Information Notice

Market Reviews

Wholesale Local Access (WLA) provided at a fixed location

Wholesale Central Access (WCA) provided at a fixed location for mass-market products

Publication and notification to the European Commission (EC), the Body of European Regulators for Electronic Communications (BEREC), and Member State National Regulatory Authorities (NRAs) of draft measures pursuant to Article 32 of Directive 2018/1972

	Information Notice
Reference:	ComReg 23/106
Version:	FINAL
Date:	14/11/2023

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Additional Information

Document No:	23/106
Date:	14 November 2023

1. This Information Notice concerns the Commission for Communications Regulation's ('**ComReg**') publication and parallel notification to relevant European authorities of its '**Draft Decision**' concerning its market reviews of the Wholesale Local Access ('**WLA**') and Wholesale Central Access ('**WCA**') markets in Ireland**.** A non-confidential copy of the Draft Decision is attached at Appendix 1 of this Information Notice.

2. In accordance with the requirements of Article 23 of the of the European Electronic Communications Code ('**EECC**')),[1] which is mirrored at Regulation 101 of the ECC Regulations,[2] ComReg carried out a public consultation ('**Consultation**') on its analysis of the WLA and WCA markets in Ireland over the period 9 January to 3 March 2023.[3]

3. Prior to the adoption of a final decision, Article 32(3) of the EECC (which is mirrored at Regulation 17 of the ECC Regulations) requires ComReg to publish and, at the same time, make draft measures accessible to the European Commission ('**EC**'), the Body of European Regulators for Electronic Communications ('**BEREC**') and National Regulatory Authorities ('**NRAs**') in other Member States (the '**Article 32 Notification**').

4. The Article 32 Notification has today been made by ComReg on the basis of the draft measures set out in the Draft Decision.

5. Please note that this Information Notice, including the Draft Decision in Appendix 1, does not constitute a national public consultation and should therefore not be construed as an invitation to make submissions to ComReg.

6. Having completed the Article 32 Notification, ComReg will take utmost account of any views expressed by the EC, BEREC and NRAs in other Member States before adopting its final decision.

[1] Directive 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (the '**EECC**').

[2] S.I. No. 444/2022 - European Union (Electronic Communications Code) Regulations 2022 (the '**ECC Regulations**') which transpose into Irish law the European Electronic Communications Code.

[3] On 9 January ComReg published its Wholesale Local Access (WLA) provided at a fixed location and Wholesale Central Access (WCA) provided at a fixed location for mass-market products Market Reviews - Consultation and Draft Decision, ComReg Document 23/03 ('**Consultation**') available at: https://www.comreg.ie/?dlm_download=wla-wca-consultation

Appendix 1: WLA Market & WCA Market Draft Measure

A 1.1 A copy of ComReg's Draft Decision is attached below.

Market Reviews

Wholesale Local Access (WLA) provided at a fixed location

Wholesale Central Access (WCA) provided at a fixed location for mass-market products

NON-CONFIDENTIAL

Final Decision

Reference: ComReg 23/XX
Version: DRAFT

Date: 14 November 2023

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Additional Information

Approval

Redacted Information

Please note that this is a non-confidential version of the Final Decision. Certain information within the Final Decision has been redacted from the public version for reasons of confidentiality and commercial sensitivity, with such redactions indicated by the symbol ✂ and highlighted in BLACK. In some cases, ComReg has presented information in an aggregated form in order to strike a balance between preserving the confidentiality of operator-specific information whilst enabling interested parties to understand, in a meaningful way, the conclusions set out in Final Decision.

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1 Executive Summary

1.1 Access to broadband services is essential for consumers and businesses, enabling access to the internet, remote working and the use of services such as online banking, shopping, entertainment and remote health.

1.2 A number of Service Providers (‘**SP(s)**’) are investing in the rollout of fibre networks which can deliver high-speed broadband to end users, in one case on a state-aided basis, although fibre network rollout is not uniform throughout the State. The regulatory approach set out in this Decision will continue to provide regulatory certainty to all SPs, thereby providing the predictability and certainty needed to support further fibre network rollout.

1.3 In this Decision, ComReg examines competition in two wholesale broadband markets to decide whether regulation is warranted and, if so, in what form. Where necessary, in regulating these markets, ComReg’s aim is to promote long term sustainable competition by enabling efficient investment in very high capacity networks (‘**VHCN(s)**’), including fibre networks, as vibrant competition amongst networks is the best way to ensure that consumers and businesses reap maximum benefits in terms of choice of high-quality services, delivered at competitive prices.

1.4 The two wholesale markets which ComReg assesses are the markets for the provision of Wholesale Local Access (‘**WLA**’) and Wholesale Central Access (‘**WCA**’), both of which ultimately support the supply of retail broadband and related services to end users. WLA and WCA inputs are purchased by Access Seekers which do not operate their own broadband networks at all, or where their own networks have only partial geographic coverage, with the use of WLA and WCA enabling them to extend their service footprints.

1.5 WLA describes the rental of a connection or access path[1] between the end user’s premises and a local serving exchange/node equivalent. In buying WLA services, an SP must arrange its own provision of the backhaul elements between its network and the local serving exchange/node.

[1] The access path connects the Network Termination Unit (‘**NTU**’) or Optical Network Terminal (‘**ONT**’) in the end user’s premises to the Point of Handover (‘**PoH**’). The PoH for WLA is typically the Main Distribution Frame (‘**MDF**’) (for copper) and the Optical Distribution Frame (‘**ODF**’) (for fibre) in the exchange/MPoP. The PoH for VUA is the Wholesale Ethernet Interconnect Link (‘**WEIL**’) at the serving Aggregation Node within local serving exchange.

1.6 In the value chain, WCA utilises WLA inputs, and is used to provide retail broadband services in the market. It involves the rental of an active broadband connection between an end user's premises and an aggregation point higher up in a network (relative to WLA), including the backhaul component. WCA therefore encompasses WLA along with backhaul connectivity across the WCA SP's network. Relative to WLA, WCA only requires an Access Seeker[2] to build connectivity to a few aggregation points on the WCA SP's network.

1.7 While WLA is deemed by the European Commission ('**EC**') to be a market susceptible to *ex ante* regulation, pursuant to the 2020 Recommendation,[3] this is no longer the case in respect of WCA. National Regulatory Authorities ('**NRA(s)**') such as ComReg must therefore, in considering the appropriateness of regulating WCA, also carry out the so-called Three Criteria Test ('**3CT**') which is described in further detail below.

1.8 Where ComReg identifies that any SP operating in the WLA or WCA markets has Significant Market Power ('**SMP**'), this means that, in the absence of regulation, these (and related) markets would not function effectively, giving rise to competition problems to the detriment of end users. Where ComReg identifies SMP, it must impose at least one of a range of *ex ante* regulatory obligations on the SP or SPs designated with SMP. At the wholesale level, these obligations may include requirements to provide specified products and services at regulated wholesale prices, and are designed to enable Access Seekers (that is, SPs without networks of their own (or insufficient network coverage of their own)) to compete in providing retail services to end users. Where SMP is not identified, any existing regulation is withdrawn.

[2] An Access Seeker is an SP which procures, or seeks to procure, access to wholesale products and services offered by a Network Operator. Thus, all Access Seekers are SPs, but a SP may not necessarily be an Access Seeker.

[3] European Commission Recommendation of 18 December 2020 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (the '**2020 Recommendation**').

1.9 In parallel with this Decision, ComReg has issued a separate decision regarding its analysis of the physical infrastructure access ('**PIA**') market which includes access to telecom-specific duct and pole infrastructure (the '**PIA Decision**').[4] The PIA Decision designates Eircom with SMP and imposes upon it a range of obligations, including to provide access to its duct and poles at regulated prices. ComReg's review of the WLA and WCA markets in this Decision takes into account regulation of the PIA markets, in particular, WLA and WCA supplied by SPs that use Eircom's PIA in doing so.

1.10 A number of SPs are actively engaged in multi-year network investment programmes, all targeted at rolling out future proofed Fibre to the Premises ('**FTTP**') networks at various locations in the State, thereby enabling the provision of very high speed broadband and other services to end users.

1.11 Eircom is currently upgrading its network to FTTP, having passed just over 1 million premises as of Q2 2023. Eircom FTTP rollout is increasing by around 216,000 premises per annum. If Eircom continued to roll FTTP out at this rate, it would likely achieve its announced target of 1.9 million premises passed with FTTP by 2026.[5] It has the largest FTTP network in the State and, on a forward-looking basis, will continue to have the largest FTTP network in the State, if Eircom and other Network Operators meet their announced rollout targets. Eircom's nearest competitor in the Commercial Next Generation ('**NG**') WLA Market, is SIRO,[6] which competes at the wholesale level and has no retail arm.

1.12 As of Q2 2023, SIRO passed just over 500,000 premises with FTTP and ultimately plans to pass 770,000 premises. ComReg considers, based on SIRO rollout rate to date, that this may potentially complete by the end of 2027.

[4] Physical Infrastructure Access (PIA) Market Review, Decision, ComReg Document 23/xx (the '**PIA Decision**').

[5] *"We are currently well underway investing €500 million to roll-out fibre to the home ("FTTH") to 1.9 million premises across urban and suburban Ireland".* https://www.eir.ie/investorrelations/about/. Accessed on 12 October 2023.

[6] SIRO is a 50:50 joint venture between ESB and Vodafone Ireland.

1.13 Virgin Media Ireland ('**VMI**') currently competes only at the retail level, providing broadband (and other services) over its cable television ('**CATV**') network, which passes close to 900,000 premises. In late 2021 VMI signalled its intention to upgrade its network to FTTP, and also to enter the NG WLA market to provide services at the wholesale level. VMI's network upgrade is at an early stage and, based on data available to ComReg on the rate at which VMI has overlaid CATV with FTTP since its announcement, as well as the absence of reliable deployment data, it is likely to be a number of years before it is complete – potentially by the end of the five-year market review period. As of October 2023, VMI has not yet commenced provision of wholesale services.

1.14 National Broadband Ireland ('**NBI**') is rolling out a FTTP network under the state-funded National Broadband Plan ('**NBP**'), with the aim of bringing high speed broadband services to 569,000 premises falling within the designated Intervention Area ('**IA**'). The IA consists of those premises identified as not being likely to be served with high-speed broadband on a commercial basis. NBI passes c.178,000 premises as of Q3 2023, and is expected to complete its rollout by 2026/27.

1.15 As set out above, a number of SPs are engaging in sizeable ongoing investments in rolling out FTTP networks, with the coverage and timing of future rollout sensitive to factors such as economic growth, inflation, and interest rates, all of which can impact the electronic communications environment, including consumers and SPs' investment plans.

1.16 Creating regulatory certainty and predictability also plays a role in enabling effective infrastructure-based competition, including through facilitating efficient commercial investment to the widest extent possible. The regulatory framework set out in this Decision supports this aim, only applying regulation where appropriate and, where applied, in a proportionate manner.

1.17 ComReg received Submissions to its 2023 Consultation[7] which issued in January 2023 from ten Respondents.

1.18 Arising from its analysis, and consistent with its position in the 2023 Consultation, ComReg defines three Relevant WLA Markets (the '**Relevant WLA Markets**') which differ by technology and/or geographic scope:

(a) A national Current Generation WLA ('**CG WLA**') Market consisting of WLA delivered over copper-only networks, including Local Loop Unbundling ('**LLU**'), Sub-loop Unbundling ('**SLU**'), and Line Share ('**LS**');

[7] Market Reviews - Wholesale Local Access (WLA) provided at a fixed location and Wholesale Central Access (WCA) provided at a fixed location for mass-market products. Consultation and Draft Decision. Document ComReg 23/03 (the '**2023 Consultation**').

(b) An Intervention Area Next Generation WLA (‘**IA NG WLA**’) Market including Next Generation (‘**NG**’)[8] WLA delivered over fibre optic cable networks,[9] including Virtual Unbundled Access (‘**VUA**’), with the geographic scope of this market corresponding to that part of the State falling within the NBP IA; and

(c) A Commercial Next Generation WLA (‘**Commercial NG WLA**’) Market including NG WLA delivered over fibre optic cable networks, including VUA delivered over full or partial fibre optic cable networks in that part of the State falling outside the IA.

1.19 ComReg considers it appropriate to distinguish two separate WLA product markets on the basis, *inter alia*, that, due to its lower-quality product and usage characteristics, and the declining numbers of CG WLA lines, from an Access Seeker perspective, NG WLA is a substitute for CG WLA, but CG WLA is not a substitute for NG WLA –described as ‘asymmetric substitution’.

1.20 ComReg considers that the CG WLA market is national in scope, given the absence of clear differences in competitive conditions across the State in the provision of CG WLA. In contrast, ComReg considers that the provision of NG WLA will, on a forward-looking basis, be characterised by differences in competitive conditions across the State, whereby NG WLA is provided on a commercial basis in some parts of the State, and on a non-commercial, state-aided basis in the footprint of the NBP IA.

[8] NG broadband includes technologies with partial or full optical components, namely Fibre to the Cabinet (‘**FTTC**’) and Fibre to the Premises (‘**FTTP**’).

[9] Fibre optic cable networks include both FTTC, which consist of a fibre optic and a copper component, and FTTP, which consists of fibre optic components only, networks.

1.21 ComReg has considered whether the Commercial NG WLA Market should be further sub-divided from a geographic perspective, including on the basis of prospective FTTP rollout. No SP operating in this market is in a position to provide ComReg with detailed and reliable FTTP deployment plans (beyond a few months) that would enable ComReg to conduct a more granular geographic analysis. Nevertheless, ComReg has considered what the likely outcome would be in the hypothetical scenario where VMI's FTTP network rolled out in the same location as its existing CATV network footprint (despite the fact that VMI is in the early stages of its FTTP rollout and is not yet showing any practical impact of service provision at the wholesale level). Having regard to a range of uncertainties, ComReg's view is that that this would not have a sufficiently material impact on the outcome on the geographic definition of the Commercial NG WLA Market. ComReg intends to closely monitor market developments over the market review period, and if market outcomes appear to be materially different ComReg may, at its sole discretion decide whether to commence a fresh market review earlier than planned.

1.22 The IA NG WLA Market is, over the five-year time horizon of this review, likely to be characterised by a situation in which no SP has SMP. Although there may be limited incentives for SPs to enter the market at the fringes to offer NG WLA on a commercial basis, ComReg considers that the terms of the NBP Contract between NBI and the State are sufficiently robust to prevent the exercise of SMP. The provision of CG WLA will decline, as Access Seekers switch away from CG WLA, and towards NG WLA.

1.23 Accordingly, and consistent with its position in the 2023 Consultation, ComReg removes SMP regulatory obligations on Eircom on the CG WLA Market and the IA NG WLA Market, subject to an appropriate sunset period which will afford Access Seekers a reasonable period of time to migrate away from Eircom CG WLA and NG WLA, to purchase other wholesale inputs capable of delivering retail broadband (and other retail services), should they so wish.

1.24 In contrast, ComReg considers that the Commercial NG WLA Market, over the five year review period, will not be characterised by the presence of sufficiently effective competitive constraints on Eircom, such that Eircom has the ability to behave, to an appreciable extent, independently of its competitors, customers and, ultimately, of its end users. Accordingly, having carried out a competition assessment and consistent with its position in the 2023 Consultation, ComReg considers that it is appropriate to designate Eircom with SMP on the Commercial NG WLA Market.

1.25 ComReg has considered what regulatory obligations should be imposed on Eircom. In doing so, ComReg considers, in the absence of any regulation, what competition concerns could arise in the Commercial NG WLA Market (and related markets). Having regard to Eircom's SMP position, including other factors such as it being a vertically-integrated SP that competes at both the retail and wholesale level, ComReg has identified that Eircom has the ability and incentive to potentially engage in anti-competitive behaviours, ultimately to the detriment of retail competition. These behaviours include the ability and incentive for Eircom to deny other SPs access to its network and to engage in pricing and other behaviours which could restrict or distort competition by actual or potential competitors. To address these concerns, ComReg imposes a full suite of justified and proportionate regulatory obligations on Eircom in the Commercial NG WLA Market. These include:

(a) Access obligations;

(b) Transparency obligations;

(c) Non-discrimination obligations;

(d) Regulatory Governance obligations;

(e) Price Control and Cost Accounting obligations; and

(f) Accounting Separation obligations.

1.26 ComReg continues to require Eircom to provide access to:

(a) VUA (including FTTP-based VUA and FTTC-based VUA);

(b) Co-location, co-location resource sharing and co-location rack interconnection;

(c) Interconnection services;

(d) Migrations;

(e) Associated Facilities, including Multicast, traffic-based and circuit-based Class of Service ('**CoS**'); and

(f) grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services.

1.27 New access obligations in this Decision require Eircom to provide access to:

(a) an interconnection sharing service;

(b) an emulated FTTC-like service on the FTTP network, where Eircom propose to withdraw FTTC services in an Exchange Area ('**EA**'); and

(c) 1:1 Virtual Local Area Network (‘**VLAN**’) tagging on FTTP-based VUA services.

1.28 ComReg requires Eircom to provide access in a fair, reasonable and timely manner, including in relation to:

(a) Requests for access;

(b) Changes to the rules or technical standards for the deployment of telecommunications equipment in the access network, including changes to the access network’s design, topology and the Copper Loop Frequency Management Plan (‘**CLFMP**’);

(c) Product development timelines; and,

(d) Service Level Agreements (‘**SLA(s)**’) (including provision by Eircom of an SLA on the accuracy of FTTP premises passed data).

1.29 Eircom supplies WLA services, such as VUA and NG migrations to Access Seekers, and also engages in self-supply of NG broadband and migrations to itself. ComReg maintains Eircom’s non-discrimination obligation to provide access and information to all Access Seekers including itself, its subsidiaries, affiliates or partners, on the same timescales, terms and conditions, including related to prices and service levels, using the same systems and processes.

1.30 ComReg continues to impose the following transparency obligations, subject to some amendments:[10]

(a) to publish an Access Reference Offer, setting out contractual terms and conditions, and the technical basis upon which Access Seekers can obtain access to WLA and associated facilities, along with requirements to publish WLA prices and provide advance notification of changes;

(b) to publish information on product development;

(c) to provide advance notice of price and non-price changes to ComReg and to Access Seekers and to have a change management process for changes to the Access Reference Offer;

(d) to make available NGA rollout plans; and

(e) to publish Key Performance Indicators (‘**KPIs**’) and information with respect to performance with SLA.

1.31 The price control is designed around the principle that an obligation of cost orientation applies to all products in the Commercial NG WLA Market save as regards FTTP VUA rental, as follows:

[10] The details of the transparency obligations are discussed in paragraphs 9.200 to 9.287.

(a) As FTTP rollout is still ongoing, and to protect investment incentives, **FTTP VUA rental** enjoys '**Pricing flexibility**'. Eircom may set FTTP VUA rental prices as it chooses, subject to the following two constraints:

  i. A Margin Squeeze Test ('**MST**') in order to mitigate the risk of margin squeeze, leverage and foreclosure, and

  ii. A price floor to mitigate the risk to competing networks of excessively low prices, set at the level of the FTTC VUA price cap (see (b) below);

(b) In order to provide an 'anchor' constraining the risk of excessive prices for FTTP VUA, **FTTC VUA** prices are cost oriented. Cost oriented prices for FTTC VUA are set following a **'Pricing continuity' approach** whereby FTTC VUA prices are set at the cost oriented level set out by the ANM Decision for the period ending 30 June 2024, subject thereafter to annual increases capped at CPI-0;

(c) In order that FTTP VUA prices remain anchored in the event that Eircom ceases to provide FTTC VUA as a result of copper switch-off, a requirement that, in that event, Eircom makes available an **Emulated FTTC-like service** on the FTTP network at the FTTC VUA price; and

(d) In order to guard against excessive prices, all other products offered by Eircom in the Commercial NG WLA Market are subject to cost orientation, including in particular Non-FTTP VUA products offered as Alternative Comparable Products ('**ACP**') (as discussed in the CSO Consultation[11] and defined in the CSO Decision[12] on the withdrawal of FTTC VUA in the context of copper switch-off).

1.32 The price control obligations imposed on Eircom in the Commercial NG WLA Market are summarised at Table 1 and are consistent with ComReg's policy of encouraging investment in Very High Capacity Networks ('**VHCN(s)**') by continuing to allow pricing flexibility for FTTP while ensuring that safeguards to prevent exclusionary behaviour and excessive pricing remain in place. Compared to the existing price control obligations imposed on Eircom in 2018 ComReg is now imposing a lighter regulatory burden as markets are deregulated, to encourage investment and competition.

[11] Consultation Framework for the Migration from Legacy Infrastructure to Modern Infrastructure Consultation and Draft Decision. ComReg 22/13R, 25/03/2022 (the '**CSO Consultation**').

[12] Framework for the Migration from Legacy Infrastructure to Modern Infrastructure, Response to Consultation and Decision, Decision D09/23, ComReg 23/102, dated 1 November 2023.

Table 1: Summary of price control obligations

Product, service or facility	Price control obligation	
	2018	2023
FTTP VUA rental	Pricing flexibility	Pricing flexibility
FTTC VUA rental	Cost orientation	Pricing continuity[13]
Emulated FTTC-like service on the FTTP network (in the event of FTTC withdrawal)	N/A	Pricing parity with FTTC VUA
Ancillary services and facilities	Cost orientation	Cost orientation

1.33 Consistent with the 2018 Decision,[14] ComReg imposes rules related to altering the price for FTTC VUA and the price floor for FTTP VUA rental with provision for Eircom to lower the FTTC VUA price and the FTTP VUA price floor, but only in exceptional circumstances, and subject to prior ComReg approval. The precise rules for these mechanisms differ from the approach set out in 2018, as described below.

1.34 Under the 2018 Pricing Decision,[15] Eircom was not permitted to offer wholesale promotions and discounts. ComReg relaxes this ban for FTTP VUA so that such offers are subject to case-by-case approval by ComReg and to be permitted only where ComReg is satisfied that the promotion or discount is consistent with the promotion of network competition and encouraging investment, while ensuring in particular that existing and prospective investment by alternative operators is not jeopardised.

[13] 'Pricing continuity' is a pricing approach whereby the proposed price is set by reference to an existing modelled price. For FTTC VUA rental ComReg sets a price cap of CPI-0 annually to the currently cost oriented FTTC VUA prices post 30 June 2024.

[14] Market Review: Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products - Response to Consultation and Decision. ComReg 18/94, D10/18 (the '**2018 Decision**').

[15] ComReg Document No. 18/95, ComReg Decision D11/18: Pricing of wholesale broadband services, Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets, Response to Consultation Document 17/26 and Final Decision, 19 November 2018 ('**2018 Pricing Decision**').

1.35 Eircom is also obliged under the 2018 Decision not to engage in a margin squeeze. The 2018 Pricing Decision and the 2018 Bundles Decision[16] further specified this obligation into three Margin Squeeze Tests (‘**MST(s)**’), namely the wholesale FTTP Bitstream to wholesale FTTP VUA MST, the bundles MST, and the standalone FTTP MST. ComReg alters the bundles MST to focus on just FTTP, to include standalone FTTP in the MST, and to remove the existing wholesale FTTP Bitstream to wholesale FTTP VUA MST.

1.36 ComReg also maintains Cost Accounting and Accounting Separation obligations on Eircom in the Commercial NG WLA Market.

1.37 Having assessed the WCA market in the context of the 3CT,[17] ComReg considers that continued *ex ante* regulation of WCA is not warranted, as there is insufficient evidence that retail broadband competition would be harmed by the absence of WCA regulation. The evidence available to ComReg suggests that, even in the absence of WCA regulation (but in the presence of WLA regulation on the Commercial NG WLA Market), the provision of retail broadband would likely be effectively competitive over the lifetime of the market review period. In this respect, there is evidence of existing retail broadband competition, particularly having regard to SP market shares, and ongoing rollout of FTTP networks capable of providing WLA and WCA to Access Seekers, and retail broadband to end users by Eircom, SIRO, NBI, and (on a forward-looking basis) VMI.

1.38 Downstream retail competition, in particular, will be safeguarded in the footprint of the Commercial NG WLA Market through upstream regulation of WLA. ComReg also notes that, even in the absence of Eircom merchant market WCA, other SPs offer WCA based on their own networks (e.g. NBI and, on a forward-looking basis, potentially VMI), or based on the use of upstream WLA purchases (such as BT). ComReg also notes that Access Seekers have the opportunity to move up the ladder of investment by procuring their own backhaul to give them the opportunity to purchase WLA, rather than WCA.

[16] ComReg Document No. 18/96, ComReg Decision D12/18: Response to Consultation and Decision on price control obligations relating to retail bundles: Further specification of the wholesale price control obligation not to cause a margin squeeze in the WLA, and WCA Markets - Response to Consultation and Decision, dated 19 November 2018 (‘**2018 Bundles Decision**’).

[17] The 3CT set out at Article 67(1) of the European Electronic Communications Code (Directive (EU) 2018/1972), sets out the criteria that must be cumulatively satisfied in order to determine whether a relevant market should be - or continue to be - subject to *ex ante* regulation. The three criteria are:

a. the presence of high and non-transitory barriers to entry;

b. a market structure which does not tend towards effective competition within the relevant time horizon;

c. the insufficiency of competition law alone to adequately address the market failure(s) concerned.

1.39 ComReg intends to closely monitor market developments over the market review period. If market outcomes become materially different, ComReg will exercise its discretion to decide whether or not to commence a fresh market review earlier than planned.

2 Introduction

2.1 Overview

2.1 The Commission for Communications Regulation ('**ComReg**') is the National Regulatory Authority ('**NRA**') responsible for the regulation of the electronic communications sector (telecommunications, radio communications and broadcasting transmission) and the postal sector in the State.

2.2 This final Decision ('**Decision**') follows the publication of the 2023 Consultation[18] in January 2023 and presents ComReg's conclusions on its analysis of the market(s) for:

(a) Wholesale local access provided at a fixed location ('**WLA**'); and

(b) Wholesale central access for mass-market products provided at a fixed location ('**WCA**').

2.3 WLA and WCA are wholesale inputs that are used by Service Providers ('**SP(s)**') in the supply of:

(a) Retail broadband and/or other services (including but not limited to Retail Fixed Telephony Services ('**RFTS**') and television ('**TV**') services)[19] to end users; and

(b) Wholesale services to other SPs.

2.4 This Decision examines the extent of competition within the **Relevant WLA Market(s)** and **Relevant WCA Market(s)** (collectively, the '**Relevant Wholesale Markets**'). Where such markets are not found to be effectively competitive due to one or more SP(s) having Significant Market Power ('**SMP**'), ComReg is obliged to impose appropriate regulatory obligations on such SP(s) as would be necessary to address identified competition problems that could arise in the Relevant Wholesale Markets or related markets, absent regulatory intervention. Similarly, if any of the Relevant Wholesale Markets are found to be effectively competitive, then regulatory intervention is not warranted, and any existing regulation must be withdrawn.

[18] Market Reviews - Wholesale Local Access (WLA) provided at a fixed location and Wholesale Central Access (WCA) provided at a fixed location for mass-market products. Consultation and Draft Decision. ComReg 23/03 (the '**2023 Consultation**').

[19] WLA and WCA inputs can be used by SPs to deliver a broad range of services and hence, the services identified here are non-exhaustive.

2.5 In the period between the publication of the 2023 Consultation and this Decision, ComReg has updated its analysis with additional data which have become available over this period. This has resulted, *inter alia*, in an updating of the geographic modelling exercise set out in Section 5 and Annex 7 of the 2023 Consultation. ComReg has also met with a number of Network Operators and has given further consideration to its approach to forecast network rollout by SIRO and VMI.

2.6 This introduction describes the following:

(a) An overview of the WLA and WCA markets (paragraphs 2.8 to 2.14);

(b) The legal basis and the regulatory framework under which this review and Decision is being undertaken (paragraphs 2.15 to 2.39);

(c) An overview of previous reviews of the Relevant Wholesale Markets and why the current review is being undertaken (paragraphs 2.40 to 2.55);

(d) An outline of the information sources relied upon for the analysis set out in this Decision (paragraphs 2.56);

(e) An overview of the consultation process and those who responded to the 2023 Consultation (paragraphs 2.57 to 2.58)

(f) ComReg liaison with the Competition and Consumer Protection Commission (‘**CCPC**’), the European Commission (‘**EC**’) and BEREC[20] (paragraphs 2.59 to 2.61); and

(g) An overview of the structure of the Decision (paragraph 2.62).

2.7 Section 1 above contains an executive summary of the overall conclusions set out in this Decision.

2.2 What are WLA and WCA?

2.8 WLA and WCA services are wholesale inputs used directly and indirectly by SPs to supply a range of downstream wholesale and retail services, including (but not limited to) RFTS, broadband connectivity, and TV services, to residential and business consumers (collectively, ‘**end users**’). WLA inputs are also used by SPs to supply downstream WCA or other wholesale services.

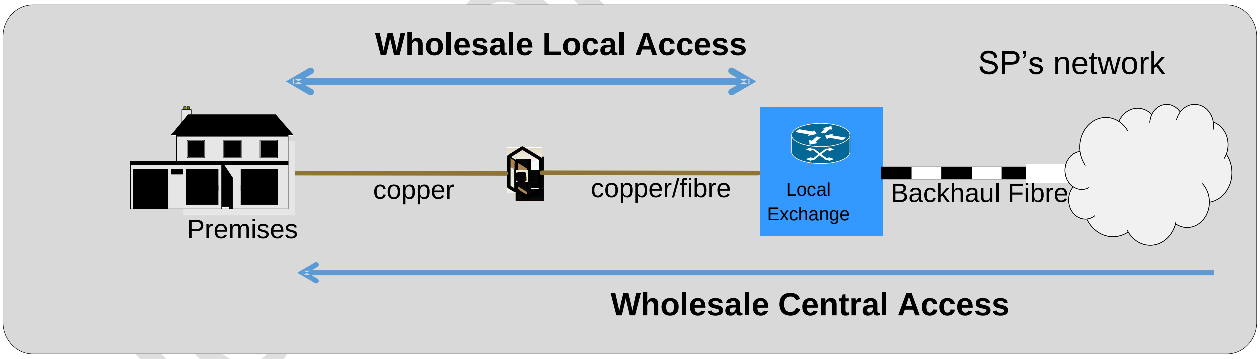
[20] Body of European Regulators for Electronic Communications.

2.9 In general, WLA relates to the connection/access path[21] between the local serving exchange/access node or Metropolitan Point of Presence ('**MPoP**') and the end user's premises, with this connection being either provided by an SP itself or purchased/rented from another SP. In buying WLA services, an SP must arrange its own provision of the backhaul elements between its network and the local exchange/node that serves the end user's premises.

2.10 The WCA market lies downstream from the WLA market but upstream from the retail broadband (and other retail) markets and encompasses the rental of an active broadband connection between an end user's premises and an aggregation point higher up in a network, including the backhaul component. As discussed later in this Decision, a number of other features also distinguish WLA and WCA services. WCA can be thought of as encompassing WLA along with backhaul connectivity across the WCA SP's network. Relative to WLA, WCA requires that an Access Seeker only needs to build connectivity to a few aggregation points on the WCA SP's network, thereby incurring lower investment costs compared to WLA.

2.11 WCA is used by SPs both directly and indirectly in the supply of a range of downstream wholesale and retail services, including (but not limited to) RFTS, broadband connectivity, and TV to end users. Figure 1 below describes the WLA and WCA markets and how they are related.

Figure 1: Stylised example of typical WLA and WCA provision[22]



[21] The Access Path connects the Network Termination Unit ('**NTU**') or Optical Network Terminal('**ONT**') in the end user's premises to the Point of Handover ('**PoH**'). The PoH for WLA is typically the Main Distribution Frame ('**MDF**') (for copper) and the Optical Distribution Frame ('**ODF**') (for fibre) in the exchange/MPoP. The PoH for VUA is the Wholesale Ethernet Interconnect Link ('**WEIL**') at the serving Aggregation Node within local serving exchange.

[22] This figure shows provision of FTTC WLA and WCA, whereby the path from the local exchange to the end user premises includes a copper component. Where WLA or WCA are delivered over FTTP, no copper is present on the access path, which consists of full fibre.

2.12 At the wholesale level, SPs purchase WLA, such as Next Generation ('**NG**') Virtual Unbundled Access ('**VUA**'), Current Generation ('**CG**') Local Loop Unbundling ('**LLU**'), and WCA inputs such as CG and NG Bitstream, to provide retail services to end users (or wholesale services to other SPs). Using LLU, an Access Seeker takes (full or partial) control of the copper loop from the local exchange to the end user's premises. Similarly, with VUA, a SP gains control of the fibre (FTTP) or fibre/copper (FTTC) path, typically from the local exchange (or equivalent) to the end user's premises. The SP can then supply retail services to the end user, or sell wholesale services, to other SPs.

2.13 Typically, the point of handover for access in the WLA market is provided more locally (i.e., the traffic is handed over at a level closer to the end user). The point of handover for access in the WCA market is typically at the national or regional level, at a higher aggregation point in the network. Furthermore, products in the WLA market give the Access Seeker[23] a greater degree of flexibility in network control (e.g., VUA products can be offered at various profiles (download speeds etc.)), allowing the Access Seeker to differentiate its retail offerings. Products in the WCA market typically have network elements and ancillary inputs that an Access Seeker has little control over.

2.14 The WLA market therefore encompasses access products that afford Access Seekers more flexible control over the access path, while the WCA market encompasses access products that provide Access Seekers with less direct control over the access path and more standardised features.

[23] A Service Provider ('**SP**') is a firm active in the provision of telecommunications services on the Relevant Markets, or on markets downstream of the Relevant Markets, including the retail broadband market. An Access Seeker is an SP which purchases wholesale services from another SP. Thus, all Access Seekers are SPs, but not all SPs are Access Seekers.

2.3 Legal basis and regulatory framework

2.15 Regulation 46 of the ECC Regulations[24] requires that ComReg, taking the utmost account of the markets listed in the 2020 Recommendation as being susceptible to *ex ante* regulation[25] and of the SMP Guidelines,[26] defines relevant markets appropriate to national circumstances, in accordance with the principles of competition law. The 2020 Recommendation retained WLA as a market susceptible to *ex ante* regulation but removed WCA from the list of markets susceptible to *ex ante* regulation. Accordingly, in respect of WCA only, ComReg is required to carry out the Three Criteria Test ('**3CT**') set out in Article 67(1) of the European Electronic Communications Code ('**EECC**')[27] and Regulation 49(3) of the ECC Regulations and discussed further below.

2.16 The EC refers in the 2020 Recommendation to WLA as follows:

> *"Wholesale local access provided at a fixed location"*[28]

2.17 The 2020 Explanatory Note[29] notes:

> *"At present, the Wholesale Local Access (WLA) market primarily consists of physical access products as well as those virtual access products that mimic the capabilities of physical access (VULA) enabling transmission of internet and related data services. Copper local loop unbundling (LLU) and copper sub-loop unbundling (SLU) – although to a decreasing extent – are still applicable access products used throughout the Union."*[30]

[24] S.I. No. 444/2022 - European Union (Electronic Communications Code) Regulations 2022 (the '**ECC Regulations**') which transpose into Irish law the European Electronic Communications Code.

[25] European Commission Recommendation of 18 December 2020 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (the '**2020 Recommendation**').

[26] European Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic networks and services, OJ 2002 C 165/3 (the '**SMP Guidelines**').

[27] Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code ('**EECC**').

[28] Annex to the 2020 Recommendation, Market 1, page 2.

[29] Commission Staff Working Document – Explanatory Note Accompanying the document Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, Brussels, 18.12.2020 SWD(2020) 337 (the '**2020 Explanatory Note**').

[30] At p.48 thereof.

2.18 Given that the 2020 Recommendation no longer identifies the WCA market as being susceptible to *ex ante* regulation, there is no longer any presumption in favour of WCA regulation at EU level, and NRAs must justify any proposal to continue to regulate WCA by reference to national market conditions, having carried out a 3CT.

2.19 The 2014 Recommendation, which at the time included WCA, defined it as:

> *"Wholesale central access provided at a fixed location for mass-market products"*[31]

2.20 The 2020 Explanatory Note notes:

> *"Compared to WLA, Wholesale Central Access (WCA) products are typically provided to the access seekers at a higher and more central layer in the network architecture. As regards WCA services, it remains likely that there is a chain of substitution between copper DSL-based bitstream services and fibre-based bitstream services provided over FttH and FttC/VDSL networks in the near future."*[32]

2.21 The 3CT sets out the criteria that must be cumulatively satisfied to determine whether a relevant market should be, or should continue to be, subject to *ex ante* regulation. The three criteria are:

(a) The presence of high and non-transitory barriers to entry;

(b) A market structure which does not tend towards effective competition within the relevant time horizon, having regard to the state of infrastructure-based competition and other sources of competition behind the barriers to entry; and

(c) The insufficiency of competition law alone to adequately address the identified market failure(s).

[31] Annex to the 2014 Recommendation, Market 3b, page 45 onwards.

[32] 2020 Explanatory Note, at p.52.

2.22 Where at least one of the 3CT criteria is not satisfied, *ex ante* regulation is deemed to be no longer required, and obligations arising from an SMP designation must be removed (subject to a notice period where necessary and appropriate). Where, on the other hand, all three criteria are satisfied, *ex ante* regulation may be warranted. In particular, Regulation 49(8) of the ECC Regulations requires that where ComReg determines, following a market analysis, that a relevant market defined in accordance with Regulation 46 of the ECC Regulations is not effectively competitive, and that the imposition of regulatory obligations is justified, that ComReg designate the SP or SPs which individually or jointly have SMP in that market and impose appropriate specific obligations on such operators, or maintain or amend such obligations where they already exist.

2.23 Regulation 45(1) of the ECC Regulations defines SMP as being equivalent to dominance on a market, that is to say a position of economic strength affording the operator concerned the power to behave, to an appreciable extent, independently of competitors, customers and ultimately, consumers, in a relevant market.

2.24 In carrying out its assessment ComReg applies the Modified Greenfield Approach ('**MGA**') set out in the 2020 Explanatory Note.[33] ComReg's market assessment starts from the assumption that SMP regulation is not present in the specific markets under consideration but takes into account regulation present in other related markets, or through the general regulatory framework. This approach avoids erroneously drawing conclusions regarding the competitive structure of a particular market that may be influenced by, or indeed premised on, existing regulation on that market. Considering how markets may function absent regulation helps to ensure that SMP-based regulation is only applied (or withdrawn) in circumstances where it is justified and proportionate to do so.

[33] See also Point 17 of the SMP Guidelines and regulation 49(5) of the ECC Regulations.

2.25 Given that ComReg is analysing both the WLA market(s) and the WCA market(s) in this Decision, it adopts the following approach with respect to the application of the MGA. In analysing the WLA market and applying the MGA, ComReg first examines the WLA market assuming regulation is absent in this and downstream markets (and related retail markets). In doing so, ComReg assumes that regulation is in place in the upstream Physical Infrastructure Access ('**PIA**') market, having regard to the conclusions set out in the separate PIA Decision. Similarly, when assessing the WCA market, the MGA requires that ComReg takes account of regulation present in the upstream PIA and WLA markets. In this respect, the intention to de-regulate the WCA market set out in this Decision is predicated on regulation of the upstream Commercial NG WLA Market. ComReg consider this approach to be consistent with Regulation 49(5) of the ECC Regulations.

2.26 In the PIA Decision, ComReg considered the transaction entered into between Eircom and InfraVia whereby a dedicated fibre company, Fibre Networks Ireland Limited ('**FNI**'), was created with plans to pass over 1.9 million homes with Fibre to the Premises ('**FTTP**') by the end of 2026 (the '**Transaction**'). InfraVia owns a 49.99% interest in FNI, and Eircom the remaining 50.01%. As part of the transaction Eircom transferred certain assets (including ducts, poles and fibre but excluding exchanges and cabinets) to FNI that are principally located outside the Government's NBP IA, where NBI is currently rolling out its FTTP network.

2.27 The 'associated assets' alluded to in the transaction include the Access Network, the Fibre Rights[34] and other assets and property used exclusively in respect of the Business[35] but exclude certain Excluded Assets. The Excluded Assets are listed in the Business Transfer Agreement[36] and include (amongst other things) **[✂** [redacted] **✂]**[37]

[34] Defined in the Business Transfer Agreement as *"all statutory, prescriptive, contractual and common law title and property rights and all easements, rights, powers, privileges and interests which are held by the Company at Completion and which are necessary to operate the Access Network"*.

[35] Clause 2.1.

[36] Clause 1.1 (Definition of Excluded Assets).

[37] Clauses 1 and 2.

2.28 In the PIA Decision ComReg's position is that it is appropriate to treat the physical infrastructure owned by FNI and Eircom as one PI network, the operation and management of which is effectively under Eircom's control.

2.29 As regards WLA and WCA supply by Eircom, having regard to the reasons set out in the PIA Decision and also noting that Excluded Assets remain under the ownership of Eircom, ComReg considers that the operation and management of WLA and WCA services is under Eircom's control.

2.30 Where an SP is designated as having SMP in a market, ComReg is obliged, under Regulation 50(1) of the ECC Regulations to impose on that SP, or maintain or amend where they already exist, such of the obligations set out in Regulations 51 to 56, 58 and 62 of the ECC Regulations as it considers appropriate. Pursuant to Regulation 50(5) of the ECC Regulations, any obligations imposed must be:

(a) Based on the nature of the problem identified;

(b) Proportionate and justified in the light of the objectives laid down in section 12 of the Communications Regulation Act 2002 (as amended),[38] and Regulation 4 of the ECC Regulations;[39] and

(c) Only be imposed following consultation in accordance with Regulations 17 and 101 of the ECC Regulations.

2.31 Section 12(1)(a) of the 2002 Act sets out ComReg's objectives in exercising its functions in relation to the provision of electronic communications networks, electronic communications services, and associated facilities, namely to:

(a) Promote competition;

(b) Contribute to the development of the internal market; and

(c) Promote the interests of users within the European Union.

2.32 In addition, Regulation 4(3) of the ECC Regulations sets out the general objectives which ComReg shall pursue in the context of its tasks specified in the ECC Regulations, which are in summary to:

(a) Promote connectivity and access to, and take up of very-high-capacity networks;

(b) Promote competition in the provision of electronic communications networks and associated facilities;

[38] Communications Regulation Act 2002 (No. 20 of 2002), as amended (the '**2002 Act**').

[39] The general objectives of the EECC are laid out at Article 3 thereof.

(c) Contribute to the development of the internal market by removing remaining obstacles to, and facilitating convergent conditions for, investment in, and the provision of, electronic communications networks, services and associated facilities and services throughout the European Union; and

(d) Promote the interests of the consumers and businesses in the State, by ensuring connectivity and the widespread availability and take-up of very-high-capacity networks.

2.33 Regulation 4(5) of the ECC Regulations requires that, in pursuit of its objectives under that Regulation and under Section 12 of the 2002 Act, ComReg shall apply objective, transparent, non-discriminatory, and proportionate regulatory principles by, *inter alia*:

(a) Promoting regulatory predictability;

(b) Ensuring there is no discrimination in the treatment of undertakings;

(c) Safeguarding competition and promoting, where appropriate, infrastructure-based competition, (Regulation 4(5)(c) of the ECC Regulations requires the application of EU law in a technologically neutral fashion);

(d) Promoting efficient investment and innovation in new and enhanced infrastructures;

(e) Taking due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State; and

(f) Imposing *ex ante* regulatory obligations only where there is no effective and sustainable competition and relaxing or lifting such obligations as soon as that condition is fulfilled.

2.34 In addition to conducting a public consultation in accordance with Regulation 101 of the ECC Regulations 2022, ComReg is required by Regulation 49(1) of the ECC Regulations to carry out an analysis of relevant markets, where appropriate, in collaboration with the Competition and Consumer Protection Commission (the '**CCPC**').

2.35 ComReg is also obliged to make certain draft measures accessible to the EC, BEREC, and NRAs in other Member States, pursuant to Regulation 17(4) of the ECC Regulations ('**European Notification Requirements**').

2.36 ComReg has consulted with the CCPC, the European Commission, and BEREC prior to the adoption of this Decision as further detailed in Section 2.8.

2.4 Previous Reviews of the Relevant Markets

2.37 On 19 November 2018 ComReg published its WLA/WCA market analysis (the '**2018 Decision**'),[40] in which it set out its then position regarding its review of competition within the WLA and WCA markets. This followed the publication of a consultation in November 2016 (the '**2016 Consultation**').[41]

2.38 On the same day, ComReg also issued two pricing decisions (the '**2018 Pricing Decision**'[42] and the '**2018 Bundles Decision**')[43] which further specified the price control obligations ComReg imposed in the 2018 Decision.

2.39 The 2021 Mid-term Assessment ('**MTA**') Decision,[44] which issued in November 2021, reassessed competition in the provision of WCA, arising from a commitment in the 2018 Decision to reappraise competition during the lifetime of the market review period.

2.4.1 Previous Review of the WLA Market

2.40 The 2018 Decision defined a national WLA Market consisting of:

(a) CG WLA products (LLU and Line Share products offered over copper networks);

(b) NG WLA products (Virtual Unbundled Local Access ('**VULA**') products offered over FTTx networks); and

(c) Eircom self-supply of the above products.

2.41 ComReg assessed competition within that WLA market and concluded that this (national) WLA market was not effectively competitive and was unlikely to become competitive over the lifetime of the market review. ComReg accordingly designated Eircom with SMP in that WLA market.

[40] Market Review: Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products - Response to Consultation and Decision. ComReg 18/94, D10/18 (the '**2018 Decision**').

[41] Market Reviews: Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products - Consultation and Draft Decision. ComReg 16/96 (the '**2016 Consultation**').

[42] Pricing of wholesale broadband services: Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets - Response to Consultation Document 17/26 and Final Decision. ComReg 18/95, D11/18 (the '**2018 Bundles Decision**')

[43] Response to Consultation and Decision on price control obligations relating to retail bundles: Further specification of the wholesale price control obligation not to cause a margin squeeze in the WLA, and WCA Markets. ComReg 18/96, D12/18 (the '**2018 Pricing Decision**').

[44] Mid-term Assessment: Regional Wholesale Central Access (WCA) Market - Re-application of geographic assessment criteria set out in ComReg Decision D10/18. Response to Consultation and Final Decision. ComReg 21/120, D10/21 (the '**2021 MTA Decision**').

2.42 ComReg accordingly imposed detailed remedies on Eircom in relation to NG WLA (fibre infrastructure and associated facilities) and CG WLA (copper infrastructure and associated facilities). ComReg imposed differentiated price control remedies in respect of CG WLA, Fibre to the Cabinet (‘**FTTC**’)-based NG WLA, and FTTP-based NG WLA, with further WLA pricing remedies specified in the 2018 Pricing Decision and the 2018 Bundles Decision.

2.4.2 Previous Review of the WCA Market

2.43 The 2018 Decision defined two sub-national WCA markets – the Urban WCA Market, and the Regional WCA Market consisting of WCA products provided over both CG and NG infrastructure. ComReg also concluded that the WCA market included WCA supplied by a purchaser of WLA.[45] The WCA market included the following products:

(a) WCA-based Bitstream products provided over copper and FTTx, including wholesale Bitstream provided using upstream WLA inputs;

(b) Self-supply of WCA-based Bitstream by Eircom and BT;

(c) WCA-based Bitstream that may hypothetically be offered by SIRO;

(d) Self-supply of CATV retail broadband products offered by VMI in areas where its network is present; and

(e) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

2.44 Having applied a set of objective criteria to define two sub-national geographic markets and, on the basis of a competition assessment, ComReg deregulated the Urban WCA Market, but designated Eircom with SMP on the Regional WCA Market. As with the WLA market, ComReg imposed remedies on Eircom in relation to NG WCA and CG WCA. ComReg imposed differentiated price control remedies in respect of CG WCA, FTTC-based NG WCA, and FTTP-based NG WCA, with further pricing remedies specified in the 2018 Pricing Decision and the 2018 Bundles Decision.

2.45 Additionally, the 2018 Decision undertook to reassess the WCA markets by means of a Mid-term Assessment (‘**MTA**’), which revisited the geographic scope of the relevant markets and the associated findings of SMP. The 2021 MTA Decision accordingly led to additional deregulation in the footprint of the Revised Urban WCA Market.[46]

[45] At the time of the 2018 Decision, BT was the only purchaser of WLA to supply downstream WCA.

[46] The Revised Urban WCA Market includes that part of the WCA market deregulated by means of the 2021 MTA and consists of the 235 Exchange Areas listed at Annex 3 of the 2021 MTA Decision.

2.5 Current Review of the WLA and WCA Markets

2.46 Given the time that has elapsed since the previous analyses of these markets and, having regard to market developments, including the publication of the 2020 Recommendation, it is now appropriate to review these markets.

2.47 To inform these market reviews, ComReg has obtained qualitative and quantitative information from SPs through information requests, as well as follow-up clarifications through meetings or correspondence.

2.48 The above information supplements information which is provided to ComReg in the performance of its regular operations (e.g. for the Irish Communications Market Quarterly Key Data Report ('**Quarterly Key Data Report**' or '**QKDR**')) or its ongoing regulatory activities.

2.49 ComReg has also reviewed in detail the experience of regulating wholesale broadband markets in other European jurisdictions, and has carefully analysed guidance available from the EC, BEREC, and other relevant bodies before arriving at its findings in this Decision.

2.50 ComReg has also commissioned market research to inform its understanding of end user behaviours in the retail broadband (and related) markets. Two surveys were undertaken, of residential end users (the '**2022 Residential Market Research**') and of SME end users (the '**2022 SME Market Research**'). These surveys are published at Annex 6 and Annex 7 respectively. These surveys are referred to collectively throughout this Decision as the '**WLA/WCA Market Research**'.

2.51 The WLA/WCA Market Research was undertaken on behalf of ComReg by Red C Market Research and examined residential and SME end user attitudes to various issues related to the provision of broadband (and other) services. The fieldwork supporting the WLA/WCA Market Research took place from February to April 2022 with the results finalised and provided to ComReg in June 2022. As part of the WLA/WCA Market Research, 2,010 residential end users were surveyed through face-to face interviews, and 300 SME end users were surveyed via computer aided telephone interview ('**CATI**'), with the person interviewed being the individual responsible for selecting the relevant business's telecommunications providers. The survey examined, *inter alia*:

(a) Importance placed by end users on ownership and usage of particular technologies;

(b) The impact of high-speed broadband and the rollout of NG broadband;

(c) Willingness of end users to switch between communications providers and technologies;

(d) Attitudes to, and actual reactions to, hypothetical changes in the price of telecommunications services; and

(e) The importance of bundled services offers for residential customers and the value that different services may hold within a bundle and in the purchasing decision of residential customers (e.g. TV services).

2.52 ComReg refers to the outputs from the WLA/WCA Market Research, along with the other data sources referred to above, throughout the remainder of the analysis in this Decision.

2.53 Rather than being definitive, the WLA/WCA Market Research informs the analysis throughout this Decision, and its outputs are considered alongside empirical data/evidence, where available, in particular, alongside data presented in the QKDR and in response to information requests.

2.54 ComReg is mindful that such surveys, while a useful practical means of gathering information on end user preferences/behaviours, need to be interpreted with care and that stated preferences of survey respondents can overestimate what they will actually do in practice (‘stated preference bias’).

2.55 Therefore, ComReg does not solely rely on the WLA/WCA Market Research in forming the conclusions set out in this Decision. ComReg considers all information available to it at the time of publishing this Decision.

2.6 Information Sources

2.56 In this Decision, ComReg draws upon the following information and data sources:

(a) The WLA/WCA Market Research. This included attitudinal surveys of retail users of broadband and other services. This research is published at Annex 6 and Annex 7;

(b) Meetings with SPs;

(c) Information provided by SPs in response to detailed information requests[47] issued by ComReg in which both quantitative and qualitative information on the retail broadband market, other markets and the relevant wholesale markets was sought;

(d) The experience of NRAs in regulating WLA and WCA markets in other jurisdictions;

(e) Guidance from the EC, BEREC and other relevant bodies;

(f) Information set out in the 2018 Decision and the 2021 MTA Decision;

[47] ComReg issued a series of information requests to SPs in January 2022.

(g) Information provided to ComReg by SPs for the purpose of ComReg's QKDR(s); and

(h) Other information in the public domain.

2.7 Consultation Process

2.57 ComReg conducted a public consultation in accordance with Regulation 101 of the ECC Regulations, issuing the 2023 Consultation in January 2023. Ten submissions ('**Submissions**') to the 2023 Consultation were received from a range of industry stakeholders (the '**Respondent(s)**'), namely:

(a) ALTO;

(b) BT Ireland ('**BT**');

(c) Eircom (including a report carried out on its behalf by Copenhagen Economics);

(d) Imagine;

(e) NBI;

(f) SIRO;

(g) Sky Ireland Limited ('**Sky**');

(h) Speed Fibre Group ('**SFG**');

(i) Virgin Media Ireland ('**VMI**') (including a report carried out on its behalf by SPC Network); and

(j) Vodafone Ireland Limited ('**Vodafone**').

2.58 Non-confidential versions of these Submissions are published in Annex 5 of this Decision. Throughout this Decision, ComReg has summarised Respondents' main views, as appropriate, and has carefully considered them before setting out its final position.

2.8 Liaison with other Bodies

2.59 In accordance with Regulation 49(1) of the ECC Regulations, ComReg has consulted with the Competition and Consumer Protection Commission ('**CCPC**')[48] on the market definition exercise and competition assessment set out in this Decision. A copy of correspondence from the CCPC (the '**CCPC Response**') is set out at Annex 2 of this Decision. The CCPC indicated in its response of 26 October 2023 that it did not object to ComReg's conclusions.

[48] Competition Act 2002 (No. 14 of 2002), as amended, ('**Competition Act 2002**').

2.60 On 14 November 2023 ComReg commenced the European Notification Requirements and made the corresponding draft measures accessible to the EC, BEREC and NRAs in other Member States (‘**Notified Draft Measures**’),[49] pursuant to Regulation 17(4) of the ECC Regulations. ComReg is required to take utmost account of any comments received. The EC provided its response to ComReg (‘**EC Response**’) on XXXX, a copy of which is set out in Annex 3.[50] The EC Response indicates that XXXX. As is required, ComReg has taken utmost account of the EC Response throughout this Decision.

2.61 This is a non-confidential version of the Decision. Certain information within the Decision has been redacted for reasons of confidentiality, with such redactions indicated by the symbol ✂. Should an individual SP wish to review its own redacted information, it should make a request for such in writing to ComReg and indicate, where possible, the specific paragraph numbers within which the redacted information being requested is contained. ComReg will consider requests for redacted information and will, subject to the protection of confidential information, respond accordingly.

2.9 Structure of the Decision

2.62 The remainder of this Decision is structured as follows:

(a) **Section 3** gives an overview of trends and developments in the retail markets, including changes in usage and consumption;

(b) **Section 4** presents an assessment of the retail market, including defining the retail product market and the geographic scope of the retail market;

(c) **Section 5** assesses the Wholesale Local Access (WLA) market(s) by defining the WLA market(s) from both product and geographic perspectives;

(d) **Section 6** presents an assessment of competition in the WLA market(s) and examines whether any operator in the WLA market(s) has Significant Market Power (‘**SMP**’);

(e) **Section 7** assesses the retail broadband market in the presence of regulation in the upstream WLA market(s), but absent regulation in the upstream WCA market(s);

(f) **Section 8** outlines competition problems that can arise in the Commercial NG WLA Market absent regulation, when there is an operator with SMP, including exploitative, leveraging and exclusionary practices;

[49] A non-confidential version of the ‘**Notified Draft Measures**’ is available online at www.comreg.ie/.

[50] Case IE/2023/XXXX.

(g) **Section 9** presents the remedies for the Commercial NG WLA Market;

(h) **Section 10** describes the withdrawal of remedies in the CG WLA Market, the IA NG WLA Market, and the Revised Regional WCA Market; and

(i) **Section 11** presents a Regulatory Impact Assessment (‘**RIA**’) of regulation of the Commercial NG WLA Market.

2.63 There are also a number of Annexes to the Decision, which give additional supporting analysis and, in some cases, outline the approach and findings in more detail, where they have been condensed for reasons of brevity in the main text.

(a) **Annex 1** sets out the Decision Instrument in respect of the Relevant WLA Markets and Relevant WCA Markets which specifies, in legal form, the remedies;

(b) **Annex 2** sets out the CCPC’s Response;

(c) **Annex 3** sets out the EC’s Response to ComReg’s Notified Draft measures;

(d) **Annex 4** sets out ComReg’s consideration of the European Commission’s Response;

(e) **Annex 5** contains non-confidential versions of Respondent Submissions to the 2023 Consultation;

(f) **Annex 6** contains the 2022 Residential WLA/WCA Market Research, undertaken by Red C Research on behalf of ComReg;

(g) **Annex 7** contains the 2022 SME WLA/WCA Market Research, undertaken by Red C Research on behalf of ComReg;

(h) **Annex 8** outlines the pricing of retail broadband products that use WLA inputs, which is the basis for the assessment of indirect retail constraints in Section 5;

(i) **Annex 9** describes the approach to the assessment of potential substitutes in a market definition exercise;

(j) **Annex 10** outlines the assessment of the Critical Loss Test (discussed in Section 5);

(k) **Annex 11** outlines those SMP criteria which ComReg considers are not relevant to the current assessment of SMP;

(l) **Annex 12** presents the WLA geographic market assessment (as discussed in Section 5);

(m) **Annex 13** describes the boundaries of the Relevant NG WLA Markets;

(n) **Annex 14** contains the reference to the Optical Distribution Network (ODN) Sharing: Report for ComReg by Analysys Mason;

(o) **Annex 15** contains the reference to the price control reports carried out for ComReg by Oxera; and

(p) **Annex 16** sets out a glossary of relevant terms used in this Decision.

3 Retail Market Trends and Developments

3.1 Introduction

3.1 In this section, ComReg sets out its views on trends and developments in the supply of, and demand for, retail broadband and other related retail services. This is accompanied by an assessment of the dynamics of the retail market and the material impact of these dynamics at an upstream wholesale level, to inform ComReg's analysis of the Relevant Wholesale Markets.

3.2 ComReg examines both demand-side and supply-side trends on the retail market. This approach stems from the fact that demand for WLA and WCA is derived from downstream end user[51] demand for a range of retail services, including broadband, which can be provided using both WLA and WCA inputs.

3.3 The most notable current and foreseeable trends and developments in the supply of, and demand for, broadband and other related retail services include:

(a) Increases in download and upload speeds on broadband subscriptions;

(b) Increases in download and upload traffic on broadband subscriptions;

(c) Movement away from copper, towards fibre-based broadband (net migration of end users from copper and FTTC towards full-fibre FTTP);

(d) Continued prevalence of bundling of broadband with other retail services, with comparatively stronger growth in standalone subscriptions compared to bundled plans;

(e) Behavioural changes as a result of the Covid-19 pandemic increasing the importance of broadband, i.e. the advent of homeworking and increased use and expectations of broadband; and

(f) Continued rollout and network upgrades by several Network Operators, including Eircom, SIRO, NBI and (on a forward-looking basis) VMI, together with increased uptake of NG broadband services.

[51] The term 'end user' generally refers to both residential and non-residential (business) customers throughout, unless otherwise specified.

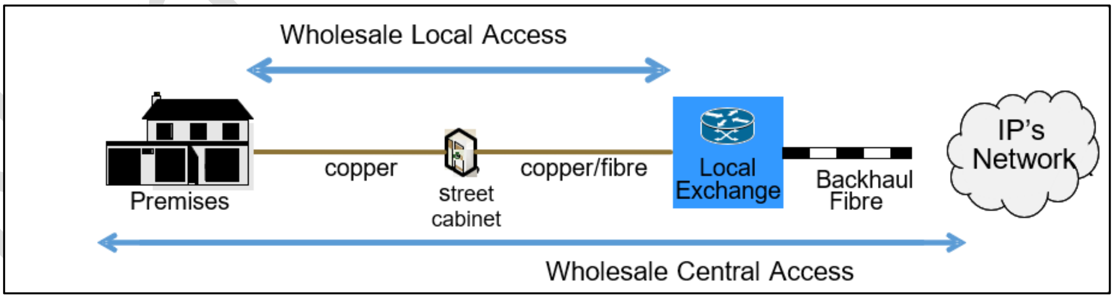
3.4 ALTO,[52] BT[53] and SIRO[54] all noted in their respective Submissions that the data utilised in the 2023 Consultation was for the period up to June 2022 (six months before its issue), which did not take into consideration the impact of subsequent global economic trends such as rising energy and inflation costs, the war in Ukraine and rising interest rates. ComReg notes that the data which was available for analysis at that time was the most recent data available. ComReg has updated the data in this Decision, to that which is most recently available, with this largely based on Q1 and Q2 2023 data. ComReg has also taken other more forward-looking data (such as forecasts of network rollout) into account where this is available and sufficiently reliable.

3.2 Relationship between WLA, WCA, and retail broadband markets

3.5 WLA and WCA are wholesale broadband products which Access Seekers[55] can purchase to offer wholesale services to other operators, or, more commonly, to offer retail broadband and other services to their own end users. The WLA and WCA markets are vertically related. The WCA market lies downstream of the WLA market, but upstream of the retail broadband (and related) market. Thus, WLA is an upstream input into the provision of WCA.

3.6 Figure 2 below illustrates the WLA and WCA markets, and how they are related. The WLA market typically comprises the connection between the local exchange/aggregation node and the end user's premises, while WCA relates to the full connection from a SP's network to the end user's premises, including the backhaul element. WCA typically aggregates traffic across local exchanges/aggregation points to carry it to a higher point in the network.

Figure 2: Example of Typical WLA and WCA Provision



[52] ALTO Non-confidential Submission, page 3.

[53] BT Confidential Submission, page 2.

[54] SIRO Non-confidential Submission, pages 4-6.

[55] An Access Seeker is a Service Provider ('**SP**') that seeks to purchase upstream inputs (in this case, WLA and/or WCA services) from another SP.

3.7 WLA includes access over what is sometimes described as the 'last mile', typically between the local exchange or access node(s) (the 'Point of Presence' or '**PoP**') and the end user.[56] WLA is acquired upstream and, as defined by the EC, consists of both *"physical access products"* and *"virtual access products that mimic the capabilities of physical access (VULA) enabling transmission of internet and related data services"*.[57]

3.8 In purchasing WLA, an Access Seeker must arrange for the provision of the backhaul elements between its network and the local exchange (or equivalent aggregation node). This can include either self-build or the purchase of backhaul from another wholesale supplier. Access Seekers purchasing WLA products do so to enable the provision to their own customers of a range of downstream (wholesale and retail) services. At the retail level these include, but are not limited to, broadband, leased lines ('**LL**'), television ('**TV**') and RFTS. At the wholesale level, an Access Seeker can also purchase WLA to facilitate its delivery of WCA services (downstream from the WLA market) to other Access Seekers who, in turn, use these inputs to provide retail services to end users. The WLA and WCA markets are therefore vertically integrated.

3.9 WCA is a wholesale input used both directly and indirectly in the provision of a range of downstream wholesale and retail services, which are typically used by end users to access broadband, TV, and RFTS. Compared to WLA, WCA products are typically provided to Access Seekers at a higher and more central layer in the network architecture.[58] Generally, WCA involves the rental of a broadband connection between an end user's premises and an aggregation point in a network, and therefore includes backhaul connectivity from the PoP to the WCA SP's network. Compared to WLA, WCA products give Access Seekers a *"less direct and more standardized control over the access line"*.[59]

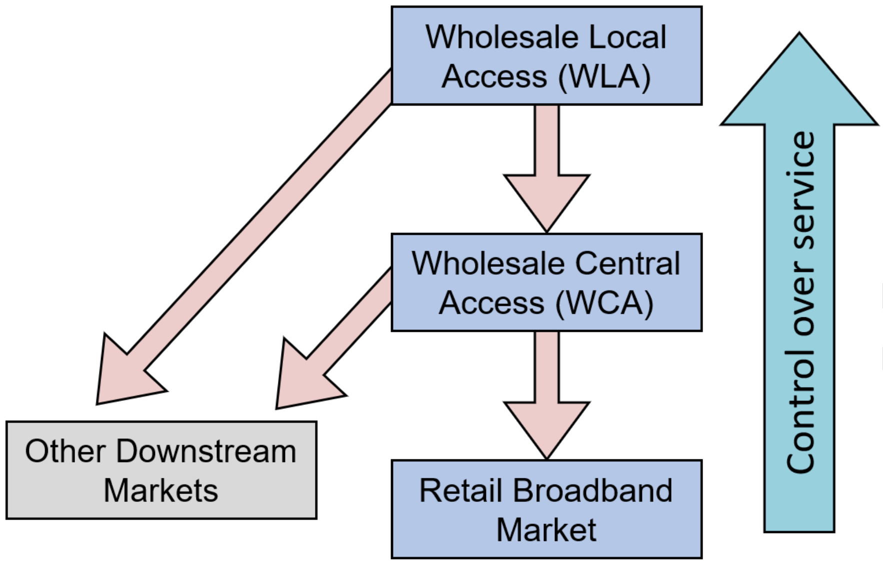
[56] This does not preclude other forms of access between these points.

[57] 2020 Explanatory Note, p.48.

[58] 2020 Explanatory Note p. 52.

[59] 2020 Explanatory Note, p.42.

Figure 3: Relationship between WLA, WCA and Retail Market for Broadband



3.10 This market review focuses on the provision of WLA and WCA services and on WLA and WCA as upstream inputs into the provision of retail broadband and other retail services. Competition in retail markets depends on SPs offering services either via their own infrastructure, or by purchasing wholesale inputs provided by another SP in the WCA or WLA markets.

3.11 WLA and WCA are provided over CG technology, which consists of legacy copper-only paths, or NG technology, which consists of technologies offered over access paths having a full or partial fibre component.

3.12 CG WLA products include Local Loop Unbundling (‘**LLU**’), Line Share and Sub-loop Unbundling (‘**SLU**’), whereas the NG WLA product is VULA (also known as VUA). In respect of WCA, the CG product is CG Bitstream, and the NG product is NG Bitstream, or Bitstream Plus.

3.13 The WLA market is described by the EC as *"Wholesale local access at a fixed location"*, referred to as Market 1 in its 2020 Recommendation.[60] This recommendation replaces and supersedes the 2014 Recommendation,[61] which then designated the WLA market as Market 3a, although the market description itself is unchanged. The inclusion of the WLA market in the 2020 Recommendation means that the EC considers that the WLA market is susceptible to *ex ante* regulation at EU level.

3.14 The WCA market is described by the EC as *"Wholesale central access at a fixed location"*. The 2014 Recommendation designated the WCA market as Market 3b. However, the 2020 Recommendation has removed the WCA market from the list of markets deemed susceptible to *ex ante* regulation. Accordingly, there is no longer any presumption at EU level that WCA markets are susceptible to *ex ante* regulation. NRAs must therefore demonstrate, in light of the structure of the market and after an assessment of the national conditions impacting the likelihood of competition in the market, whether certain conditions exist that warrant the regulation of the WCA market.

3.15 The Three Criteria Test ('**3CT**') is the assessment carried out by an NRA to determine whether a market not identified in an EC recommendation should be subject to regulation.[62] The 3CT seeks to determine whether, in light of national market circumstances, a market is characterised by;

(a) The presence of high and non-transitory structural, legal, or regulatory barriers to entry;

(b) A market structure which does not tend toward effective competition within the relevant time horizon, having regard to the state of infrastructure-based competition and other sources of competition behind the barriers to entry; and

(c) Competition law alone is insufficient to adequately address the identified market failure(s).

[60] European Commission Recommendation of 18 December 2020 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (the '**2020 Recommendation**').

[61] European Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation (the '**2014 Recommendation**').

[62] As outlined in Article 67 of the Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (the '**EECC**').

3.16 NRAs may identify and regulate markets not listed in the 2020 Recommendation, if they can demonstrate that each of the three criteria listed above are cumulatively met, such that the 3CT is deemed to pass. However, meeting the 3CT does not automatically mean that regulation is warranted. It is then necessary to carry out a further assessment on that market to determine whether SMP is present.

3.17 In its Submission, Eircom[63] considered that ComReg had not linked the retail market data to the wider context for use in its SMP analysis. Eircom referred to the Copenhagen Economics[64] Submission on its behalf which stated that Eircom's declining retail market share was not consistent with it having SMP in the entire Commercial NG WLA Market. Eircom stated that ComReg should review these points and incorporate them to inform its SMP analysis.

3.18 Taking these points into consideration and analysing the QKDR data, ComReg observes that Eircom has actually gained market share in the fixed broadband market over recent quarters (from Q3 2022 to Q2 2023) and over the last six quarters in the FTTP market. The claims made by Copenhagen Economics that Eircom's market share is in decline do not therefore hold.

3.19 The issues Eircom has raised relating to the findings of SMP on the upstream Commercial NG WLA Market are more appropriately addressed in Section 6.

3.2.1 Retail Service Providers using WLA, WCA and own network inputs

3.20 A number of Access Seekers are currently active in the provision of retail services using WLA and/or WCA inputs.[65] These Access Seekers differ in terms of the product(s) they supply, the underlying access technology or platform, their relative size, their geographic coverage and thus their service availability. For the purposes of ComReg's analysis, SPs can be divided into three broad categories, in terms of the extent of their own network coverage and the degree to which they depend on the use of wholesale services purchased from other SPs. ComReg collects data on a quarterly basis[66] from these SPs, based on the following delineations:

[63] Eircom Non-confidential Submission, pages 9-12.

[64] Copenhagen Economics Non-confidential Submission. Copenhagen Economics prepared an economic report on behalf of Eircom in response to the 2023 Consultation.

[65] The Service Providers listed in this section do not serve as an exhaustive list of all suppliers currently active in the Irish market, but rather as examples of some of the principal suppliers.

[66] The ComReg Quarterly Key Data Report ('**QKDR**') is published on a quarterly basis at the following; https://www.comreg.ie/industry/electronic-communications/market-information/quarterly-key-data-report/. Data from these reports are referenced throughout.

(a) **Network Operators:** These SPs operate and maintain their own local access network and associated infrastructure. Eircom, SIRO, NBI and – potentially on a forward-looking basis - VMI are all examples of Network Operators (‘**NO(s)**’). Such SPs operate as wholesale-only providers, whereby they provide wholesale services to other SPs entirely over their own network and associated infrastructure, on a merchant market basis (SIRO and NBI); or they can be active in the provision of retail broadband to their own end users (Eircom and VMI) on a self-supply basis, instead of, or in addition to, offering wholesale services.

(b) **Retail Operators:** These SPs purchase upstream inputs in the WCA and WLA markets to provide products in the downstream retail market(s). Typically, such operators have limited network infrastructure of their own and rely on access to wholesale services provided by Network Operators to provide downstream wholesale and/or retail service to end users. Examples of Retail Operators include Vodafone and Digiweb.

(c) **Resellers:** These SPs purchase products from a third-party SP (a Network Operator) and resell services in the retail market, under their own brand, for example, Sky. Some such SPs only have regional coverage, for example, Westnet and Rocket Broadband.

3.21 Although most SPs fall under the above delineations, in some instances certain SPs fall between or across categories. For instance, BT does not fit into just one of the above categories, since it operates its own network but also purchases wholesale services from other operators and uses these inputs to compete at the wholesale and retail level. BT also acts as an aggregator in selling to other SPs, purchasing from NOs and selling services to other SPs.

3.22 These SPs (in addition to others not mentioned above, but active in the provision of retail broadband) offer a range of retail services, using inputs from the WLA and WCA market, in addition to their own network inputs.

3.2.2 Network upgrade and rollout plans

3.23 A number of SPs are currently engaged in the rollout of FTTP networks. Several of these rollouts had commenced or were planned at the time of the 2018 Decision. Since then, rollout of FTTP broadband networks has continued, with additional announcements of further phases of rollout, or, in the case of VMI, plans for a complete FTTP network overbuild of its existing CATV network. During Q4 2021, several operators (namely Eircom, VMI and SIRO) announced either network expansion plans to areas previously unserved or plans for network upgrades in areas already served. Additionally, in Q4 2022, VMI announced plans to enter the wholesale market, having reached an agreement with Vodafone for the provision of wholesale services over its FTTP network, as that network is rolled out.[67] VMI subsequently announced the conclusion of a second wholesale agreement with Sky in October 2023.[68] These market developments, if and when they come to fruition, are likely to have an impact on the broadband market, at both retail and wholesale level.

3.24 The number of premises in the State capable of receiving FTTP (i.e., which are passed by an FTTP network) continues to grow through a combination of rollout from Eircom, NBI, SIRO (and, on a forward-looking basis, VMI).[69] In Q2 2023 1,527,302 unique premises in the State were passed by any FTTP network,[70] of which 576,856 (38%) were active lines.[71]

[67] https://www.irishtimes.com/business/2022/10/27/virgin-media-opens-up-its-fast-fibre-broadband-network-to-vodafone/

[68] Virgin Media Ireland and Sky Ireland Announce Landmark Wholesale Deal, accessed on 18 October 2023.

[69] Throughout, ComReg includes references to VMI FTTP rollout, taking a forward-looking perspective. The proposed overbuild of VMI's existing DOCSIS 3.1 network to FTTP was announced in November 2021 and as of October 2023, VMI has commenced its rollout. For more detail and discussion of the VMI announcement and rollout plans see paragraphs 3.42 to 3.443.44 and elsewhere.

[70] 'Premises passed' refers to the total number of active, passed and in situ lines i.e. the total number of lines with an active subscription, have been passed by operators but are not currently active, and lines which were previously but are not currently active (these lines are easily 'switched' back on). The 'unique premises' metric accounts for the fact that some Eircodes/premises are passed by more than one FTTP network. There is FTTP overlap at approximately 391,867 Eircodes. Accounting for only unique premises passed by an FTTP network allows for a better picture of actual coverage, as including Eircodes passed by multiple FTTP networks more than once would artificially inflate coverage figures and infer a greater degree of FTTP coverage than is the reality.

[71] 'Active' refers to lines which have an associated active subscription i.e. a retail operator has purchased these from the Network Operator or is used by a Network Operator's retail arm to sell to an end user.

3.25 A number of Respondents queried if NOs would continue, over the lifetime of the market review, their rollout at the same pace going into the future as the period to date. BT[72] notes the 'cheaper money window' is disappearing, leading to potential slowdown of broadband rollout as NOs adjust to higher costs. SFG,[73] Sky[74] and VMI[75] make similarly broad arguments that there is uncertainty about future rollout, with NOs having overestimated their ability to rollout in the past.

3.26 While ComReg notes there is a possibility that network rollout may slow down, the evidence to date does not indicate that this is the case. Table 2 below shows each NO's additional premises passed each quarter,[76] highlighting large increases in NBI and Eircom network rollout in recent quarters, with SIRO's network rollout being broadly steady (although there is some variability across some quarters). VMI's FTTP network rollout is still in its infancy. ComReg is required to be forward looking in its analysis[77] but can only do so on the basis of sufficiently reliable forecast data, which is not always available.

Table 2: Additional Premises passed each quarter by Network Operators[78]
[✂REDACTED ✂]

Additional premises	[✂ [redacted]	[redacted]	[redacted]	[redacted] ✂]
Q2 2023	[redacted]	[redacted]	[redacted]	[redacted]
Q1 2023	[redacted]	[redacted]	[redacted]	[redacted]
Q4 2022	[redacted]	[redacted]	[redacted]	[redacted]
Q3 2022	[redacted]	[redacted]	[redacted]	[redacted]
Q2 2022	[redacted]	[redacted]	[redacted]	[redacted]
Q1 2022	[redacted]	[redacted]	[redacted]	[redacted]
Q4 2021	[redacted]	[redacted]	[redacted]	[redacted]
Q3 2021	[redacted]	[redacted]	[redacted]	[redacted]

[72] BT Confidential Submission, page 2.

[73] SFG Non-confidential Submission, pages 4-5.

[74] Sky Non-confidential Submission, pages 2-3.

[75] VMI Non-confidential Submission, page 9.

[76] These premises are additional to each NO and some premises may be overlapped by other operators.

[77] As set out in regulation 49(5) of the ECC Regulations.

[78] Note that total figures for each operator may not add up to all additional premises passed from Q2 2019 to Q1 2023 as some NOs had prior FTTP rollout.

Q2 2021	[redacted]			
Q1 2021				
Q4 2020				
Q3 2020				
Q2 2020				
Q1 2020				
Q4 2019				
Q3 2019				
Q2 2019				
Total				

3.27 NBI[79] argues in its Submission that ComReg alludes to a competitive market where end users will have a choice of up to five FTTP networks but notes that NBI will only rollout where no other NO is present. NBI also notes that there is no guarantee that every premises currently served by ADSL, VDSL or CATV will be upgraded to FTTP.

3.28 Given the NBP contract with the State and due to its exceptional circumstances, as set out in paragraphs 5.80 to 5.82 below. ComReg is satisfied that where NBI is the only NO present at a premises, it is constrained by its contractual agreement, ultimately facilitating effective competition at the retail broadband level. Regarding VMI's upgrade of its CATV network to FTTP, VMI has commenced the overlay upgrade and Eircom continues to upgrade its existing ADSL and VDSL network (outside the IA) with FTTP. In the case of ADSL being upgraded to FTTP, where a premises is deemed uneconomic to upgrade by commercial operators, the premises will likely fall into the IA.

3.29 SIRO[80] notes in its Submission that weakening price controls on Eircom in respect of the NG WLA Market could lead to the introduction of aggressive discounting by Eircom, increasing frailty of investment plans by competitors and undermining ComReg's objective of encouraging investment. This issue is not germane to retail trends and regulatory price controls on Eircom are addressed in Section 9 in the context of the Commercial NG WLA Market.

[79] NBI Non-confidential Submission, pages 4-5.

[80] SIRO Non-confidential Submission, pages 4-6.

Eircom

3.30 In 2014 Eircom announced the rollout of an FTTP network with download speeds of up to 1 Gbps. This rollout commenced in 2016 and as of Q4 2023 is ongoing. As its FTTP rollout has progressed this has become the dominant technology deployed across its network, surpassing FTTC. As Eircom continues to deploy fibre deeper into its local access network and closer to the end user premises, this will shift (eventually completely) to a FTTP-based network (excluding premises served by NBI in the Intervention Area). As of Q1 2023 Eircom announced that it passed **[✂** [redacted] **✂]** premises with FTTP[81] and **[✂** [redacted] **✂]** with FTTC, inferring a total Eircom FTTC/FTTP ('**FTTx**') footprint, when accounting for overlaps, of **[✂** [redacted] **✂]**[82] premises in the State. ComReg QKDR data for Q1 2023 also show that, overall, FTTP subscriptions (537,243), surpassed FTTC subscriptions (513,916) and ComReg expects this trend to continue.

3.31 Eircom's initial FTTx network rollout plans included 300,000 rural premises, which were originally part of the NBP IA and which, in April 2017 were removed from the IA following commitments made by Eircom to the Department of Environment, Climate and Communications ('**DECC**')[83] to provide premises in rural Ireland with access to high speed broadband.[84] Subsequently, Eircom added another 40,000 premises to this figure (the '**Rural 340k**')[85] which it agreed to roll FTTP out to on a commercial basis, completing this in 2019.

3.32 Sky[86] argues in its Submission that ComReg should monitor competitive conditions in different areas of the country, suggesting an 'Urban/Suburban Commercial' area where Eircom, SIRO and VMI are present and a 'Rural Commercial' area where only Eircom is present.

[81] According to QKDR data. Eircom's own results for Q2 2023 show it passed over 1.083 million premises with FTTP. These results also indicate that some 986,000 premises are passed with FTTC only https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf.

[82] Accounting for Eircom FTTP and FTTC overlaps at [✂ [redacted] ✂] premises. There is a small disparity (0.07% difference) between this FTTx footprint figure and the FTTx footprint figure outlined in the geographic assessment, owing to slight differences in data sets and outputs.

[83] As set out in the Commitment Agreement between Eircom and DECC.

[84] https://www.dccae.gov.ie/en-ie/communications/topics/Broadband/national-broadband-plan/frequently-asked-questions/Pages/Light-Blue.aspx The underlying Commitment Agreement is available at https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf.

[85] https://www.independent.ie/business/farming/rural-life/eir-says-plan-to-provide-30000-farms-with-highspeed-fibre-broadband-will-be-complete-in-june-37824246.html.

[86] Sky Non-confidential Submission, pages 2-3.

3.33 The competitive conditions of the retail broadband market and any potential geographic differences across the State are addressed in Section 4 below.

3.34 In October 2021 Eircom announced plans to speed up its fibre rollout via investment from an infrastructure investment partner, InfraVia.[87] In January 2022, Eircom announced that a deal had been reached with InfraVia to establish a Joint Venture ('**JV**') partnership for its wholesale FTTP network, with the goal of reducing the time required for the completion of the next phase of its FTTP overbuild.[88] This transaction was completed in June 2022, resulting in InfraVia taking a 49.9% stake in a new Eircom subsidiary, Fibre Networks Ireland Limited ('**FNI**'), which will provide passive broadband services exclusively to Open Eir (the wholesale arm of Eircom) while Eircom continues to manage and provide maintenance and services across its network.[89] Eircom indicated that 200,000 homes would be passed by FTTP in 2022, increasing to 250,000 homes in 2023 and per annum thereafter, resulting in 1.9 million premises served by Eircom FTTP. Eircom completed rollout at **[✂** [redacted] **✂]** premises in 2022 and, as of Q2 2023, passed **[✂** [redacted] **✂]** premises with FTTP.

3.35 SFG[90] expressed concern in its Submission as to how ComReg is overseeing the Eircom-InfraVia JV from a regulatory perspective in the context of the PIA Consultation. The implications of the InfraVia Transaction on the PIA market are considered in the PIA Decision.

3.36 As part of the transaction Eircom transferred certain assets to FNI (including ducts, poles and fibre but excluding exchanges and cabinets) that are principally located outside the IA, where NBI is rolling out its FTTP network.

[87] http://home.eir.ie/pressroom/eir-and-InfraVia-Form-Partnership-to-Accelerate-eirs-Fibre-Broadband-Roll-Out/.

[88] According to Eircom, this transaction will allow for fibre rollout to accelerate by 25% to pass an additional 250,000 homes by the end of 2023.

[89] Details of the transaction are available at https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/news/eir_Fibre_Partnership_Press_Release_220128.pdf and https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/news/220701-eir-Fibre-Partnership-Completes-Press-Release.pdf.

[90] SFG Non-confidential Submission, pages 4-5.

3.37 The associated assets as defined in the Transaction Documents[91] include the Access Network, the fibre rights[92] and other assets and property used exclusively in respect of the business[93] but excluding certain excluded assets. The excluded assets are listed in the Business Transfer Agreement[94] and include (amongst other things) **[✂** [redacted] **✂]**[95]

3.38 In the PIA Decision ComReg's view is that it is appropriate to treat the physical infrastructure owned by FNI and Eircom as one PI network, the operation and management of which is effectively under Eircom's control.

3.39 As regards WLA and WCA supply by Eircom, having regard to the PIA Decision and also noting that excluded assets remain under the ownership of Eircom, ComReg considers that the operation and management of WLA and WCA services is under Eircom's control.

3.40 SIRO[96] notes in its Submission that the strong link between PIA and WLA is not sufficiently evidenced by ComReg. This link determines the choice a NO makes between no investment in the PIA market to provide services, or substantial investment in providing a competitive market. SIRO suggests that there should be a margin squeeze test to ensure operators who invest in PIA cannot be squeezed out of the WLA market by Eircom. Issues relating to the relationship between PIA and the WLA market are considered in the separate PIA Decision. ComReg notes, however, that a margin squeeze test between PIA and WLA would require direct equivalent upstream and downstream products. No such downstream products that are directly relatable to PIA.

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[91] The InfraVia Transaction is comprised of Transaction Documents, which include a Shareholders Agreement, a Business Transfer Agreement, a Managed Services Agreement, a Transitional Services Agreement, a Commercial Services Agreement, a Deed of Conveyance, Transfer and Assignment of Fibre Rights, a Master Duct and Pole Licence Agreement ('**Transaction Documents**').

[92] Defined in the Business Transfer Agreement as *"all statutory, prescriptive, contractual and common law title and property rights and all easements, rights, powers, privileges and interests which are held by the Company at Completion and which are necessary to operate the Access Network"*.

[93] Clause 2.1.

[94] Clause 1.1 (Definition of Excluded Assets).

[95] Clauses 1 and 2.

[96] SIRO Non-confidential Submission, pages 4-6.

Virgin Media Ireland ('VMI')

3.41 In 2005, VMI (then operating as UPC Ireland) began providing broadband services over its CATV network, offering download speeds up to 30 Mbps. In 2010, it began upgrading its CATV network to the DOCSIS 3.0 standard and completed the upgrade of its network to the DOCSIS 3.1 standard in August 2020 - enabling VMI to provide faster gigabit capable broadband to over 97.5% of its network.[97]

3.42 In November 2021, VMI announced its intention to replace its CATV network with a FTTP network. This rollout has now commenced[98] and VMI has indicated to ComReg that its FTTP upgrade plan **[✂** [redacted] **✂]** VMI has also announced its intention to provide wholesale access to third parties across the new FTTP network and has taken decisions to:

(a) upgrade its existing DOCSIS 3.1 network to FTTP;

(b) offer wholesale access; and

(c) use other networks to increase its potential customer reach.

[97] The DOCSIS 3.1 specification for coaxial-based (CATV) networks was released in 2013, providing for 10 Gbps downstream and 1-2 Gbps upstream and allowing for a smooth migration from DOCSIS 2.x and 3.0. See page 42 of the 2020 Explanatory Note.

[98] http://www.techcentral.ie/virgin-media-ireland-announces-national-fibre-network-upgrade/.

3.43 In August 2022, VMI announced that it had entered into a wholesale agreement with SIRO, allowing it to expand its reach across the State and as of Q3 2022 has commenced purchases of wholesale inputs from SIRO.[99] VMI announced in October 2022 that it had agreed a wholesale merchant market FTTP network access deal with Vodafone.[100] VMI also announced a wholesale agreement with Sky in October 2023.[101] **[✂** [redacted] **✂]** While VMI has commenced its FTTP overlay, it has not, as of October 2023, been able to provide ComReg with detailed forward-looking deployment plans, other than its intention to overlay its CATV network over time.[102] The rollout of VMI's new FTTP network is in addition to its existing FTTP footprint of **[✂** [redacted] **✂]** premises it had already passed with Radio Frequency over Glass ('**RFoG**'), technology, which although itself is not currently capable of wholesale services, can be readily converted to use in a XGS-PON FTTP context.[103]

[99] https://www.virginmedia.ie/about-us/press/2022/virgin-media-expands-market-reach/.

[100] Virgin Media opens up its fast fibre broadband network to Vodafone – The Irish Times

[101] Virgin Media Ireland and Sky Ireland Announce Landmark Wholesale Deal VMI announced in this press release that it had already upgraded 250,000 premises to FTTP across its network. ComReg queried this number with VMI, which is not consistent with the data which ComReg holds. In response, VMI indicated that **[✂** [redacted] **✂]**

[102] VMI confirmed that while it has 'passed' **[✂** [redacted] **✂]** homes with XGS-PON, these are not all ready for service and so differ from ComReg's definition of homes passed (with this, in summary being, that the customer can actually order a service and be connected within standard lead times at standard prices). **[✂** [redacted] **✂]**

[103] There is potential in the future for those premises currently passed by RFoG FTTP to be upgraded to XGS-PON for wholesale services, should it be requested. Data provided to ComReg as of Q2 2023 by VMI suggest that the number of premises passed by VMI FTTP had increased from **[✂** [redacted] **✂]** in Q1 2023, to **[✂** [redacted] **✂]** premises in Q2 2023. This is a sizeable increase on the previous quarter, noting that average quarterly VMI FTTP rollout in the period 2019 to Q1 2023 had been **[✂** [redacted] **✂]** premises. However, VMI FTTP nevertheless continues to form a very small proportion (in the range of 10-20%) of its overall CATV and FTTP network deployment. VMI has indicated to ComReg that its current FTTP rollout and investment pattern leads to homes becoming serviceable in lumpy and bulk volumes. This suggests that VMI FTTP rollout figures may be characterised by unevenness and irregularity, such that reporting in one quarter may not give reliable indicators of activity in subsequent quarters.

3.44 [✂ [redacted] ✂]. Further details on VMI's deployment plans and entry into the WLA market are set out at paragraphs 5.84 to 5.91.

3.45 SPs[104] noted in meetings with ComReg that [✂ [redacted] ✂]

SIRO

3.46 In July 2014, ESB and Vodafone Ireland announced a 50:50 Joint Venture ('**SIRO**'), to build an FTTP network across 50 towns in Ireland, with the target of reaching 500,000 customers (a figure later revised to 450,000), with download speeds up to 1 Gbps. This has now been completed, and SIRO has commenced Phase 2 rollout across a further 79 towns, with plans to add an additional 320,000 premises to its existing footprint. The network is deployed on ESB's existing overhead and underground infrastructure. Although SIRO operates at the wholesale level only, it is relevant to the retail market assessment as its product offering directly impacts the products its retail partners can offer to end users. As of October 2023 SIRO advertises 12 retail partners on its website, including Vodafone, VMI and Sky, and the SIRO network passes, as of Q2 2023 [✂ [redacted] ✂] premises.[105] On completion, the SIRO network is planned to span 26 counties with coverage of 154 towns, encompassing c.770,000 premises.[106] Further details on SIRO's deployment plans are considered below at paragraphs 5.74 to 5.77.

3.47 Eircom[107] notes in its Submission that wholesale arrangements between Vodafone and SIRO and Vodafone and VMI could dampen the expectation of competing network overbuild and competition.

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[104] [✂ [redacted] ✂] and [✂ [redacted] ✂].

[105] QKDR Q2 2023.

[106] SIRO reports passing over 515,000 premises as of October 2023: http://siro.ie/, accessed on 26 October 2023.

[107] Eircom Non-confidential Submission, pages 9-12.

3.48 As set out above, VMI intends to overlay its CATV network with FTTP and SIRO plans to increase its FTTP footprint. Eircom has also signalled its intention to ultimately upgrade its network to serve some 2 million premises with FTTP. In this context a degree of network overlap is likely. It is a matter for each SP to determine independently its own network upgrade/rollout strategy and the evidence suggests that network overlaps occur, albeit at varying levels of intensity.

NBI

3.49 The NBP Contract[108] was signed between the Government and NBI in November 2019. Pursuant to the contract, over a seven-year rollout period, NBI is scheduled to pass approximately 560,000 premises in the IA. The IA focuses on areas where there is no existing or planned commercial NG network, which amounts to approximately 21% of all premises in the State. Although predominantly rural, the IA covers areas in all 26 counties, and all but four metropolitan Dublin constituencies. NBI rollout commenced in late 2020, passing its first premises in January 2021 and as of September 2023 passes 182,250 premises in the State.[109] NBI has forecasted that, by the end of January 2024, it will have passed approximately 185,000 premises.[110]

[108] The full details of which, including the contract document are available at https://www.gov.ie/en/publication/16717-national-broadband-plan-contract/ (‘**NBP Contract**’). The contract is subject to a change control procedure and elements may be updated over the project lifetime.

[109] https://nbi.ie/ accessed 5 October 2023.

[110] https://nbi.ie/nbp-project-progress/ NBI measures ‘premises passed’ as premises which are typically available for connection within a 10-day time period.

Imagine

3.50 Imagine provides predominantly Fixed Wireless Access ('**FWA**')-based broadband to end users, typically located in rural areas. In February 2019 Imagine announced plans[111] to cover 1.1 million premises in regional and rural areas with 150 Mbps connectivity using 5G 3.6 GHz spectrum fixed infrastructure. Under the announced plan, Imagine aimed to build 325 sites to do so within 18 months, with additional sites to be added to meet demand as it arose. In ComReg's 2021 Multi Band Spectrum Award, concluded in 2023, Imagine acquired spectrum in both the 2.3 GHz band and the 2.6 GHz band, facilitating the continued rollout/upgrade of its FWA network. As of September 2023, this service is live and available in 24 counties and according to Imagine currently passes 74% of rural premises in the State.[112]

3.3 Broadband subscriptions by network platform, type and speed

3.51 The following sub-section analyses trends and patterns in demand for retail broadband since the 2018 Decision. ComReg examines trends in broadband subscriptions, by platform, type and download speed, along with behavioural changes and market dynamics which drive these trends.

[111] https://www.siliconrepublic.com/comms/imagine-5g-broadband-rural-ireland.

[112] https://www.imagine.ie/#check-coverage. ComReg notes that this does not necessarily mean that Imagine can serve every premises in its coverage footprint, as this will be conditional on its network capabilities, including, for example, backhaul.

3.3.1 Broadband subscriptions by platform

3.52 Figure 4 below illustrates the breakdown of broadband subscriptions[113] in Ireland by type since Q4 2018. In contrast to the breakdown at the time of the 2018 Decision,[114] retail subscriptions delivered over Next Generation broadband ('**NG broadband**')[115] now account for 93% of subscriptions delivered over CG or NG, highlighting the migration of end users away from broadband delivered over legacy copper networks towards higher speed broadband provided over (full or partial) fibre networks. Alongside the migration away from copper-only broadband, there is also ongoing migration within the 'umbrella' of NG broadband, from partial fibre, FTTC-based broadband, towards full fibre FTTP – driven in large part by the increased availability of FTTP networks. Since Q4 2018, copper-only broadband subscriptions have declined 66% and FTTC subscriptions have declined 20%, while FTTP subscriptions have risen by 536% (albeit from a low base initially).

[113] Total broadband subscriptions represent the sum of copper, FTTC, FTTP, CATV, FWA, Satellite and Mobile broadband Subscriber Lines, as described in the QKDR.

[114] The 2018 Decision was published on 30 November 2018. Comparisons from this time period therefore rely on figures from Q4 2018, where available. Due to some changes in data collection methodologies and storage, certain data points are only available on a comparative basis from Q1 2019.

[115] NG broadband includes technologies which include a partial or full optical component, including Fibre to the Cabinet ('**FTTC**'), Fibre to the Premises ('**FTTP**'), and DOCSIS 3.1 which is used to deliver broadband over CATV. Under the provisions of the EECC, a Very High Capacity Network ('**VHCN**') is defined as an electronic communications network which consists wholly of optical fibre elements at least up to the distribution point at the serving location, or an electronic communications network capable of delivering, under usual peak-time conditions, similar network performance in terms of available downlink and uplink bandwidth, resilience, error-related parameters, and latency and its variation.

3.53 According to the QKDR, as of Q2 2023, there were a total of 2 million (fixed and mobile) broadband subscriber lines in the State. 5% of these subscriptions were delivered over a CG copper network.[116] In terms of subscriptions delivered over NGA platforms,[117] 25% of total broadband subscriptions were delivered over FTTC (VDSL),[118] 29% over FTTP, and 18% of subscribers received broadband over VMI's CATV DOCSIS 3.1 network.[119] An additional 19% of subscribers made use of mobile broadband ('**MBB**')[120] and remaining subscribers accessed services using satellite or FWA networks,[121] accounting for less than 5% of subscription volumes.

3.54 By comparison, in Q4 2018, there were a total of 1.7 million broadband subscriptions, of which 17% were delivered over a CG copper network, 36% were delivered over FTTC, 5% over FTTP and 22% over VMI's CATV network. The remaining subscribers accessed broadband via MBB (17%), FWA (3%) and satellite (0.3%).

[116] A copper network or a copper-only network refers to a network that does not include any fibre in the access path. A copper network is typically used to supply ADSL and ADSL+ broadband services.

[117] Next Generation Access ('**NGA**'), provided over a fibre or fibre/copper hybrid network. Fibre is typically described as being provided 'to the …'. 'FTTx' refers to the provision of broadband by means of fibre optic cable, either as Fibre to the Home ('**FTTH**'), Fibre to the Premises ('**FTTP**'), Fibre to the Cabinet ('**FTTC**') or DOCSIS 3.1 CATV.

[118] Very high-speed Digital Subscriber Line ('**VDSL**').

[119] Cable Access Television ('**CATV**') Data Over Cable Service Interface Specification ('**DOCSIS**').

[120] Broadband services delivered over a mobile network using a dongle or MiFi device. Such services are currently available from SPs including Three, Eircom, Vodafone and Magnet. ComReg QKDR data do not split MBB subscriptions by underlying (4G/5G) technology.

[121] FWA subscriptions accounted for a 4.3% share and satellite subscriptions for 0.3%.

Figure 4: Retail Broadband Subscriptions by Platform, Q4 2018 – Q2 2023[122]

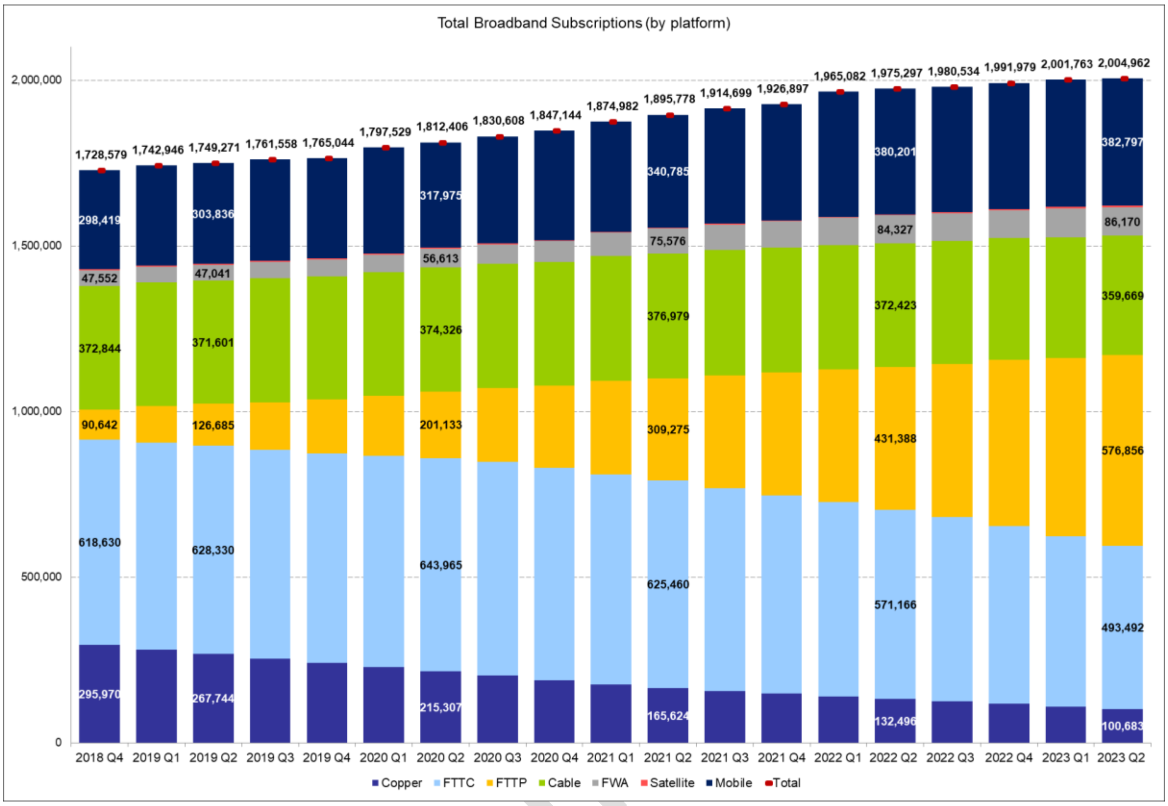
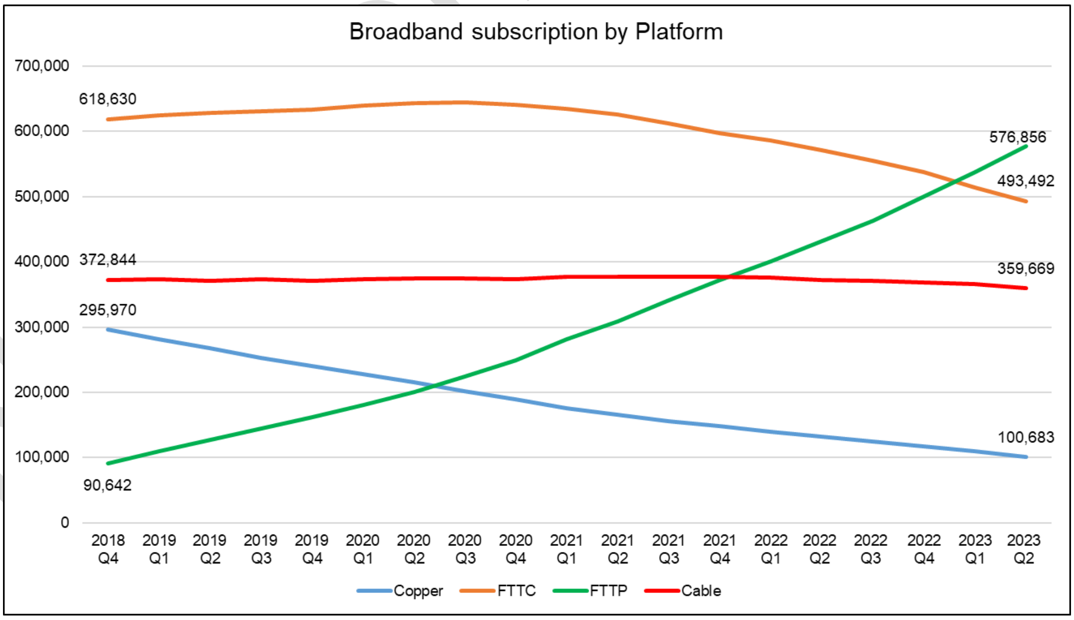


Figure 5: Retail Fixed Broadband Subscriptions, Q4 2018 – Q2 2023[123]



122 QKDR data.

123 QKDR data.

3.55 During this period, the platform which experienced the highest growth was FTTP, increasing by 536% from 90,642 subscriptions in Q4 2018 to 576,856 in Q2 2023. This increase in FTTP subscriptions resulted in its share of total subscriptions rising from 5% in Q4 2018 to 29% by Q2 2023, outstripping the growth of every other broadband platform over the same period. Notably, in Q1 2022 FTTP-based subscriptions surpassed the number of CATV-based subscriptions in the State for the first time, highlighting the continued growth in this segment of the market. FTTP subscriptions (aided by ongoing FTTP network rollout and increased availability) have increased consistently in every quarter since the publication of the 2018 Decision, a trend which, as of Q1 2023, saw FTTP account for the largest proportion of the retail broadband market, overtaking FTTC for the first time.

3.56 Both ALTO[124] and BT[125] suggested in their respective Submissions that consumers will not upgrade their broadband plans due to disposable income tightening. ComReg notes that while this may be the case for certain consumers, the evidence shows that there have been consistent increases in FTTP subscriptions and products being sold with higher download speeds, while at the same time there have been declines in FTTC-based and copper-based broadband products.

3.57 During this period the other major identifiable trend is the decline in copper-based subscriptions.[126] Copper-based subscriptions declined by 66%, from 295,970 subscriptions in Q4 2018 to 100,683 in Q2 2023, and now account for just 5% of total broadband subscriptions (in comparison to 17% in Q4 2018). This ongoing decline continues a trend first identified in the 2018 Decision.

3.58 In its Submission, SFG[127] broadly agreed with the main developments in the retail broadband market but expressed concern that deregulation of CG copper will offer no protection, in terms of price, choice and quality to end users, with some consumers losing service altogether (particularly in the IA). It noted that customers can only switch to fibre where and when fibre is available.

[124] ALTO Non-confidential Submission, page 3.

[125] BT Confidential Submission, page 2.

[126] 'Copper/copper only network' refers to a network that does not include fibre in the access path (i.e. which has exclusively copper in the access path). A copper network is typically used to supply, amongst other things, ADSL and ADSL2+-based broadband services.

[127] SFG Non-confidential Submission, pages 4-5.

3.59 ComReg disagrees that end users on copper subscriptions will be adversely affected for a number of reasons. Firstly, given that a majority of copper customers fall into the footprint of the IA, they will ultimately be passed by NBI's FTTP network. While ComReg appreciates that NBI's rollout will not be fully completed for a number of years, ComReg is required to take a forward-looking approach based on reasonably reliable deployment forecasts which NBI can provide. QKDR data show a persistent decline in copper subscriptions, and it is not necessarily the case that retail copper services will be withdrawn at de-regulation. As set out in Section 10, the withdrawal of regulation in the CG WLA Market is subject to a sunset period, in this instance of 12 months.

3.60 The rise in FTTP and simultaneous decline in copper subscriptions is clearly illustrated in Figure 5 above. There are likely to be several underlying migration dynamics driving these figures:

(a) Migration from Copper to FTTC;

(b) Migration from Copper to FTTP; and

(c) Migration from FTTC to FTTP.

3.61 As illustrated in Figure 5, since Q4 2018, FTTC subscriptions have declined by 20%, from 618,630 to 493,492 in Q2 2023. For the first eight of these quarters (from Q4 2018 to Q3 2020) FTTC subscriptions were in fact growing, reaching a peak of 645,125 subscriptions. However, after this point, the trend reversed and FTTC subscriptions have now been in decline for 11 consecutive quarters, falling 24% from its peak in Q3 2020 to Q2 2023.

3.62 Over the same period, CATV subscriptions (delivered via DOCSIS 3.1) fluctuated within a narrow band, with its share of subscriptions declining from 22% to 18% (somewhat reflective of overall growth in the market and it having a smaller share) and absolute subscription numbers decreasing slightly, from 372,844 in Q4 2018 to 359,669 in Q2 2023, peaking at 377,570 in Q1 2021.

3.63 MBB subscriptions have increased 28% over the period, increasing by 84,560 from 298,419 to 382,797. Although the absolute number of broadband subscriptions has risen, MBB subscriptions as a share of total broadband subscriptions have remained largely unchanged over the period, fluctuating in a narrow band, in a similar fashion to CATV subscriptions. Overall, MBB subscriptions account for the third largest portion of total broadband subscriptions, at 19%.

3.64 In Q2 2023 there were 5,295 satellite subscriptions and 86,170 FWA subscriptions. Since the 2018 Decision, FWA subscriptions have increased from 47,552 to 86,170, an increase of 81%. However, relative to its peak in Q1 2008, when FWA subscriptions numbered 123,456, the current figure remains below this level. In Q2 2023, 4.3% of broadband subscriptions were delivered over FWA. Accordingly, although the share of total broadband subscriptions attributable to FWA has remained relatively consistent (fluctuating between 3% and 4%), in absolute terms FWA subscriptions since Q4 2018 have increased by 81%. This upward trend commenced in Q2 2019 and FWA subscriptions have increased since, except for small decreases in Q2 2020, Q3 2022 and Q2 2023. However, some of this increase can be explained by the first-time collection of data from certain FWA SPs who met reporting thresholds for QKDR purposes – with these accounting for approximately 7,200 subscriptions growth since Q4 2021.

3.65 Satellite broadband had been decreasing each quarter from the 2018 Decision, from 4,522 in Q4 2018 to 1,665 in Q1 2022. However, from Q2 2022, Starlink started submitting data to ComReg and its subscriber figures have been included, raising satellite subscriptions to 5,295, marking a 17% increase in subscribers since the 2018 Decision.

3.66 Typically, FWA services are more prevalent in rural areas, where fixed NG broadband is, in general, less prevalent than in more densely populated urban areas. Imagine is the largest retail provider of FWA services, with a market share of **[✂ [redacted] ✂]**[128] of all FWA subscriptions. FWA is also provided by a number of smaller, mostly regional-based, SPs, often described as Wireless Internet Service Providers ('**WISP(s)**'). Despite the increase in the incidence of FWA since the 2018 Decision, there is some evidence to suggest that the increase in demand for these services may be transitory in nature.

3.67 In discussions with ComReg, **[✂ [redacted] ✂]** were of the view that FWA is being used as a temporary solution by end users in less densely populated areas of the State where FTTP is not (yet) available and that it is likely that end users have turned to FWA whilst awaiting FTTP rollout in their area as a means of securing a higher speed broadband connection than that available over e.g. copper. The phenomenon may have been amplified by the Covid-19 pandemic and the increased need of many end users for access to higher speed, more reliable broadband (at short notice) to facilitate remote work and education.[129]

[128] Between 50% and 60%.

[129] As set out in meetings with **[✂ [redacted] ✂]** and **[✂ [redacted] ✂]** both in January 2022.

3.68 Despite increases in FWA subscription numbers, NBI noted in discussions with ComReg that, [✂ [redacted] ✂].

3.69 ComReg data on the geographic distribution of FWA subscriptions suggest that the large majority of premises served by FWA are likely to fall within the IA.[130] Overall, ComReg recognises the upwards trend in FWA but considers that it does not represent a significant change in the underlying dynamics of the retail market or have any substantial identifiable impact at wholesale level. In addition, despite the fact that subscriptions have grown by 81% since Q4 2018, this needs to be considered in the context of FWA having a low overall base, the second lowest proportion of subscriptions out of all the broadband technologies assessed by ComReg.

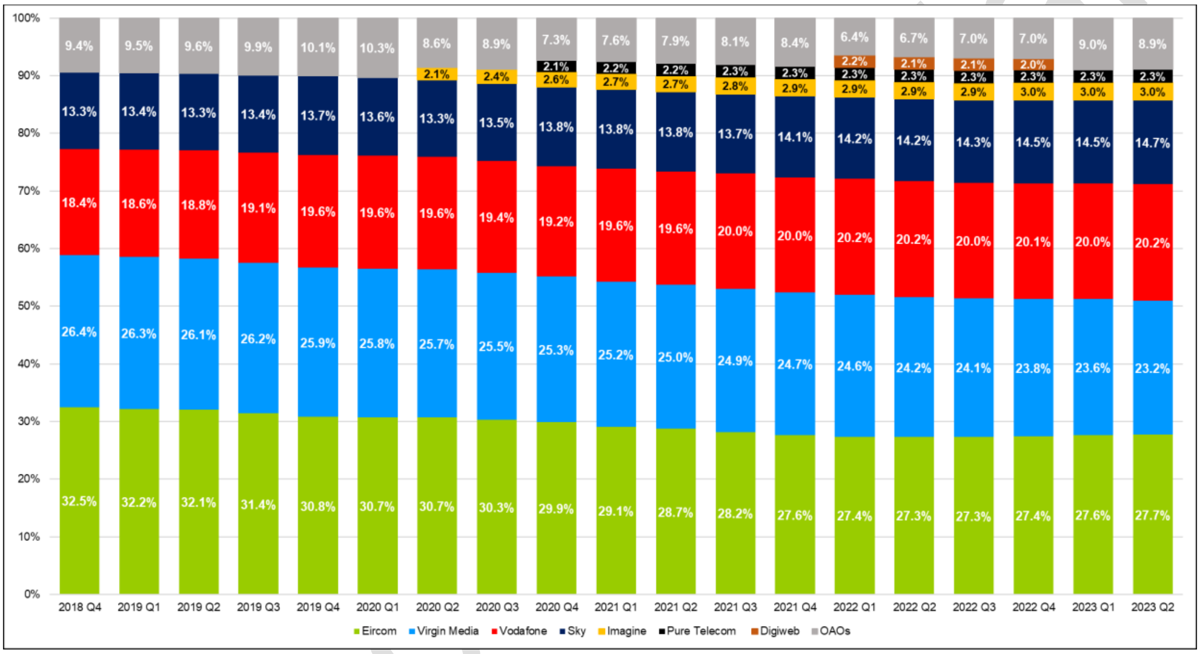
3.70 Overall, the most significant trend at retail broadband level is the growth in broadband subscriptions provided by means of FTTP and the decline in subscriptions provided over copper. Since Q4 2018, broadband subscriptions over copper have declined by 66%, while FTTP subscriptions have grown by 536%. As discussed in paragraph 3.52, copper-based broadband is in decline, as end users migrate towards NG-based broadband, primarily over fibre, where available. FTTP has experienced the greatest growth in subscriptions, in absolute and relative terms, illustrating the active migration of end users towards NG technologies. Over the five-year period of this market review, on the assumption that FTTP rollout plans by NOs materialise, FTTP will be the predominant broadband platform, and FTTC, copper and FWA broadband subscriptions are likely to have a relatively lower share of overall broadband subscriptions, with FTTP broadband subscriptions predominating.

[130] ComReg Q2 2023 data indicate that 80% of premises served by FWA for which there is geo-location data (approximately 67,000 of 86,000 FWA subscriptions) are located within the IA footprint.

3.3.2 Market shares of SPs providing broadband services

3.71 Figure 6 below shows the market shares of fixed broadband[131] operators by subscription numbers – including operators that offer services on the basis of purchased wholesale broadband services. It should be noted that these retail shares are in the presence of WLA and (partial) WCA regulation. ComReg's QKDR groups together operators which individually account for less than 2% of total fixed broadband subscriptions under the heading Other Authorised Operator(s) ('**OAO(s)**').[132]

Figure 6: Fixed Retail Broadband market shares, Q4 2018-Q2 2023[133]



[131] Fixed broadband referring to broadband provided over Copper (DSL), FTTC, FTTP, DOCSIS 3.1 CATV, FWA and Satellite. Equivalent to total retail broadband, minus mobile broadband figures.

[132] Examples of Other Authorised Operators ('**OAO(s)**') include Digiweb, Magnet and Whizzy.

[133] QKDR data. Fixed retail market refers to broadband provided over copper (DSL), FTTC, FTTP, DOCSIS 3.1 CATV, FWA and Satellite.

3.72 Eircom, which is vertically integrated, remains the largest provider of WLA and WCA services in the State. It owns and controls a ubiquitous CG network and also operates a NG network, which, as set out in Table 2, it is upgrading and rolling out on an ongoing basis. In Q2 2023 Eircom's FTTP network overtook its FTTC network with regards to premises passed (1.083 million premises passed with FTTP).[134] Eircom has, and is likely to continue to have, the largest FTTP network in the State. In particular, Eircom is currently focussed on overlaying its FTTC network with FTTP. This FTTP network will eventually replace Eircom's copper and FTTC network (mainly in areas outside the IA) and facilitate end user migration away from both legacy, copper-based broadband and FTTC-based broadband (which includes a copper component) towards full fibre, such that the sole technology in Eircom's network will ultimately be FTTP.[135] Currently Eircom provides a range of services over its CG and NG networks, including RFTS, broadband, TV and Leased Line ('**LL**') services to both residential and non-residential customers. However, there is an ongoing and persistent decline in services supplied over its CGA network.

3.73 As evidenced by Figure 6, in the presence of regulation Eircom remains the single largest retail broadband SP, and as of Q2 2023, holds a market share of 28% of fixed broadband subscriptions, compared to a market share of 33% in Q4 2018 – although its market share has been relatively stable since Q4 2021.[136] In Q2 2023 Eircom had 449,577 retail broadband subscriptions – **[✂** [redacted] **✂]**

3.74 VMI holds the next largest share of fixed broadband subscriptions, at 23%. As of Q2 2023 VMI serves 377,016 (predominantly residential) retail broadband customers over its CATV and FTTP network – with CATV subscriptions being in slow decline since Q4 2021. In November 2021 VMI announced its intention to upgrade its current network by replacing its existing DOCSIS 3.1 CATV network with a FTTP network. As of Q2 2023 VMI's CATV network passed **[✂** [redacted] **✂]**. It had a total of 377,016 subscribers, just 18,780 (5%) of which were FTTP customers, the remainder being served by its CATV network. 95% of VMI customers are residential customers.

[134] Eir Group Results Q2 2023. https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf

[135] Eircom's ongoing and rollout to date is discussed in greater detail in paragraphs 3.30 to 3.40 above.

[136] Based on operator share of the number of retail subscriber lines for DSL, VDSL, FTTP and CATV plus subscriber lines for satellite and FWA.

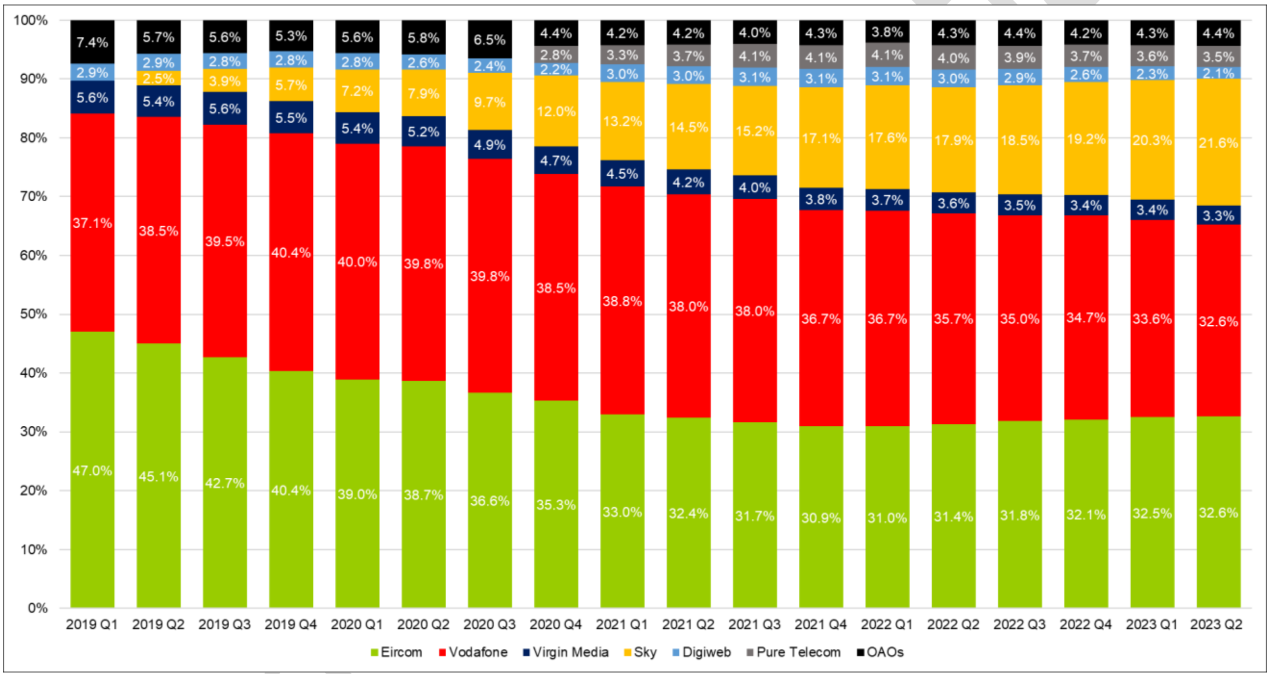
3.75 There have been some changes in market shares since the publication of the 2018 Decision. Eircom's retail broadband market share has declined the most (by 4.8%). VMI's market share has also declined (by 3.1%) but to a lesser degree, whereas Vodafone's share has increased by 1.8% and Sky's share has increased slightly (by 1.3%). In terms of smaller-scale operators, while the collective OAO market share looks as if it declined, this is likely due to Imagine and Pure Telecom exceeding the 2% share standalone reporting criterion which means they were removed from the OAO category and identified on an individual standalone basis instead. Cumulatively, the top four providers of fixed broadband services account for 86% of the market, as of Q2 2023, a decline of 5% from the Q4 2018 figure of 91%.

3.76 In the overall fixed broadband market,[137] there has been some change over the last three years, namely the 5% decline in Eircom's market share, the 3% decline in VMI's share and the growth in market shares of the remaining operators (including Sky, Imagine and Pure Telecom). However, there has been a greater degree of change within the (growing) FTTP segment of the overall fixed broadband market. As of Q2 2023, FTTP accounts for 36% of total fixed retail broadband subscriptions (compared to 6% in Q4 2018). Eircom and Vodafone are the largest retail providers of FTTP (33%), followed by Sky (22%). This picture contrasts with the overall fixed broadband market, with Vodafone holding a much larger proportion of FTTP subscriptions than its share in the overall fixed broadband market and VMI having very limited market presence (due to its relative lack of FTTP rollout and current preferred use of DOCSIS 3.1). ComReg also notes that Vodafone's FTTP share has declined by 3.1% since the 2023 Consultation (Q2 2022 to Q2 2023), with Eircom's share increasing by 1.2% and Sky's increasing by 3.7%.

[137] Consisting of retail subscriptions to DSL, VDSL, FTTP, CATV, satellite and FWA.

3.77 Since the 2018 Decision, the provision of FTTx has changed significantly, with FTTP now offered by at least six of the main retail SPs[138] along with a wide range of smaller retail SPs, on the basis of Eircom, NBI or SIRO wholesale inputs and on a forward-looking basis, VMI. The increasing (in line with network rollout progress) presence of Eircom, SIRO, NBI and on a forward-looking basis VMI[139] in upstream wholesale markets (and in the retail market via their respective retail partners) has resulted in a greater number of end users having the option to purchase FTTP broadband and access the greater speeds it is capable of delivering. Although operating at the wholesale level only, at the retail level, SIRO and NBI have c.12 and 50 retail partners respectively.[140]

Figure 7: FTTP Retail Market Share by Subscription, Q1 2019 – Q2 2023[141]



[138] Namely Vodafone, Eircom, Sky, Pure Telecom, VMI and Digiweb. FTTP services are also offered by a number of smaller, more localised operators such as Fastcom and Airspeed.

[139] VMI has announced plans to commence provision of wholesale services over FTTP to both Vodafone and Sky, but as of October 2023, ComReg understands that service provision has not actually commenced.

[140] See http://siro.ie/ and http://nbi.ie/where-can-i-buy/, accessed on 5 October 2023.

[141] QKDR data.

3.78 Eircom's retail share of FTTP subscriptions has declined, falling from 47% in Q1 2019 to 32.6% as of Q2 2023, although it has increased QoQ since Q4 2021 having grown by 1.7%.[142] Vodafone's share has declined from 37% to 32.6%. Vodafone purchases wholesale FTTP services from SIRO, Eircom and NBI (and has signed an agreement with VMI to do so **[✂** [redacted] **✂]**),[143] whereas Eircom does not purchase from SIRO and purchases a small amount of wholesale lines from NBI. From only being present in the OAO figure in Q1 2019 (i.e., holding a share <2%) Sky holds 21.6% of FTTP subscriptions at Q2 2023, the strongest growth of any FTTP SP over the period.[144] Sky currently purchases wholesale inputs from SIRO and NBI **[✂** [redacted] **✂]** In October 2023, Sky announced that it had entered into a wholesale agreement with VMI[145] **[✂** [redacted] **✂]**

3.79 Figure 8 shows the proportion of each broadband subscription type attributable to residential and non-residential customers. For all fixed broadband types, residential subscriptions dominate, whereas when it comes to MBB, non-residential subscriptions make up the larger portion, at 55% (although the residential/non-residential split is much less pronounced than in other fixed categories). The platforms with the highest proportion of residential subscriptions are FTTP and satellite (96% and 97% respectively) broadband, closely followed by CATV (at 95%).

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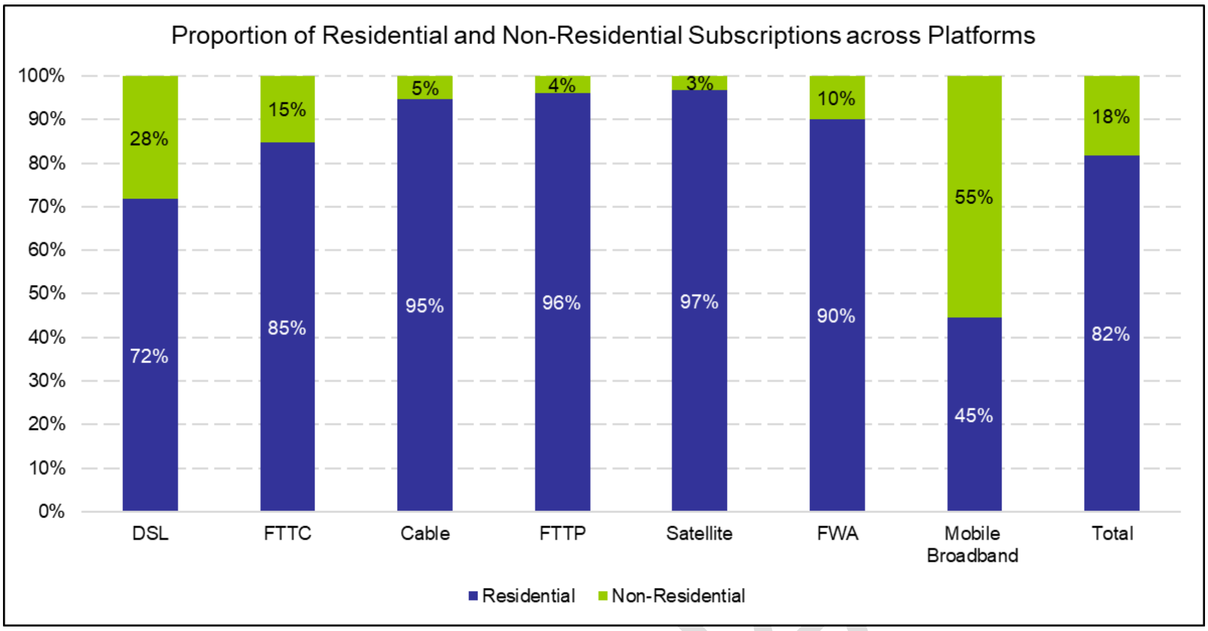
[142] Note that the percentage needs to be considered in the context of the overall number of FTTP subscriber lines. In Q4 2018 there were 90,642 FTTP subscriptions, rising to 576,856 FTTP subscriptions in Q2 2023. It should also be noted that Access Seekers were slower initially in purchasing FTTP wholesale services from Eircom.

[143] VMI response to ComReg IIR, 4 November 2022, with subsequent meetings, most recently 27 July 2023 confirming this timing.

[144] In the Q3 2019 ComReg QKDR, the methodology applied in compiling FTTP subscription data was amended to include additional FTTP subscription data available via other reporting sources. This was retrospectively implemented from Q1 2019 and FTTP subscription market share, as a standalone figure was published, for the first time in Q3 2019 reflecting salient market developments.

[145] Sky Ireland and Virgin Media Ireland Announce Landmark Wholesale Deal | Sky Group

Figure 8: Broadband Subscriptions by Type, Q2 2023[146]



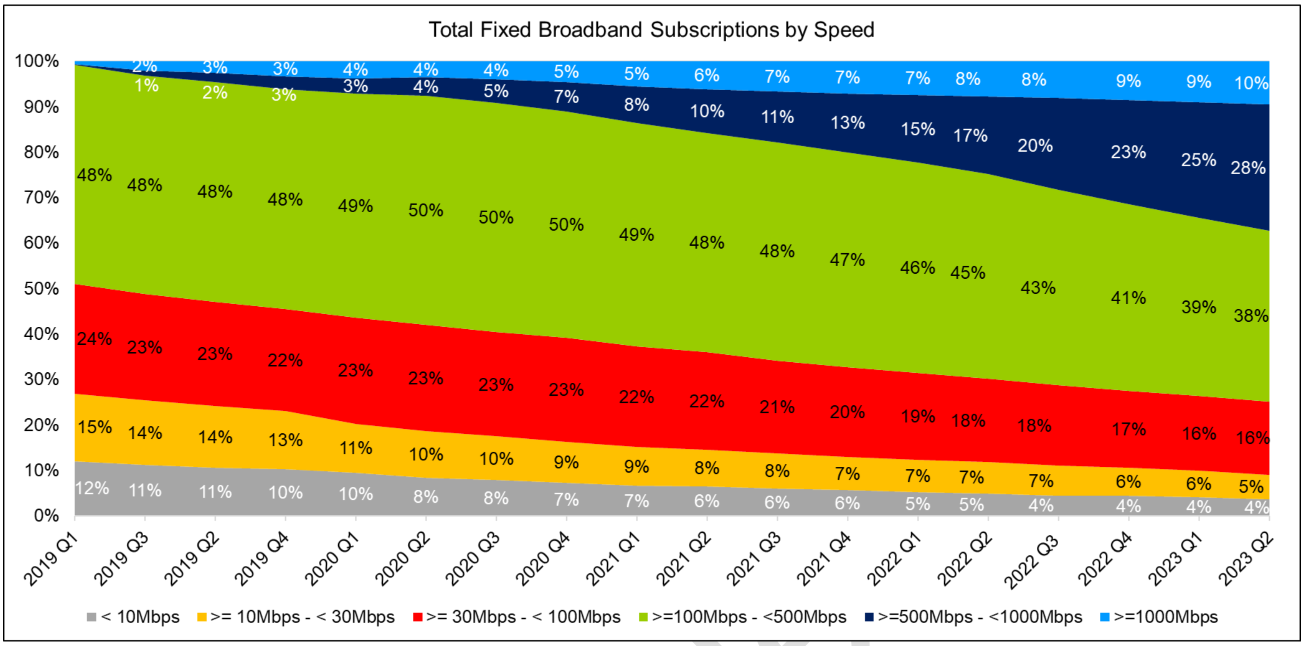
3.3.3 Broadband Subscriptions by Speed[147]

3.80 Since the 2018 Decision, advertised broadband download speeds have increased (although this remains subject to geographic availability). Figure 9 shows the evolution of fixed broadband subscriptions by contracted download speed between Q1 2019 and Q2 2023. Over the period, growth in broadband subscriptions has been concentrated in the higher speed bands, in particular the two bands in excess of 500 Mbps. As of Q2 2023, 10% of subscriptions had sold download speeds of 1 Gbps or above, 38% of subscriptions exceeded 500 Mbps and 76% have speeds in excess of 100 Mbps, with just 9% falling below speeds of 30 Mbps, compared to 27% in Q1 2019. Since Q1 2019, the number of subscriptions with speeds of between 500 Mbps and 1 Gbps has increased markedly, from 0.2% to 28%, and plans with speeds of at least 1 Gbps have risen from 1% to 10%.

[146] QKDR data.

[147] Sold speed: The maximum transmission rate for download of data from an SP which is contractually agreed with the broadband purchasing operator for the specific broadband product type sold. Actual speed: the maximum transmission rate for download of data from an SP which an end user could expect to achieve most of the time when accessing the service. Contracted speed refers to the 'up to x Mbps' advertised download speed under which the broadband product/bundle is advertised and contracted to the end user. It does not typically match the 'actual speeds' experienced by the end user but instead is an absolute maximum which they could expect.

Figure 9: Fixed Broadband Subscriptions by Sold Speed, Q1 2019 – Q2 2023[148]



3.81 Since Q1 2019 ComReg has collected data on speeds at a more granular level for higher speed categories, driven by the significant rise in broadband subscriptions falling in the ≥100 Mbps band. Since Q4 2021, the majority of fixed broadband subscriptions have fallen into the ≥100 Mbps category (i.e., Q4 2021 was the first period in which subscriptions of speeds ≥100 Mbps exceeded 50% of overall subscriptions), a development which is consistent with indications given to ComReg by SPs that many of their customers are increasingly starting on plans with speeds of at least 500 Mbps.[149]

[148] ComReg internal QKDR data.

[149] The main FTTP SPs (Eircom, Vodafone and Sky) all offer their FTTP broadband with starting speeds of 500 Mbps, with the exception of Eircom's 100 Mbps FTTC offerings. [✂ [redacted] ✂]

3.82 Since the 2018 Decision, in absolute terms, copper-based CG broadband subscriptions have declined by 66%, while NG broadband subscriptions have increased by 32%.[150] In relative terms, the split between CG and NG fixed broadband subscriptions has shifted from 21% CG and 79% NG in Q4 2018, to 7% CG and 93% NG in Q2 2023. Again, this ties in with the breakdown of subscriptions by speed. As end users have been migrating away from the legacy copper product (which typically offers a maximum download speed of 24 Mbps)[151] and towards FTTx services capable of delivering much higher download speeds, there has been a marked increase in uptake of subscriptions with download speeds in excess of 100 Mbps.

3.83 SIRO has announced the rollout of its 10 Gbps broadband network, initially being offered to non-residential customers.[152] 2 Gbps products are currently offered at retail level by a small number of SPs (including Blacknight, Vodafone and VMI[153]), within a limited number of geographic areas.[154]

[150] CG refers to copper-based subscriptions and NG collectively refers to FTTC (VDSL), FTTP and CATV-based subscriptions.

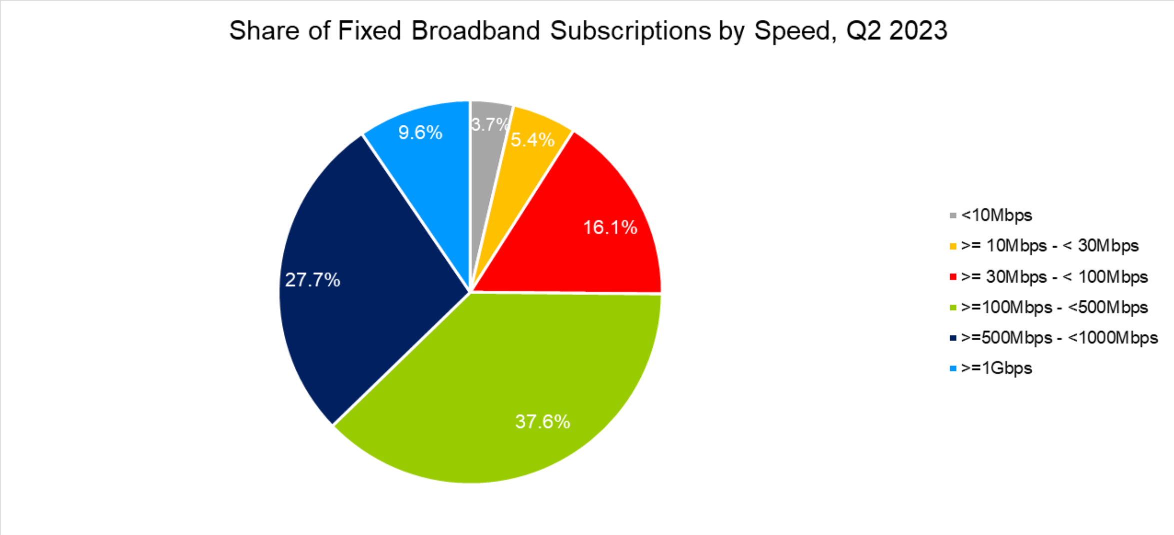
[151] https://selectra.ie/broadband/market/adsl

[152] https://siro.ie/news-and-insights/why-10-gigabits-why-now/

[153] https://www.virginmedia.ie/about-us/press/2023/virgin-media-launches-2-gigabit-full-fibre-broadband/#:~:text=Virgin%20Media's%20new%202%20Gig%20full%20fibre%20broadband%20will%20provide,consumers%20and%20businesses%20across%20Ireland.

[154] NBI has also future proofed its network to deliver speeds of up to 10 Gbps, with initial speeds of up to 2 Gbps being offered. https://nbi.ie/faqs/.

Figure 10: Share of Fixed Broadband Subscriptions by Speed, Q2 2023[155]



3.84 As noted in the 2022 Market Research, 41% of residential respondents identified download speed as the most important characteristic of their broadband service and, of those who have switched their broadband plan during the past three years, 50% did so in order to secure a higher speed plan, the second most common motive, behind only cost.[156]

3.85 The 2022 Market Research also suggested that, in comparison to 2017,[157] end user awareness of the download speed of their broadband plan has increased by around 10%, with those in the most rural areas being the most likely to have an awareness, and those in the most urban areas being the least likely to.[158] However, despite this increase, overall awareness remains low, at 32%, with relatively little variation across providers or regions, although across technologies, those with FTTx-based broadband were marginally more likely to be aware of the maximum download speed, at 36%.[159]

[155] QKDR data.

[156] See Slides 23 and 78 of the 2022 Residential Market Research.

[157] ComReg carried out Retail Broadband Market Research for its WLA/WCA market review in 2017.

[158] See Slide 81 of the 2022 Residential Market Research.

[159] See Slide 81 of the 2022 Residential Market Research.

Figure 11: Knowledge of Maximum Claimed Download Speed[160]

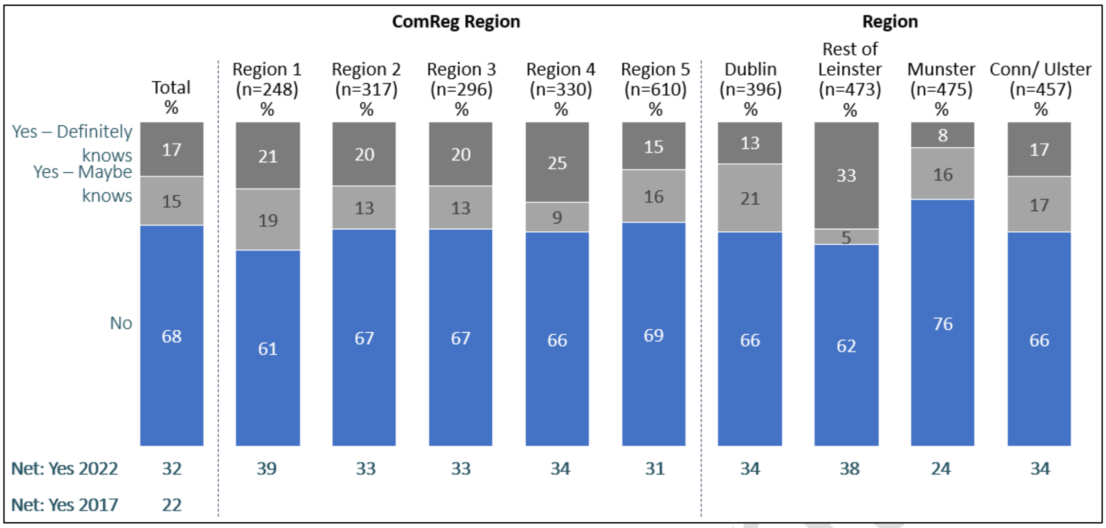
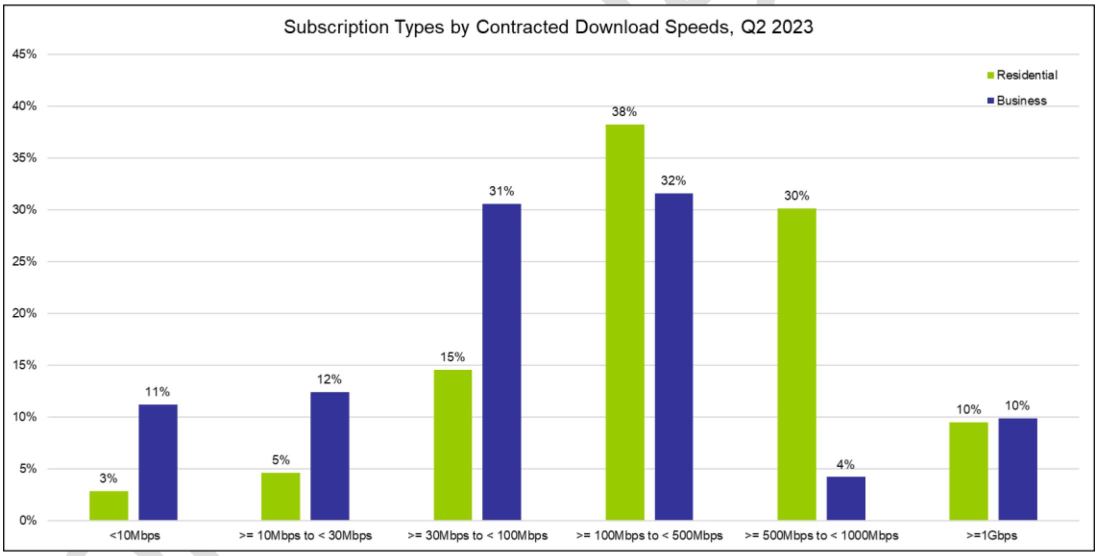


Figure 12: Fixed Broadband Subscriptions by Contracted Download Speeds and Subscription Type[161]

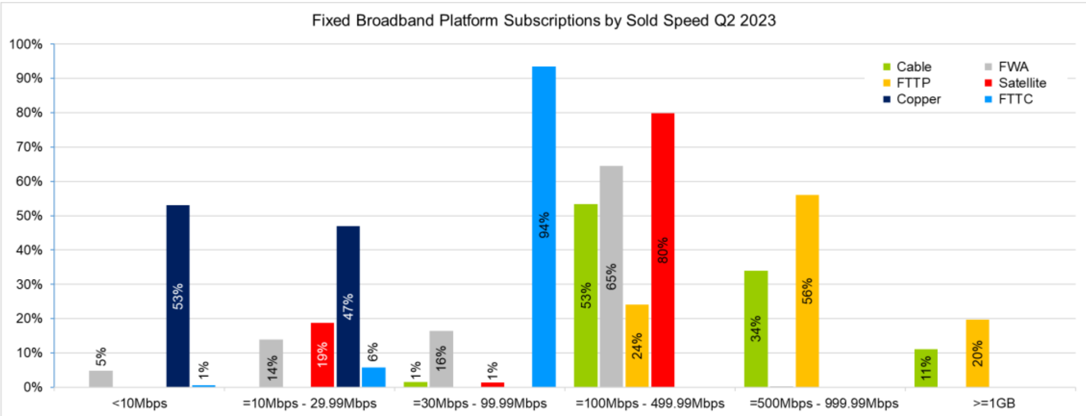


3.86 Figure 12 above shows the breakdown of fixed broadband subscription speeds by type of end user. 78% of residential and 46% of non-residential subscriptions fall into the ≥100 Mbps category, again illustrating the marked upward trend in uptake of higher speed broadband connections, as discussed in paragraphs 3.80 to 3.82. While the majority of residential end users fall into the ≥100 Mbps region, the majority of business end users fall within the ≥30 Mbps to < 500 Mbps region.

160 2022 Market Research.

161 QKDR data.

Figure 13: Fixed Broadband Subscriptions by Sold Speed and Technology, Q2 2023[162]



3.87 Figure 13 shows that in the three highest speed bands (≥100 Mbps, ≥500 Mbps and ≥ 1Gbps), end users predominantly receive service over CATV or FTTP, once again showing that the increase in download speeds and use of broadband has been aided by the rollout and increased availability of such NG technologies. Also, of note from Figure 13 is that the majority of FWA (65%) and satellite subscriptions (80%) are in the 100-500 Mbps range. The ability of FWA to deliver speeds comparable to those over FTTx is a potential explanation for the rise in absolute subscription numbers in recent years, whilst end users have been awaiting FTTP rollout (see paragraphs 3.64 to 3.66 for more discussion of this trend).

3.88 In its Submission, Eircom[163] argues that ComReg should have taken into consideration a 'high-speed broadband market' consisting of subscriptions of 100 Mbps or greater. Eircom notes that this segmented market would be dominated by VMI and Vodafone, while Eircom would be the third largest operator. Eircom argues that copper migration to FTTx is not corresponding to an increase in subscriptions on its fibre network, with SPs (Vodafone and Sky) sourcing their FTTP connections from other Network Operators and claims that its retail market share is declining.

3.89 While Eircom is increasing its FTTP footprint significantly each quarter, the data show that it has maintained its FTTP penetration rate at **[✂** [redacted] **✂]** from Q4 2021 to Q2 2023, indicating consistent take-up of new subscriptions on its FTTP network, in line with its rollout.

[162] ComReg QKDR data.

[163] Eircom Non-confidential Submission, pages 9-12.

3.90 ComReg does not consider it appropriate to define a segmented retail broadband market based on a specified speed range. As set out in Section 4, ComReg defines a CG retail market and a NG retail market instead. ComReg takes a view of the retail broadband market as a whole and speed trends over time, which is then used to inform the subsequent analysis of the WLA and WCA markets. While Eircom claims it holds a significantly smaller market share on the segment of the market with subscriptions of 100 Mbps and above, ComReg's QKDR shows Eircom's fixed broadband market share (across all fixed broadband technologies) is still the largest of any operator. Similarly, Eircom's market share by FTTP subscriptions has increased steadily since Q4 2021, while Vodafone's market share has declined. ComReg also notes that declines in Eircom's FTTC subscribers are likely linked to the rollout of FTTP (and consumer migrations/uptake of related products), including by Eircom, and over the five-year market review period this is expected to continue. Taking a static view of market shares using subscriptions of 100 Mbps and above and below as a delineator, is not considered useful or meaningful.

3.3.4 Bundling of broadband with other retail services

3.91 In the 2018 Decision, ComReg identified a strong tendency for end users to purchase retail services as part of a bundle delivered over NG from a single SP. This trend has continued, and a large proportion of the market (74% as of Q2 2023) consists of broadband bundled with at least one other retail service.

3.92 Various bundles delivered over NG broadband are available to end users, with most SPs offering both bundled and standalone broadband.[164] A bundle comprises any combination of broadband, RFTS, TV and mobile phone services. Some end users - referred to as 'split purchasers' - split their purchases and have standalone contracts with multiple providers for different retail services, such as broadband with one provider and TV with another.[165]

3.93 A single-play subscription (also referred to as a 'standalone' subscription) is where the end user pays for a single service from their SP. A dual-play bundle typically consists of broadband and RFTS or broadband and TV, however, it can technically encompass any combination of two retail services. A triple-play bundle refers to a retail bundle of any combination of three services, from TV, broadband, RFTS and/or mobile services and a quad-play bundle consists of TV, broadband, RFTS, and mobile phone services. Examples of the bundles and standalone products available can be found in Annex 8.

[164] Although it is notable that Eircom no longer advertises a standalone broadband product, instead only offering broadband in a bundle with RFTS as a 'baseline product'.

[165] According to the 2022 Market Research, just 16% of respondents reported receiving separate bills for broadband and other services from different providers (a decline on the 19% reported in 2017).

3.94 Over the period Q4 2018 to Q2 2023 overall single play subscriptions[166] increased by 22%, an increase largely driven by the significant increase in standalone broadband subscriptions, from 201,739 to 414,278 (105%) and mobile telephony subscriptions, from 17,590 to 93,108 (429%). There has also been a decline in double and triple play bundles, falling by 0.1% and 6.8% respectively, while quad play bundles increased by 20%. A large proportion of overall single play subscriptions are accounted for by standalone TV subscriptions (45% as of Q2 2023).

Figure 14: Broadband Subscriptions by Bundle Type, Q4 2018 – Q2 2023[167]

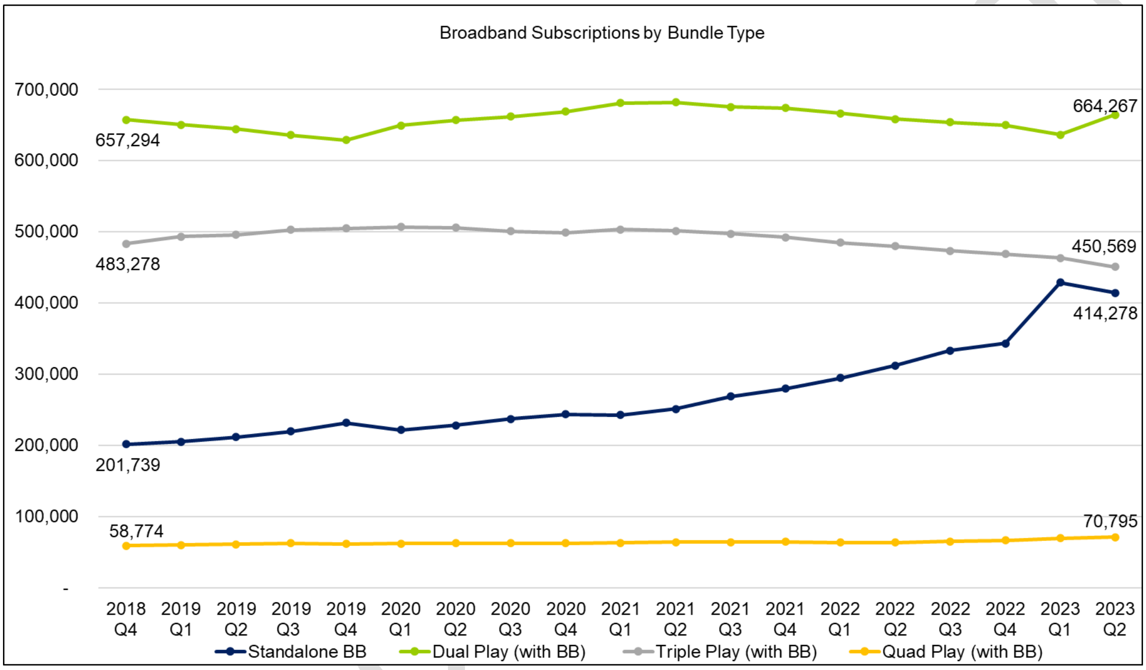


Table 3: Subscriptions by Bundle Type, Q4 2018 and Q2 2023[168]

Subscription Type	Q4 2018	Q2 2023	% change
Single Play	1,049,977	1,281,974	22.1%
Dual Play	672,842	672,298	-0.1%
Triple Play	483,372	450,631	-6.8%
Quad Play	58,774	70,795	20.5%
Total Bundled Subscriptions[169]	**1,214,988**	**1,193,724**	**-1.8%**

[166] In the QKDR 'Single Play Subscriptions' can consist of RFTS, Broadband, Mobile or TV.

[167] ComReg QKDR data. Note a change in methodology for standalone broadband between Q4 2022 and Q1 2023. Where previously this was collected as subscriptions, it is now collected on the basis of lines and of the 85,640 increase **[✂** [redacted] **✂]** is contributed by Vodafone, **[✂** [redacted] **✂]** from Sky and **[✂** [redacted] **✂]** from VMI.

[168] ComReg QKDR data.

[169] Referring to the total of double, triple and quad play subscriptions.

3.95 The trend in standalone broadband subscriptions is notable as it indicates that, despite the incidence of bundling, a growing proportion of end users demand broadband sold on a standalone basis, a fact reiterated by several SPs in discussion with ComReg. Since the 2018 Decision, the rate of overall growth in bundled subscriptions has slowed, and in the case of double and triple play, has declined compared to the period preceding the 2018 Decision.

3.96 As of Q2 2023, of the 1.6 million subscriptions with a broadband component, 26% were standalone, 42% were purchased in a double-play bundle and the remaining 33% were made up of triple and quad-play bundle subscriptions. The most common product bundled with broadband in Q2 2023 was RFTS, with 501,635 subscriptions – also the most commonly purchased bundle.

Table 4: Subscriptions by Bundle Type, Q4 2018 and Q2 2023[170]

Subscription Type	Bundle format	Number of subscriptions		% change
		Q4 2018	Q2 2023	
Single Play	RFTS	275,137	200,896	-27%
	Broadband	201,739	414,278	105%
	Mobile	17,590	93,108	429%
	TV	555,511	573,692	3%
Dual Play	Broadband + RFTS	622,581	501,635	-19%
	RFTS + Mobile	6,227	2,286	-63%
	RFTS + TV	8,324	3,024	-64%
	Broadband + TV	29,259	153,216	424%
	Broadband + Mobile	5,454	9,416	73%
	Mobile + TV	997	2,721	173%
Triple Play	Broadband + RFTS + TV	402,838	319,936	-21%
	Broadband + RFTS + Mobile	78,424	127,912	63%
	RFTS + Mobile + TV	94	62	-34%
	Broadband + TV + Mobile	2,016	2,721	35%
Quadruple Play		58,774	70,795	20%
Total Broadband Subscriptions		1,401,085	1,599,909	14%
Total Bundled Subscriptions with a Broadband Component		1,199,346	1,185,631	-1%

170 ComReg QKDR data.

3.97 SPs offer bundles (including bundles with a broadband component) to benefit from economies of scope in the supply of those services. Bundling products allows SPs to achieve savings in production, distribution and transaction costs and may offer SPs the opportunity to reduce churn in a market which is typically characterised by high customer acquisition costs and may allow them to increase their revenue per customer, even when the price of individual services is decreasing. The incremental cost to the end user of adding additional services to a broadband package, as opposed to opting for a standalone product (most typically broadband or RFTS) is often low, particularly compared to the cost of acquiring the chosen additional service as a standalone service in itself.[171]

3.98 Despite the apparent and significant demand for bundled packages, many SPs continue to offer standalone services, especially in their core businesses.[172] This suggests that there is an inherent demand for standalone services (standalone broadband in particular, reflected in subscription numbers, as discussed at paragraph 3.93) and SPs deem it commercially worthwhile to continue offering standalone broadband products to end users.

3.99 In its Submission, SFG[173] considered Eircom's dual play broadband and RFTS bundle to be a misleading characterisation due to the lack of value placed on the voice component by end users. SFG is concerned that having this product offering classified as a bundle will be of strategic benefit to Eircom due to the margin on the voice component of the bundle being high and those margins being used to subsidise what is effectively a standalone broadband product in order to meet margin squeeze obligations.

[171] For instance (as of August 2023), for all of the broadband packages offered by Digiweb, end users have the option to add on RFTS at no additional cost. Vodafone customers can add fixed voice to any broadband plan for €5 per month.

[172] VMI, Sky and Vodafone all continue to offer a standalone retail broadband product, as part of their 'core' set of advertised and offered products.

[173] SFG Non-confidential Submission, pages 4-5.

3.100 ComReg notes that at the retail broadband level and in the absence of a finding of SMP in a retail market, Eircom is entitled to offer a dual play service and is similarly entitled not to offer a standalone broadband service (but also in conformity with any obligations in upstream markets). Eircom is not the only retail SP bundling RFTS with broadband as its main product offering with, for example, Digiweb also employing this retail strategy. Given the presence of alternative retail SPs, customers can switch providers should they want a standalone broadband product only. SFG claims that broadband and voice bundles could be cross subsidized for a standalone broadband product, but it is unclear how this could occur, given that Eircom does not offer standalone broadband. ComReg also notes that SPs themselves have the ability to offer a Voice Over Broadband (‘**VoB**’) service at relatively low incremental cost.

3.101 In its Submission, SIRO[174] argued that standalone broadband is being undermeasured as there is no incremental cost to an operator to RFTS and bundle these together as a double play broadband and RFTS bundle, where the value of the service is derived from the broadband alone. SIRO notes that customers who purchase these broadband and RFTS bundles have no choice but to accept the RFTS component in order to avail of the retail offering. ComReg notes that regardless of the use of the RFTS component of a double play broadband and RFTS bundle, by definition, the service is still being sold as a bundle and so cannot be considered a standalone product. The definition of a bundle as per ComReg’s reporting requirement is *“if the Broadband Service is sold or provided with another telecoms service by the same operator under the same or a closely related or linked contract.”* The use of the terminology ‘provided’ in this definition allows Eircom to bundle Broadband with RFTS at no additional cost and report it as a bundled service.

[174] SIRO Non-confidential Submission, pages 4-6.

3.102 Since the 2018 Decision usage of certain Over the Top ('**OTT**')[175] services has increased. Market research data suggest, for example, that, the expected growth of OTT video services is likely to be 9.1% CAGR[176] per annum.[177] Users relying on OTT services may not have strong incentives to subscribe to a (likely more expensive) bundled plan, encompassing additional services such as TV, as broadband access alone may suffice, and allow them to subscribe to additional services on a more ad hoc basis. In the Irish market, all the main SPs offer a range of retail broadband bundles. Most offer a range of standalone and double-play bundles, with Eircom, Vodafone, VMI and Sky offering triple-play subscriptions and all but the latter (Sky) also offer quad-play bundles, due to their status as MNOs/MVNOs. Currently and at various points in the past, SPs have also advertised bundles which include subscriptions to OTT platforms, such as Amazon Prime, Apple TV and Netflix.[178]

3.103 Of those surveyed in the 2022 Market Research 62% of residential and 71% of business end users with a broadband plan purchase broadband bundled with at least one other service.[179] The incidence of bundling is highest amongst Eircom and Sky customers. While Sky only currently offers dual and triple play subscriptions, it has publicly announced it will enter the Irish mobile market in 2023 as an MVNO on Vodafone's network,[180] after which it will be able to offer quadruple play subscriptions (although no further announcement has been made, as of October 2023). Eircom no longer offers standalone broadband or standalone RFTS as part of its core product offering, as advertised on its website,[181] which is likely a contributing factor to its customers having a greater tendency to have a bundled plan.

[175] Over the Top ('**OTT**') services refers to streaming services or content delivered via an internet connection, for instance, video streaming services such as Netflix, Disney+ and Prime Video. Such services are described as 'over the top' as they are delivered 'on top' of an internet connection.

[176] Compound Annual Growth Rate (CAGR).

[177] https://www.pwc.ie/media-centre/press-releases/2022/irish-entertainment-media-industry-outlook-2022-2026.html

[178] Eircom currently offers free access to Amazon Prime Video for new or existing customers of Eir TV http://www.eir.ie/primevideo/. Accessed 5 October 2023.

Sky currently offers a broadband and TV package deal with a Netflix component 'at no extra cost' http://www.sky.com/ie/deals/tvandbroadband. Accessed 5 October 2023.

[179] See Slide 29 of the 2022 Residential Market Research.

[180] https://www.skygroup.sky/article/sky-to-enter-mobile-market-in-ireland

[181] Accurate as of October 2023.

3.4 Other changes in broadband supply and consumption patterns

3.104 Since the 2018 Decision there have been several other developments in both the WLA and WCA markets, with the number of rollout and upgrade related announcements in recent months from SPs being indicative of the dynamic nature of retail broadband, and by association the WLA and WCA markets. The announced, planned and ongoing rollouts of the respective SPs are outlined above at paragraphs 3.23 to 3.50.

3.105 Arguably one of the largest changes in the market has been on the demand side, as a result of the Covid-19 pandemic.[182] Adequate home broadband services became crucial for remote working affecting demand substitution dynamics domestic retail broadband, due to the requirement of such activities for higher bandwidth and more reliable broadband connections. Following the pandemic, there remains a persistent degree of hybrid and online working. These 'pandemic induced' trends and behavioural changes continue to have an impact on the uses of broadband and related services, however the longer-term impact and the degree to which these trends will be permanent or transitory in nature remains to be seen.

3.106 In terms of the frequency with which households access the internet, according to the 2022 Market Research, the average household accesses the internet for 5 hours per day (up from the 4.6 hours reported in 2017),[183] a figure which is relatively consistent across regions, but varies by technology. End users accessing broadband via fibre (5.5 hours) and CATV (5 hours) tend to spend more time online in comparison to those on other platforms.[184]

[183] See Slide 21 of the 2022 Residential Market Research.

[184] See Slide 22 of the 2022 Residential Market Research.

3.4.1 Changes in Broadband Subscriptions

3.107 The absolute number of broadband subscriptions[185] in Ireland has increased by 16%, from 1.73 million in Q4 2018 to 2 million in Q2 2023 (split between 382,797 mobile subscriber lines and 1.622 million fixed subscriber lines). This pace of growth is somewhat more subdued compared to previous periods, but broadband subscriptions nevertheless continue to grow and follow an upward trend. The tapering off of the growth rate in broadband subscriptions (compared to that experienced between 2010 and 2018, for instance) is reflective of significant growth in previous time periods having already resulted in a large number of broadband subscriptions in Ireland and a high level of broadband penetration, relative to elsewhere in the EU.[186]

3.108 The 2022 Market Research found that, across a nationally representative sample, 90% of households had broadband access[187] while the Central Statistics Office ('**CSO**')[188] reports that 94% of all households in the State have internet access.[189] According to Eurostat, Ireland's household broadband penetration rate (including fixed and mobile broadband) in 2022 was 94%, above the EU average of 92%.[190]

3.109 Despite variations in the figure for broadband penetration from each of the quoted sources, stemming from variations in methodologies (as outlined in the relevant footnotes), all three sources put broadband penetration in Ireland at, or above, 90%. These figures are indicative of a high rate of broadband take-up, availability and usage in the State, relative to elsewhere in the EU.

[185] Both fixed and mobile broadband subscriptions.

[186] As identified in the 2022 DESI Report, Ireland ranks overall 5th of the EU27 and Ireland's performance for connectivity improved substantially since 2020, with VHCN coverage jumping from 35% in 2019 to 89% in 2021 (ranking 6th for connectivity). https://ec.europa.eu/newsroom/dae/redirection/document/88707 .

According to Eurostat, 97% of households in Ireland have internet access, the EU27 average is 92%. Only the Netherlands and Luxembourg have a higher rate with Finland having the same rate as Ireland. See https://ec.europa.eu/newsroom/dae/redirection/document/88764 .

[187] See Slide 11 of the 2022 Residential Market Research.

[188] Note that 'CSO' throughout this document refers to either the Central Statistics Office or Copper Switch-Off. The context of surrounding text indicates the correct interpretation of the acronym.

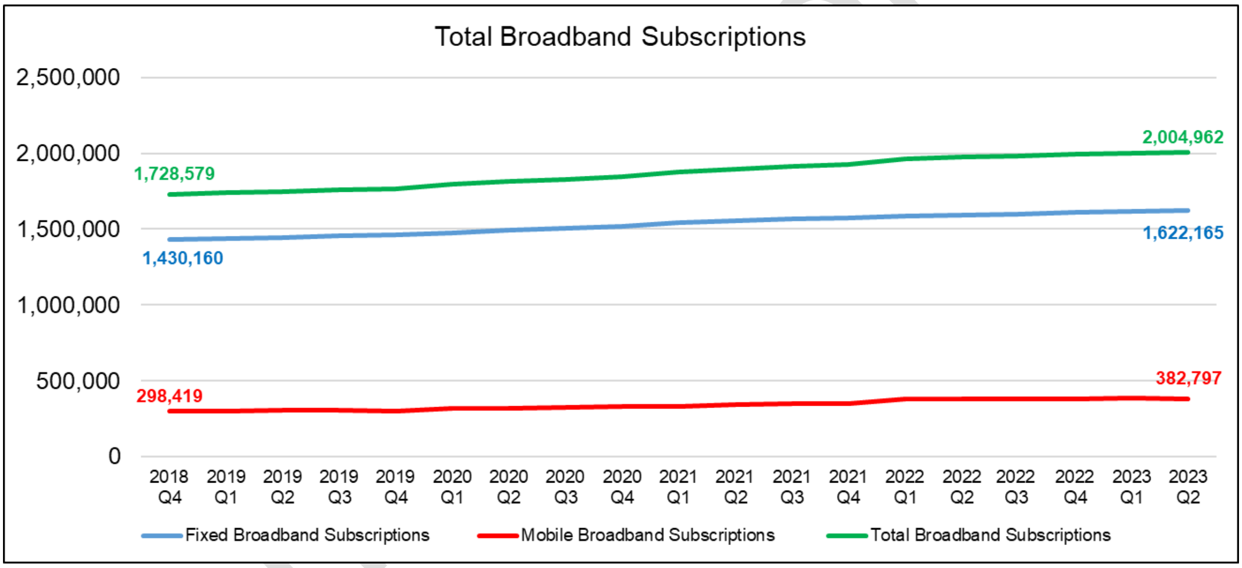
[189] See CSO 'Internet Coverage and Usage in Ireland 2022' survey at; https://www.cso.ie/en/releasesandpublications/ep/p-isshict/internetcoverageandusageinireland2022/ . In this dataset 'a household' is defined as 'a single person or group of people who usually reside together in the same accommodation and who share the same catering arrangements.' Fixed broadband is delivered over DSL, ADSL, VDSL, CATV, optical fibre and satellite; mobile refers to a connection via mobile phone network with minimum 3G and narrowband refers to dial-up access over PSTN or ISDN.

[190] https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database Households - level of internet access.

3.110 According to QKDR data and as illustrated in Figure 15 and Figure 16 below, over the period Q4 2018 to Q2 2023 total broadband penetration has grown by 2.9%, with FTTP penetration growing by 22.4%, the highest across any platform, and one of only four platforms (the other being FWA, Satellite and mobile broadband) across which penetration rates have increased. The most significant decline was in copper.

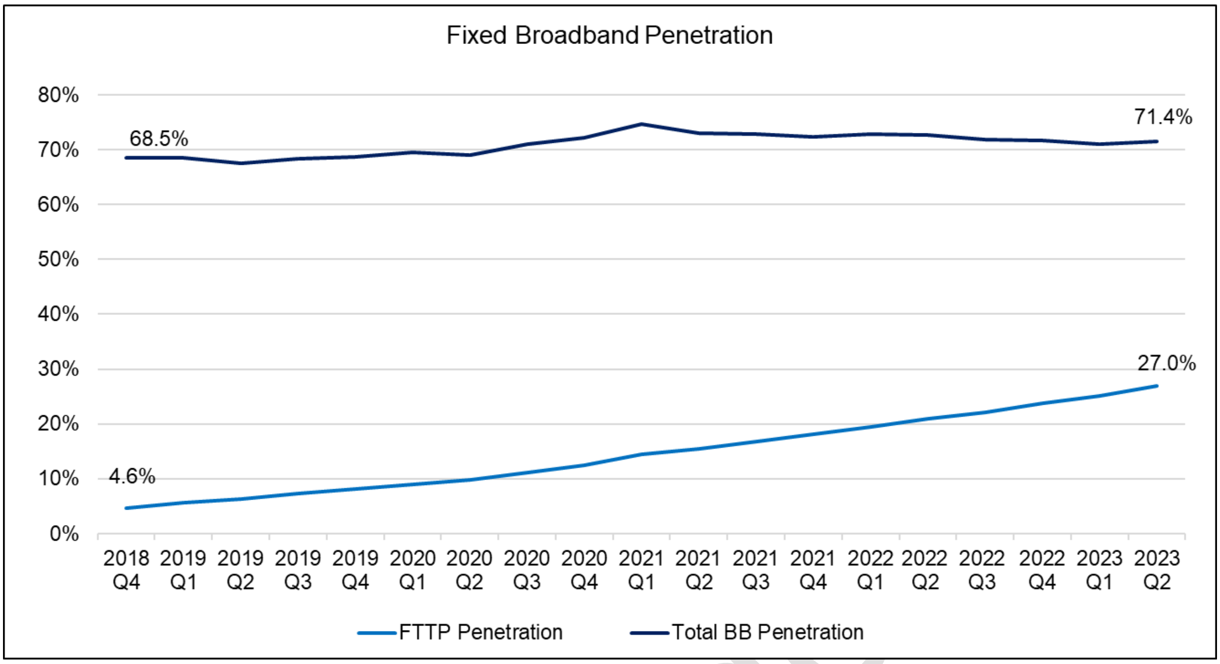
3.111 Overall, during the period Q4 2018 to Q2 2023, total broadband subscriptions rose by 16% to 2 million, with fixed and mobile subscriptions growing by 13% and 29% respectively. Beyond the headline figure for growth in broadband subscriptions, a key parameter is the breakdown of broadband subscriptions by platform. The headline growth figure has been driven by strong growth in FTTP subscriptions, whilst FTTC is in decline, CATV subscriptions have decreased slightly over recent quarters, and copper is in continued decline.

Figure 15: Total Broadband Subscriptions, Q4 2018 – Q2 2023[191]



[191] ComReg QKDR data.

Figure 16: Broadband Penetration, Q4 2018 –Q2 2023[192]



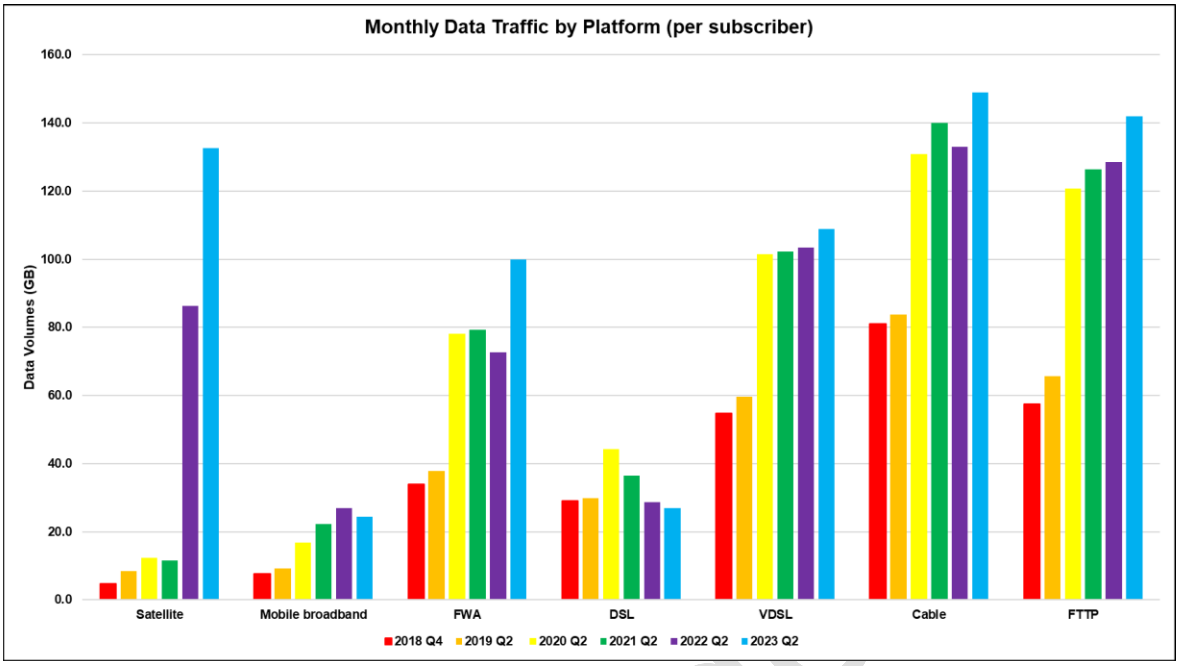
3.4.2 Changes in Broadband Traffic

3.112 The greater availability of higher speed broadband is reflected in the volumes of data consumed by end users, which indicates that higher speeds are able to facilitate higher traffic volumes and more intensive broadband usage. In Q2 2023 1.8 billion GB of data were downloaded, compared to 716 million GB in Q4 2018.[193] Figure 17 below illustrates average data traffic per subscriber, per month by platform since the 2018 Decision. This time period allows for comparisons between pre-pandemic, pandemic and post-pandemic periods.

[192] *Ibid.*

[193] Total Fixed Broadband Data Traffic (GB).

Figure 17: Average Monthly Data Traffic per Subscriber by Platform[194]



3.113 There is a marked rise in traffic after the onset of the Covid-19 pandemic between Q2 2019 and Q2 2022, following the introduction of remote working, education, and generally more extensive use of broadband services for many aspects of day-to-day life. Fixed broadband traffic has continued to increase, peaking in Q4 2022, showing the continued demand for broadband capable of delivering services to support high intense usage.

3.114 Between Q4 2018 and Q2 2023, monthly data traffic over CATV, FTTC and FTTP increased by 84%, 99% and 147% respectively. Similarly, those technologies record the largest average amount of data consumption. Copper is the only technology which saw a decrease in its traffic consumption (of 7%), and while satellite was in decline up to Q1 2022, since Q2 2022 Starlink has seen data traffic for satellite increase substantially. Despite increased uptake of FTTP services capable of delivering speeds of up to 2 Gbps and beyond, the highest level of data usage per subscriber as of Q2 2023 continues to be over VMI's DOCSIS 3.1 CATV platform, however, over the last few quarters this metric has fluctuated between CATV and FTTP.

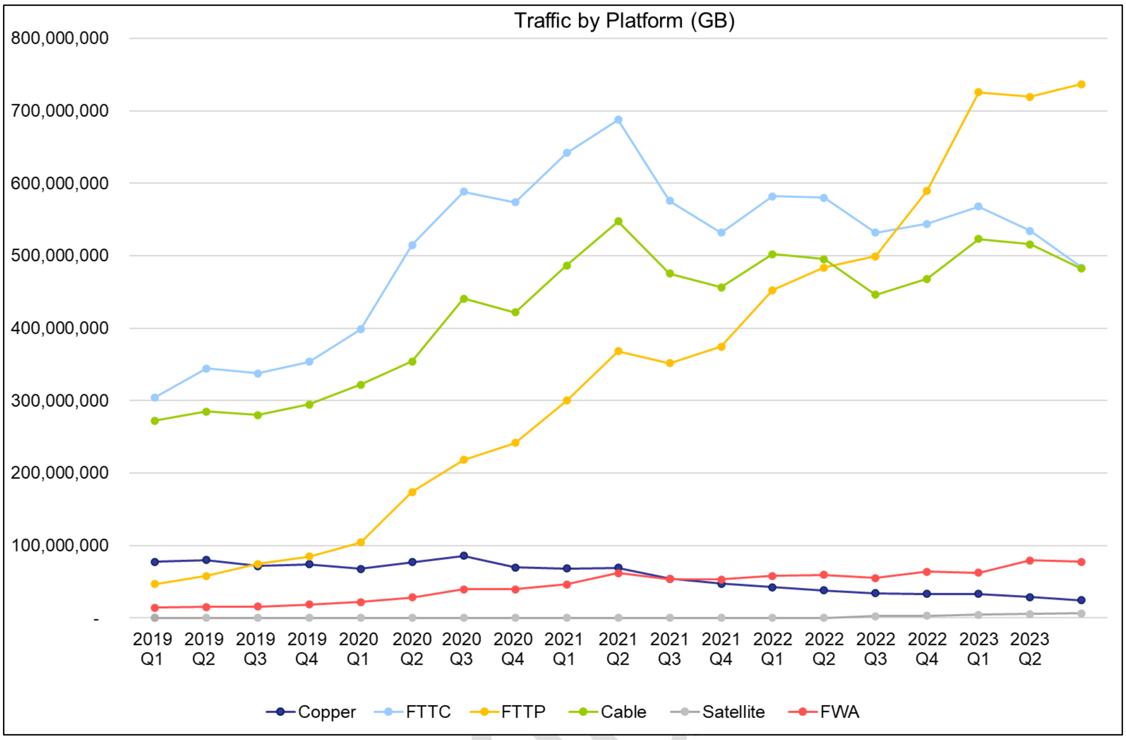
[194] ComReg QKDR data.

3.115 Data traffic volumes across all platforms increased most steeply between Q4 2019 and Q1 2021, after which they went into moderate decline, with variations depending on broadband technology. While some broadband technologies have continued to decline, for example, copper, other technologies such as FTTP have seen continuous growth. The moderate declines in data traffic in 2021 are likely attributable to the reduction in Covid-19 public health restrictions and since Q3 2021, figures have been moving back towards the pre-pandemic on-trend growth rate observable prior to Q2 2020. While data traffic has increase in the aftermath of the Covid-19 pandemic, it peaked in Q4 2022 at 1.9 billion GB and has decreased in the two subsequent quarters, indicating a likely plateau in data consumption.

3.116 Since the 2018 Decision, total fixed broadband traffic has grown by 153%, strongly driven by growth in data consumption over FTTP, which grew by 1,470%, by FWA at 433%, and by CATV at 77%. Satellite data traffic over the period increased by 3,144%, but this was driven by the submission of data from Starlink to ComReg from Q2 2022. As outlined in Figure 18 below, while the increase in data traffic for satellite is substantial, in absolute terms, satellite data traffic is still the lowest of any broadband platform. From Q1 2020 to Q2 2022,[195] traffic over FTTP increased by 187% and as of Q3 2022, FTTP overtook FTTC to have the most data traffic of any broadband platform.

[195] A time period which captures the duration of the Covid-19 pandemic and associated restrictions and changes in broadband usage patterns.

Figure 18: Broadband Traffic by Platform (GB), Q4 2018 – Q2 2023[196]



3.5 Supply Side Considerations: NGA rollout

3.117 Since the 2018 Decision, rollout of FTTx broadband networks (in particular, FTTP) has continued. The number of premises in the State capable of receiving FTTP services continues to grow, through a combination of rollout from Eircom, NBI, SIRO and on a forward-looking basis, VMI. In Q1 2019 560,000 premises in the State were passed by an FTTP network. As of Q2 2023, this figure now stands at 1,527,302.

3.118 During Q4 2021, several operators (namely Eircom, VMI and SIRO) announced both network expansion/upgrade plans to areas previously unserved, and network upgrades in areas already served. These market developments (with the caveat that several are in various stages of planning/rollout and are subject to revision) when they come to fruition, are likely to have an impact on the broadband market, at both retail and wholesale level. These market developments (with the caveat that several are in various stages of planning/rollout and are subject to revision) when they come to fruition, are likely to have an impact on the broadband market, at both retail and wholesale level. For discussion of ongoing network rollouts, upgrades and announcements see paragraphs 3.23 to 3.50 above.

[196] ComReg QKDR data.

3.6 Overall Conclusions on Retail Trends and Developments

3.119 Having regard to the discussion in paragraphs 3.51 to 3.118 above, ComReg is of the view that the most notable and relevant trends within the retail broadband market are:

(a) Increases in download speeds on broadband subscriptions. In the four-year period to Q2 2023, growth in broadband subscriptions was concentrated primarily in the ≥ 100 Mbps category, which increased from 49% to 75% as a share of total fixed broadband subscriptions.

(b) Increases in download traffic on broadband subscriptions. The availability of increased broadband speeds has allowed end users to download greater volumes of data. In Q2 2023 an average of 149GB of data per month was consumed by CATV subscribers and 142GB by FTTP subscribers. Average data volumes have increased across the board (except on CG copper technology), but particularly across platforms offering higher speed products.

(c) Movements away from copper and towards fibre-based broadband (net migration of end users from copper and, more recently, FTTC towards FTTP). Broadband provided over full copper now constitutes just 5% of total broadband subscriptions, with the largest shares now accounted for by FTTP (29%), FTTC (25%) and CATV (18%). There has been a significant increase in the number of FTTP subscriptions, which grew from just 5% of subscriptions in Q4 2018 to 29% in Q2 2023 and as of Q1 2023, FTTP overtook FTTC to be the most predominant broadband technology in the State.

(d) Standalone and bundled packages. There is a strong tendency for broadband services to be purchased alongside other related services (such as RFTS and TV) from a single retail SP, through a double, triple or quad-play bundle. In Q2 2023, of an estimated 1.6 million broadband subscriptions, 26% were standalone, 42% were double-play and the remaining 33% were made up of triple and quad-play subscriptions. However, demand for standalone broadband rose by 212,539 (105%) from 201,739 to 414,278 between Q4 2018 and Q2 2023. This contrasts with the decline in bundled subscriptions, which fell 1% over the same period, however, bundled plans still constitute the large majority (74%) of broadband subscriptions.

(e) Persistence of behavioural changes as a result of the Covid-19 pandemic. The advent of home working, remote education, and use of broadband for social activities during the Covid-19 pandemic resulted in an increased reliance on broadband services, increased data traffic and a rise in demand for higher speed broadband over NGA technologies.

(f) Continued rollout and network upgrades by SPs and uptake of high-speed broadband services. The continuing rollout by Eircom of its FTTP network, alongside ongoing rollout by SIRO and NBI will result in greater availability of high-speed FTTP services, in both urban and rural areas of the State. VMI has also announced plans to upgrade its existing retail offering from CATV-based broadband to FTTP broadband, to be completed and offered to end users on a national basis, over a five-year horizon, and also to provide wholesale services over its FTTP network.

4 Retail Market Assessment

4.1 Overview

4.1 In this section, ComReg outlines some of the main structural and behavioural characteristics associated with the provision of retail services supplied using upstream WLA and WCA inputs.

4.2 The European Commission defines a relevant product market as:

> *"all those products and/or services which are regarded as interchangeable or substitutable by the end user, by reason of the products' characteristics, their prices and their intended use".*[197]

4.3 ComReg is not required to conclude on a precise definition of the retail market(s) in this market review. Rather, the purpose of the retail market assessment is to inform the subsequent assessment of the WLA and WCA markets in respect of both market definition and the strength of any indirect retail constraints from the related downstream retail broadband market(s).

4.4 Given that Access Seeker demand for WLA and WCA is a derived demand driven by end user demand for retail broadband (and related services), it is necessary to consider the dynamics of the retail market, and whether these dynamics materially impact competition at a wholesale level. The derived demand for WLA and WCA services stems from end user demand for:

(a) Access to broadband; and

(b) Access to other services that can be offered over or alongside the broadband service (including RFTS and/or TV).

4.5 The 2020 Explanatory Note explains that *"…the starting point for the identification of wholesale markets susceptible to ex ante regulation is the analysis of the corresponding retail markets"*,[198] indicating that any analysis of a wholesale market must be preceded by an assessment of the competitive conditions in the related retail market, absent regulation, following the MGA.

4.6 In considering the relevant upstream wholesale markets, ComReg must assess whether any effective direct demand-side substitutes, direct supply-side substitutes or indirect retail constraints exist which would effectively constrain the price setting behaviour of a hypothetical monopolist ('**HM**') supplier of WLA and/or WCA services.

[197] Notice on Market Definition, paragraph 7.

[198] At pp.8-9 of the 2020 Explanatory Note.

4.7 For the purpose of examining the retail market(s), as per the MGA, ComReg's assessment is conducted assuming no regulation of the WLA and WCA markets, as appropriate.[199] In this regard, ComReg assumes the presence of upstream regulation of the PIA Market, on the basis of the analysis set out in the PIA Decision, which is published at the same time as this Decision.

4.8 In their respective Submissions, ALTO[200] and BT[201] disagreed with ComReg and argued that the upstream PIA market is not functioning well. ComReg notes that as per the MGA, it is entitled to take upstream SMP-based PIA regulation into account, noting that in the PIA Decision, ComReg has decided to designate Eircom with SMP in that market and impose regulatory obligations on it. As there is no material use of PIA other than for NBI, ComReg duly takes account of retail services offered by SPs on the basis of wholesale access to NBI's network. The function of the PIA market has been dealt with in the PIA Decision itself.

4.9 In this Section ComReg considers the impact of price changes on retail market behaviour, in particular, the likelihood of a change in wholesale pricing impacting retail prices and the extent, if any, to which the pass-through of changes in wholesale prices into retail prices may cause end users to change their behaviour or switch to an alternative platform.

4.10 As part of its analytical process, ComReg commissioned the market research firm Red C Research and Marketing ('**Red C**') to carry out quantitative market research of residential and non-residential/SME end users to inform its understanding of end user attitudes and behaviours in the retail broadband (and related) market(s). Some of the issues covered in the survey include:

(a) Broadband usage and prevalence;

(b) Pricing and knowledge of cost;

(c) Prevalence and patterns of bundling;

(d) Switching behaviours and criteria for choosing providers; and

(e) Price sensitivities and reactions to hypothetical changes in pricing (used as the basis for the Small but Significant Non-transitory Increase in Price ('**SSNIP**') test for bundled and non-bundled packages).

[199] When considering the WCA market, in accordance with the MGA, ComReg takes into account any regulation present on the WLA market(s), which lies upstream of the WCA market.

[200] ALTO Non-confidential Submission, pages 3-4.

[201] BT Confidential Submission, pages 3-4.

4.11 Throughout this document, the findings of this research will be referred to as the ‘**2022 Residential Market Research**’ and ‘**2022 SME Market Research**’ (collectively, the **2022 Market Research**’).

4.12 ComReg carried out similar market research for the 2018 Decision. Where it is instructive to draw comparisons between these results and the 2022 results, ComReg does so below. This previous research is referred to as the ‘**2017 Market Research**’ throughout.

4.13 The 2022 Market Research in itself is not definitive, and whilst its results inform the analysis presented in this Decision, the output of the market research is considered alongside other empirical data and evidence, where available, and as appropriate. The 2022 Market Research is set out at Annex 6 and Annex 7.

4.14 In addition, there are certain limitations to the 2022 Market Research, particularly where responses resulted in small sample sizes and where the results are indicative of gaps in end user knowledge (particularly around the technology over which their broadband is delivered, the speed of their connection and the alternative platforms to which they could switch at their address). ComReg therefore treats the results of the market research with the appropriate degree of caution throughout and notes those occasions where reliable or representative inferences cannot be drawn from the results, or where the sample is too small to allow for definitive conclusions to be drawn.

4.2 Relevant Product Market Assessment

4.2.1 Summary of Product Market Assessment

4.15 In carrying out its retail broadband product market assessment below, ComReg designates retail broadband delivered over FTTx as the focal product against which an assessment of potential substitutes should be carried out. A majority (53%) of retail broadband subscriptions in the State are delivered over FTTx, with the next most prevalent fixed broadband technology – CATV – accounting for 18% of subscriptions. FTTx broadband is delivered by a wide range of retail SPs making use of wholesale inputs provided by three Network Operators (Eircom, SIRO, and NBI). FTTx broadband is also capable of meeting the expectations of retail broadband end users in respect of usage cases, speed, download capabilities, and reliability. ComReg also considers that the pricing and product characteristics of retail broadband delivered over FTTx suggest that it is the appropriate focal product.

4.16 Having designated retail broadband delivered over FTTx as the appropriate focal product, ComReg then assesses whether the market should be expanded to include any demand-side or supply-side substitutes. ComReg considers that there are no sufficiently effective supply-side substitutes for retail broadband delivered over FTTx. However, ComReg considers that retail broadband delivered by VMI on a self-supply basis over its CATV network is likely to amount to a sufficiently effective demand-side substitute for the focal product. ComReg considers that this is the case, having regard in particular to similarities between both products, measured by intended usage, product characteristics, and pricing.

4.17 The inclusion of retail broadband delivered over CATV is subject to two caveats. First, it is only capable of acting as a substitute to the focal product in those areas where VMI has rolled out its CATV network, amounting to approximately 35% of premises in the State as of Q2 2023. Second, VMI has announced its intention to overlay its CATV network with FTTP (and has existing FTTP network coverage of 7%), such that, over time, demand-side substitution possibilities arising from CATV will decline.

4.18 ComReg additionally allows for the possibility of defining a separate product market for retail broadband delivered over copper, arising from the fact that retail broadband delivered over copper does not match the product or intended usage characteristics of the FTTx focal product due to the lower speeds achievable over copper. Additionally, ComReg notes that end user demand for retail broadband delivered over copper is in persistent decline. For these reasons, ComReg considers that retail broadband delivered over FTTx and copper may be characterised by asymmetric substitution, whereby end users deem FTTx retail broadband to be a sufficiently effective substitute for copper, but they do not deem copper retail broadband to be a sufficiently effective substitute for FTTx retail broadband.

4.2.2 Overview of Products

4.19 Broadband products are typically advertised and sold by download speeds ranging from ‘up to’ 100 Mbps to ‘up to’ 2 Gbps, as outlined in Annex 4Annex 8. Broadband over FTTC is typically offered with a download speed of ‘up to’ 100 Mbps. However, the actual speed received by the end user will vary, *inter alia*, depending on factors such as the distance of their premises from the cabinet or the quality of the copper component of the access path.[202] Broadband over FTTP is typically offered with download speeds of up to between 500 Mbps and 2 Gbps. VMI offers CATV-based broadband at two speed points, up to 500 Mbps and 1 Gbps and as of Q3 2023 VMI has launched FTTP broadband (in limited geographic areas) with speed points of up to 500 Mbps, 1 Gbps and 2 Gbps, in line with other operators providing FTTP.[203]

4.20 MBB relates to broadband provided over a mobile network, making use of a 3G, 4G or 5G signal delivered over a dongle or MiFi device. MBB is offered by a number of SPs active in the Irish market, including Eircom, Three, Vodafone and Magnet.

4.21 FWA refers to the delivery of broadband to a fixed location over a wireless network, and some FWA SPs offer advertised broadband speeds of up to 150Mbps. Whether a user can obtain such speeds is dependent on the number of users in a wireless cell, the backhaul capacity and weather conditions. FWA is more prevalent amongst more rural end users, where there are typically fewer wired broadband options, and in particular more limited higher speed, fixed broadband solutions. Satellite broadband offers downloads speeds of up to 22 Mbps for both residential and business end users.[204]

4.22 Table 5 outlines the key characteristics of broadband services provided over each of the above platforms.

[202] https://www.thinkbroadband.com/guides/fibre-fttc-ftth-broadband-guide http://www.increasebroadbandspeed.co.uk/chart-of-bt-fttc-vdsl2-speed-against-distance-from-the-cabinet

[203] https://www.virginmedia.ie/about-us/press/2023/virgin-media-launches-2-gigabit-full-fibre-broadband/

[204] Starlink satellite broadband offers higher download speeds than traditional satellite broadband, however there is a degree of ambiguity around the exact maximum download speeds on offer. The maximum download speed quoted is 220 Mbps on its Business Fixed Service Plan and 250 Mbps on its Premium Mobile Service Plan. https://www.starlink.com/legal/documents/DOC-1002-69942-69?regionCode=US

Table 5: Overview of Broadband Product Characteristics

	Copper	FTTC	FTTP	CATV	MBB	Satellite	FWA[205]
Technology	ADSL, ADSL2+	VDSL	GPON & XGS-PON	DOCSIS 3.1	3G/4G/5G	Satellite	4G/ 5G/ WiMax
Subscriptions							
Q4 2018	295,970	618,630	90,642	372,844	298,419	4,552	47,552
Q2 2022	132,496	571,166	431,388	372,423	380,201	3,296	84,327
Q2 2023	100,683	493,492	576,856	359,669	382,797	5,295	86,170
Max Download Speeds	24 Mbps	100 Mbps	2 Gbps	1 Gbps	150 Mbps	75 Mbps	150 Mbps
Monthly cost (inc. VAT)	€60	€22.50-€50	€30 - €70	€44 - €54	€20 - €45	€45 - €85	€35 - €55
Download Allowance	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited[206]	75-150GB	1TB – Unlimited

4.2.3 Designation of the appropriate retail broadband focal product

4.23 As set out above,[207] as of Q1 2023, FTTP subscriptions overtook FTTC subscriptions and as of Q2 2023 account for the largest proportion of retail broadband subscriptions, at 576,856,[208] or 29% of total broadband subscriptions.[209] The next largest portion of broadband subscriptions is delivered over FTTC, with 493,492 (25%). Mobile broadband subscriptions make up the third largest portion of the broadband market with 382,797 subscriptions (19%) with VMI's CATV subscriptions making up the fourth largest portion of the broadband market with 359,669 subscriptions (18%), having been overtaken by FTTP subscriptions in Q1 2022. NG networks therefore collectively account for 71% of retail broadband subscriptions (which includes MBB), and 88% of all fixed subscriptions in the State (that is, excluding MBB).

[205] The maximum advertised FWA download speed is 150 Mbps (at https://www.imagine.ie/broadband/). ComReg QKDR data indicate that c.65% of FWA subscribers are sold advertised speeds of >100 Mbps.

[206] MBB is increasingly offered on an unlimited basis. Where download allowances apply, they tend to range from 75GB to 150GB.

[207] See paragraphs 3.52 to 3.70.

[208] ComReg QKDR data.

[209] Total broadband is inclusive of both fixed and mobile, satellite and FWA broadband subscriptions.

4.24 Since the 2018 Decision, the retail broadband market in Ireland has changed to a significant degree, arising *inter alia* from the persistent decline in copper and growth in FTTP networks and the associated changes in retail demand. In Q1 2023, FTTP overtook FTTC in terms of subscription numbers, becoming the most common form of retail broadband subscription in the State. This is due to FTTC subscriptions being in decline and the current (and planned) rollout of FTTP by several operators (including Eircom, SIRO, NBI and VMI).[210] In the case of Eircom's FTTP rollout, a significant portion of this will take the form of an upgrade of FTTC to FTTP, such that eventually the only broadband product offered by Eircom will be FTTP.

4.25 The figures discussed above illustrate the significant shift in the retail broadband market away from legacy CG copper broadband, towards NG (in particular FTTP) broadband capable of delivering much higher download speeds and supporting more intensive use of broadband-dependent services. In Q4 2018, 21% of broadband was delivered over CG technology, but as of Q2 2023, this has declined to 6%.[211]

4.26 Unlike the legacy copper network, which is owned and operated by a single SP (Eircom), several SPs are active (at the wholesale and/or retail level) in the provision of fibre-based broadband. In addition, given the network rollout and upgrade plans of these SPs (Eircom, SIRO, NBI and VMI), more than one SP providing FTTP may be present in some geographic areas. The number of premises passed by overlapping FTTP networks is outlined in Table 11.

4.27 As set out in detail below, ComReg considers that the product characteristics, pricing and intended use of FTTC-based retail broadband are still sufficiently similar to those of FTTP-based retail broadband such that the focal product at the retail level should be defined as FTTx, to encompass both FTTC and FTTP. ComReg considers that FTTC will be replaced in time by Eircom, given its publicly announced network upgrade plans, so this does not impact the conclusions arising in this Decision. FTTC and FTTP differ in how they deliver services over the 'last mile', between the cabinet and the end user premises, a fact which has consequences for the download speeds attainable for end users. Together, as of Q2 2023 FTTx subscriptions constitute 53% of the retail broadband market, with FTTC accounting for 25% and FTTP for 29% (an increase from the Q4 2018 figure of 41%).

[210] https://www.virginmedia.ie/about-us/press/2021/virgin-media-ireland-announces-national-fibre-network-upgrade

[211] ComReg QKDR data. Measured as a total of fixed broadband subscriptions.

Product Characteristics of broadband provided over FTTx

4.28 Table 6 sets out the main characteristics of broadband provided over FTTx.

Table 6: Product characteristics of broadband provided over FTTx networks

	FTTC	FTTP
Technology	VDSL	GPON/XGS-PON
Subscribers (Q2 2023)[212]	493,492	576,856
Download Speeds	Up to 100 Mbps[213]	Up to 2 Gbps[214]
Upload Speeds	Up to 10 Mbps	Up to 100 Mbps
Price Range (inc. VAT)	€22.50-€50	€30 - €70
Download Allowance	Typically unlimited	
Bundles	Commonly bundled with retail products including RFTS and/or TV	
Typical Contract Length	12/24 months	

4.29 Broadband over FTTC offers advertised download speeds of up to 100 Mbps and upload speeds usually around 10% of the download speed, i.e., 10 Mbps. Broadband provided over FTTP offers advertised download speeds of ‘up to’ 500 Mbps, ‘up to’ 1 Gbps and ‘up to’ 2 Gbps[215] and, similar to FTTC, upload speeds typically amount to around 10-20% of the download speed. Download allowances for FTTx-based broadband packages are typically unlimited.[216]

4.30 FTTx broadband is offered on a standalone basis by several SPs but is also commonly bundled with one or more related retail services, including RFTS – which is increasingly delivered via Voice over Internet Protocol (‘**VoIP**’), rather than over a traditional copper phone line – TV services and mobile packages.

[212] ComReg QKDR data.

[213] Attainable download speeds over FTTC attenuate with distance from the cabinet. Therefore, although the plan may be advertised as delivering ‘up to 100 Mbps’ the reality for some end users may be much lower speeds. According to QKDR data, as of Q2 2023, 6% of FTTC subscriptions are at sold speeds of 2 – 30 Mbps and 94% are 30 – 100 Mbps.

[214] The majority of FTTP packages are advertised at maximum download speeds of 1 Gbps. However, 2 Gbps FTTP services are available in a small number of areas as of October 2023, primarily over SIRO’s network (available to retail end users through Vodafone and VMI). Speeds of ‘up to 1 Gbps’ are more widely available and advertised.

[215] FTTP speeds are advertised as 500 Mbps, 1 Gbps and 2 Gbps by Eircom, Sky and Vodafone.

[216] Typically, ‘unlimited’ plans are subject to fair usage policies.

Pricing

4.31 Annex 8 outlines a range of broadband services and bundles available to end users in Ireland, including details on prices, speeds and bundle components. It includes both fixed and mobile offerings in addition to a breakdown of services available to residential and business customers. The plans outlined in Annex 8 are accurate as of the date of publication, however, they are subject to continual change and promotional offers.

4.32 For residential subscribers the cost of FTTC broadband typically varies from €22.50 to €50 and for business subscribers the cost varies from €35 to €50 per month.[217] For residential end users the price of broadband provided over a FTTP network typically varies from €30 to €70 and for business customers, the price can vary from €35 to €99 per month.[218]

4.33 The 2022 Market Research found that, on average, residential customers were paying €43 for standalone broadband and €75 for broadband in a bundle, per month.[219] Business customers were paying an average of €107 for standalone broadband and €152 for broadband in a bundle, per month.[220]

4.34 Minimum contract lengths for broadband provided over FTTC are typically 12 months for residential and business users. Minimum contract lengths for broadband provided over FTTP are, typically, 12 months for residential and business end users, although some plans extend to 24 or 36 month terms.

Intended Use

4.35 In terms of derived demand for broadband and the underlying usage intentions of broadband purchasers, the 2022 Residential Market Research revealed that the main uses of broadband amongst end users with fibre were browsing the internet (87%), using email (82%), online shopping (69%) and downloading/streaming TV content (66%).[221]

[217] A range which encompasses both standalone and bundled plans.

[218] These figures stem from desk-based research by ComReg on advertised broadband plans from a variety of SP websites, accurate as of August 2023.

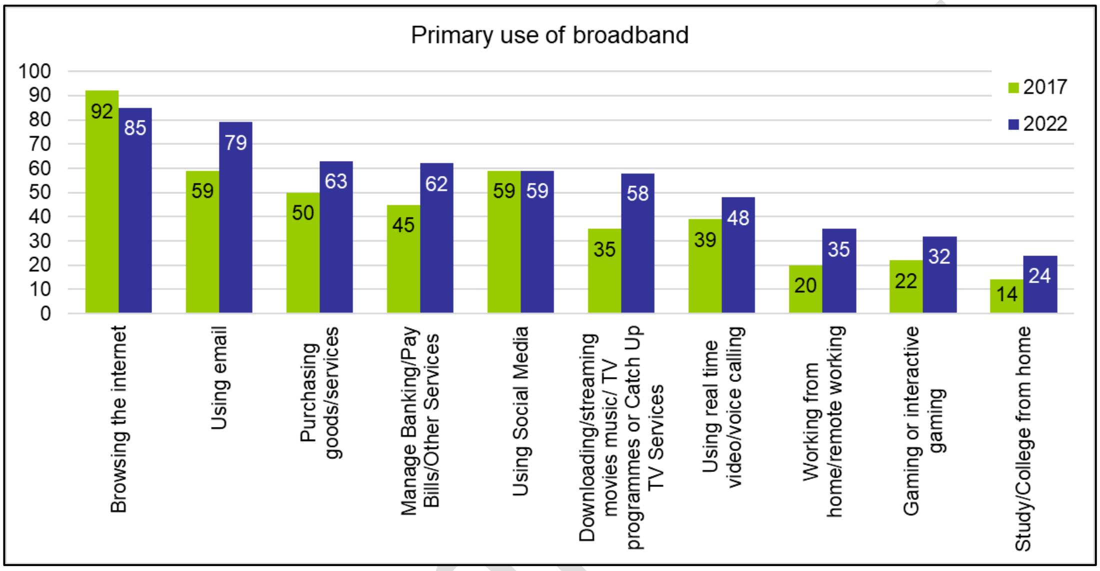
[219] See Slides 38 and 51 of the 2022 Residential Market Research. Overall average, across platforms.

[220] See Slide 37 and Slide 33 of the 2022 SME Market Research. The modal and median monthly cost for bundled broadband was €100, a figure which may be more reflective of the true average monthly cost, as it is less prone to outlier effects.

[221] See Slide 19 of the 2022 Residential Market Research. Here and throughout, where the 2022 Market Research is referenced, 'fibre broadband' refers to broadband delivered over FTTx. There was no delineation within the Market Research between FTTC and FTTP.

4.36 As illustrated in Figure 19, compared to the 2017 Market Research, the uses which have increased to the greatest degree are email, remote working and streaming/downloading TV content. The results around the use of broadband for remote work and streaming/downloading TV content fit with the behavioural change over the period of the Covid-19 pandemic and also align with increased download speeds attainable over broadband, which facilitates these uses.

Figure 19: Primary Uses of Broadband 2017 versus 2022[222]



4.37 The 2022 Market Research suggests that broadband is used differently depending on the underlying technology, particularly for fibre-based broadband, which amongst respondents, was typically associated with the use of higher bandwidth activities, such as remote working, video calling and gaming.[223] For instance, respondents with fibre broadband were significantly more likely to stream movies, watch TV and remote work than end users on other platforms, even in comparison to those with CATV broadband, which is technically capable of delivering a similar service in terms of bandwidth and download speed, to FTTx connections.

4.38 FTTx residential end users spent an average of 5.5 hours online per day, with 68% of those end users accessing broadband on an ongoing basis throughout the day. The overall average time spent online per day, across all platforms was 5 hours, the same as the 2017 market research result.

[222] 2022 Residential Market Research.

[223] See Slide 20 of the 2022 Residential Market Research.

4.39 In terms of what end users deem the most important characteristics of their broadband plan, the most valued aspect is reliability (83% of residential respondents ranked this the single most important factor), followed by download speed (41%) and customer service (30%).[224]

4.40 In comparison to broadband delivered over other platforms, end users with fibre broadband were more likely to engage in high bandwidth activities such as downloading/streaming content, watching live TV, remote work/study and gaming,[225] highlighting the differences between FTTx and other platforms, including CATV, copper and MBB.

4.41 Average data consumption[226] by broadband users on a FTTP network is 149 GB per month and on a FTTC network is 109 GB per month, as of Q2 2023.

Conclusion on Focal Product

4.42 In light of the above evidence and analysis, ComReg's view is that retail broadband provided over an FTTx network is the most appropriate focal product against which an assessment of substitute products should be carried out. Where alternatives are found to act as an effective substitute for the focal product, they will be included in the relevant retail product market.

4.43 In the following section ComReg assesses the various alternative networks used to provide broadband services in order to determine whether broadband provided over those networks is likely to be an effective demand and/or supply-side substitute for the focal product. Where this is found to be the case, the network under assessment is included in the relevant retail product market.

4.2.4 Direct Constraints

4.44 ComReg examines the following platforms and their suitability as demand or supply side substitutes for the retail focal product;

(a) Broadband provided over a copper-only network;

(b) Broadband provided over a CATV network;

(c) Broadband provided over a 3G/4G/5G mobile network;

(d) Satellite broadband;

(e) Broadband provided over a FWA network; and

(f) Broadband provided over a leased line.

[224] See Slide 23 of the 2022 Residential Market Research.

[225] See Slide 20 of the 2022 Residential Market Research.

[226] ComReg QKDR data for 'Average Traffic per subscriber per month'.

4.45 These potential substitutes are considered across a range of relevant substitutability criteria, as set out in the EC's Notice on Market Definition,[227] according to which a relevant product market is defined.

4.46 Although a comparison of technologies or characteristics can indicate the degree to which different technical solutions may be functionally equivalent at the service level, other factors, ranging from intended use, ease of switching and geographic availability must also be considered in determining whether products are substitutes in practice.

Demand Side Substitution

4.47 ComReg's starting point is to examine whether the above technologies are likely to be considered by end users to be effective demand-side substitutes for the focal product (defined at paragraph 4.42 above).

4.48 The retail assessment of potential demand side substitutes analyses product characteristics, prices, and any available data regarding end user behaviour and usage. It also takes into consideration whether a sufficient number of end users would likely switch to any candidate substitutes in response to a hypothetical 5-10% SSNIP in the retail price of the identified relevant broadband products.

4.49 The 2022 Market Research found that, in response to a SSNIP, the majority of end users (across all broadband platforms) would 'do nothing' in response to a €4 increase in the price of broadband, a common behavioural response whether the broadband is purchased on a standalone or bundled basis, and whether end users fell into the category of residential or business, suggesting a lack of price sensitivity amongst a large proportion of broadband customers.

4.50 More precisely, if the price of standalone broadband hypothetically increased by €4 per month, 57% of residential respondents responded that they would 'do nothing', 8% would stay with their current provider, but downgrade to a 'lesser plan', 6% would cancel their current plan and 11% would shop around for an alternative plan (with the remainder indicating that they were unsure of what they would do in response).[228]

[227] Commission Notice on the Definition of the Relevant Market for the purposes of Community Competition Law (97/C372/03) ('**Notice on Market Definition**'), available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209(01)&from=EN.

[228] See Slide 55 of the 2022 Residential Market Research.

4.51 For respondents who purchased their broadband as part of a bundle, if the price of bundled broadband hypothetically increased by €4 per month, 53% of residential respondents responded that they would ‘do nothing’, 6% would stay with their current provider, but downgrade to a ‘lesser plan’, 7% would cancel their current plan and 16% would shop around for an alternative plan (with the remainder indicating that they were unsure of what they would do).[229]

4.52 These results vary across regions and by technology, with respondents located in Dublin and users of FTTx-based broadband being the most likely to make a change in response to a SSNIP.

4.53 For business end users who purchase broadband on a standalone basis, 62% would ‘do nothing’ in response to a SSNIP and amongst bundle customers, 58% would ‘do nothing’. In both cases, businesses currently making use of FTTx are more likely to ‘do nothing’ in response to the SSNIP.

4.54 Figure 20 and Figure 21 below provide a summary of residential survey respondents’ likely behavioural responses to a hypothetical price increase. Respondents were asked:

(a) If they would change their purchasing behaviour in response to a SSNIP (hypothetical price increase of €4);

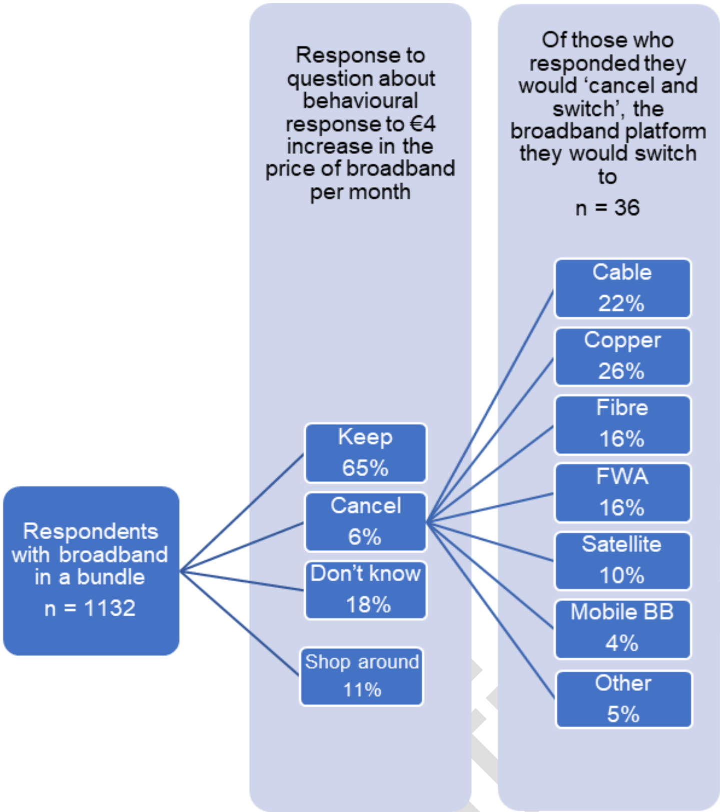
(b) What they would do (cancel or switch) if they would change their purchasing behaviour;

(c) How likely they are to actually change their purchasing behaviour; and

(d) Which broadband platform they would switch to if they were likely to actually change their behaviour.

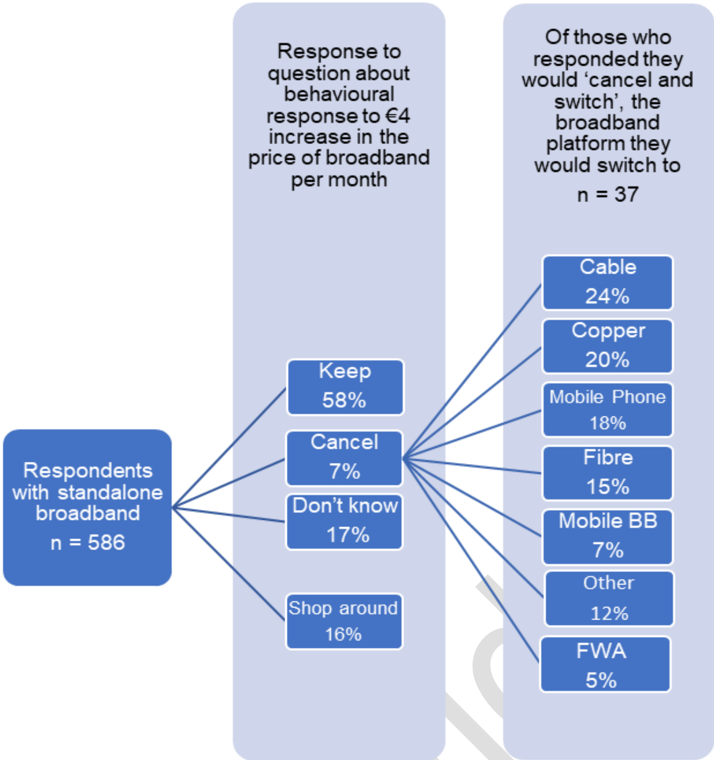
[229] *Ibid.*

Figure 20: SSNIP summary for residential respondents purchasing bundled broadband[230]



230 Caution: note small sample size.

Figure 21: SSNIP summary for residential respondents purchasing standalone NG broadband[231]



Assessing the impact of retail end user behaviour on the relevant wholesale markets

4.55 ComReg first considers whether, from an end user demand-side perspective, there are any products which might act as an effective substitute for the focal product - broadband provided over a FTTx network. ComReg examines this from two perspectives;

(a) Whether the characteristics, prices and intended use of potential substitute products are sufficiently interchangeable with those associated with the focal product; and

(b) The likelihood that a sufficient number of end users may switch to these potential substitutes in response to a SSNIP of the focal product to render that SSNIP unprofitable.

[231] Caution: note small sample size.

4.56 The analytical framework for defining a relevant product market involves examining end user behaviour in response to a SSNIP of a focal product supplied by a HM above the competitive level, typically taken to be in the range of 5-10%. In this regard, ComReg notes that a notional €4 increase at retail level would likely overestimate the true level of pass-through of a SSNIP of WLA to retail level (because, for example, a 10% increase in the wholesale price would translate into a lower percentage of the retail price given retail prices are higher than wholesale ones).

4.57 Under the SSNIP test, where the hypothetical price increase induces a switching response by end users to an alternative product, such that the SSNIP is unprofitable for the HM, the alternative product is deemed to be a substitute for the focal product and is included in the relevant product market. The SSNIP test is conducted for any number of alternative products which, depending on their characteristics, prices and intended use, may or may not constitute an effective demand-side substitute for the focal product. If switching to any of these alternative products is sufficient to render the SSNIP of the focal product unprofitable, these alternatives are included in the relevant product market.

Broadband provided over CG copper

4.58 It is ComReg's view that, from a demand-side perspective, there is likely to be some degree of substitution between copper and FTTx-based broadband, but that this substitution is asymmetric in nature.

4.59 As defined in the SMP Guidelines, asymmetric substitution occurs where there is substitution between two products, but in one direction only.[232] In the case of CG copper and FTTx-based broadband, ComReg is of the view that end users would likely, in response to a SSNIP, substitute from copper-based broadband to FTTx-based broadband (assuming it is available), but not necessarily from FTTx to copper i.e. there is substitution from the alternative product to the focal product but not vice versa.

4.60 In this instance ComReg is of the view that end users will switch from copper to FTTx, that is, 'trade up', but will be less likely to 'trade down' from FTTx to copper, based on end users' expectations of the two platforms[233] (assuming this option is available) and their contrasting technological capabilities and performance. Asymmetric substitution between copper and FTTx is further discussed below at paragraphs 5.38 to 5.45.

[232] European Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic networks and services, OJ 2002 C 165/3 (the '**SMP Guidelines**'). https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=51836

[233] In France Télécom v Commission (Case C-202/07 P), the EC stated that the user expectations from low-speed internet and high-speed internet are extremely different. Although the high-speed internet

4.61 In correspondence with ComReg, **[✂ [redacted] ✂]** noted that, based on its experience in the market to date, when presented with the choice, broadband customers are actively migrating from copper to fibre rather than vice versa. ComReg data also point to a decline in copper-based subscriptions and an increase in FTTx subscriptions. Between Q4 2018 and Q2 2023, copper subscriptions fell from 295,970 to 100,683 (-66%), whereas over the same timeframe FTTx subscriptions rose from 709,272 to 1,070,438 (51%).[234]

4.62 In such instances NRAs must decide whether or not the alternative product (in this case, CG copper) belongs in the market. The BEREC FMS Report[235] suggests two ways of considering asymmetric substitution when carrying out market analyses, as set out in detail at paragraphs 5.103 to 5.106 above.

4.63 As of Q2 2023, there were a total of 100,683 copper-based broadband subscribers in the State, amounting to 5% of overall broadband subscriptions or 6% of all fixed broadband subscriptions. This amounts to a decline of 66% since the publication of the 2018 Decision.

Product Characteristics of broadband provided over CG copper

4.64 Eircom owns and operates a ubiquitous copper network in Ireland.[236] Broadband provided over copper is typically sold with an advertised maximum download speed of 24 Mbps,[237] with unlimited download allowance. However, copper-based broadband services and packages from SPs are dwindling, and availability to new customers is limited, with only one SP offering a copper-based broadband product, as of October 2023.[238]

can perform everything that the low-speed internet can, the users do not shift to high-speed internet for the same kind of activities. Therefore, the relevant market, in this case, was not enlarged to encompass both the services citing the *"extremely asymmetric"* nature of substitution.

[234] ComReg QKDR data

[235] BEREC Report on impact of fixed-mobile substitution in market definition pp. 12-15; https://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/118-berec-draft-report-on-the-impact-of-fixed-mobile-substitution-in-market-definition_0.pdf (the '**BEREC FMS Report**').

[236] Taking a forward-looking perspective, this copper network will eventually cease to operate under Eircom's Copper Switch-off programme and plans.

[237] An example of a copper-based broadband product advertised at a maximum download speed of 24 Mbps is Digiweb's DSL Unlimited plan; https://digiweb.ie/dsl-broadband/.

[238] Digiweb offers copper-based retail broadband to residential subscribers and other SPs continue to offer such services on a legacy basis, including Eircom.

4.65 According to the 2022 Market Research, the average claimed download speed of those with copper broadband is 133 Mbps.[239] As noted at paragraph 4.14, the market research suggests a gap in the knowledge of end users. However, this is technologically not feasible, as copper can only deliver a maximum speed of around 24 Mbps. This result could be due to end users over-estimating their speed in instances where they have a copper (DSL) connection, or it could be indicative that they do not in fact have a copper connection, but rather some form of NG connection, as such speeds are only attainable over NG broadband networks.

4.66 For business end users (who have a greater tendency to have a copper-based connection, in comparison to residential subscribers), the average quoted download speed was 73 Mbps, which again suggests a knowledge gap.[240]

4.67 In their respective Submissions, ALTO[241] and BT[242] argued there is consumer confusion over the delivery of copper over Sub-Loops or Sub-Loop Unbundling, which is based on the use of the copper network to provide what ultimately would be an FTTC broadband service. Both Respondents remarked that if copper SLU were to be deregulated as part of CG WLA deregulation, this would then undermine the regulation of NG FTTC.

4.68 ComReg notes that Access Seekers have not used SLU to date and it therefore does not have any impact on the retail market (although ComReg notes that Eircom effectively self-supplies SLU for its own FTTC retail offerings). In this context ComReg fails to see how SLU impacts the regulation (or otherwise) of NG FTTC. Additionally, FTTC is continuously diminishing over time. The withdrawal of existing SLU remedies is addressed in more detail in Section 9. ComReg also notes that it is possible that there may be some confusion amongst consumers in their understanding of FTTP and FTTC-based retail offers, given they both have a fibre element.

[239] See Slide 85 of the 2022 Residential Market Research.

[240] See Slide 23 of the 2022 SME Market Research. ComReg QKDR data indicate that, as of Q1 2023, 47% of business broadband subscriptions were in the 30-100 Mbps range.

[241] ALTO Non-confidential Submission, pages 3-4.

[242] BT Confidential Submission, pages 3-4.

Pricing

4.69 A detailed examination of broadband prices, including those for copper-based services is included in Annex 8Annex 4. Copper-based broadband is priced at €60 per month for residential customers. Copper-based broadband is most frequently bundled with RFTS, at a low additional cost to the end user. In comparison to the number of plans and packages available over other platforms, very few copper-based options are available, in particular to new customers, as the majority of copper-based customers are served on a legacy basis - making a thorough analysis of pricing more challenging.

4.70 The 2022 Market Research revealed that residential respondents on a copper network whose broadband is part of a bundle paid an average of €70 per month, with those who purchase copper broadband as a standalone product paying an average of €43 per month.

4.71 Contract lengths for broadband provided over copper are typically a minimum of 12 months for both residential and business end users.

4.72 In response to a SSNIP, 62% of residential respondents who purchase broadband through a traditional phone line as part of a bundle said that they would not change their behaviour,[243] however, 8% would be induced to cancel their plan (to at least some extent). 92% of respondents who would cancel reported that they would be very likely or fairly likely to follow through on this change. Of those residential respondents who purchase standalone copper-based broadband, 71% indicated that they would not change their behaviour in response to the SSNIP, a figure which is higher than other platforms,[244] suggesting that end users on legacy copper products are less price sensitive than end users on NG broadband products (although this may be influenced by copper broadband users having greater awareness that FTTx broadband may not be available at their premises).

[243] See Slide 56 of the 2022 Residential Market Research.

[244] See Slide 65 of the 2022 Residential Market Research.

Intended Use

4.73 The 2022 Residential Market Research revealed that the main uses among end users using broadband on a copper network were browsing the internet (86%), using email (86%) and online shopping (66%). Respondents with copper-based broadband were notably less likely to use gaming (29%) or remote work (22%) than respondents with a NG broadband service.[245] For end users on a copper network, the average time spent online was 4.5 hours per day, marginally lower than the overall average of 5 hours per day.[246]

4.74 As set out in the QKDR, average data consumption by copper broadband users is 27 GB per month, as of Q2 2023. This is one of the lowest data usage figures across platforms, with data consumption over CATV, FTTC and FTTP networks at substantially higher levels, in excess of 100 GB per month. This potentially illustrates that those who need high speed broadband connections and use broadband intensively do not opt for a CG copper product but rather, a NG product capable of delivering much higher download speeds and reliability of service. However, another underlying dynamic at play here is availability. Where an end user hypothetically demands a high-speed broadband connection to support their intended use of broadband, but they are located in an area not currently covered by any NG network(s) they will have no choice but to opt for copper – despite a likely preference for a higher speed product. In such instances demand is constrained by availability.

Substitution

4.75 ComReg notes the clear, observable decline in broadband delivered over copper, and rise in FTTx broadband. As noted above, substitution between copper and FTTx is likely asymmetric in nature, i.e., users of copper-based services may switch to FTTx services in response to an increase in the price of copper-based services, but the opposite may not be the case.

4.76 There are potentially a number of drivers underlying this asymmetry, including consumer preferences, the introduction of new technologies (in particular, FTTP) and convergence in prices for copper and FTTx. However, the main driver of demand for NG versus CG-based retail broadband appears to be end user demand for high-speed broadband with the capability of supporting broadband and bandwidth-intensive purposes, including streaming, video calling, gaming and remote work.

[245] See Slide 20 of the 2022 Residential Market Research.

[246] See Slide 22 of the 2022 Residential Market Research.

4.77 ComReg is of the view that a HM supplier of FTTx broadband is likely to be able to sustain a profitable SSNIP in the range of 5-10% above the competitive level without a sufficient number of customers switching to broadband provided over a copper-only network.

4.78 ComReg also acknowledges that, although the average retail price of copper broadband falls within the minimum/maximum range of FTTx-based broadband, given the superior functionality and download speeds offered by FTTx broadband (where available), end users are likely to opt for FTTx rather than copper (with the potential exception of that cohort of the market who are price insensitive and reluctant to migrate to NG technology).

4.79 In addition, copper-based broadband is only available on a relatively limited basis to new customers and from a smaller number of SPs than those which offer FTTx broadband[247] as a consequence of the ongoing rollout of FTTP networks over which numerous SPs offer retail broadband. This has consequences for substitution dynamics as end users can only switch to FTTx where it is available, irrespective of their demand for such services.

4.80 The ability of copper-based end users to migrate to FTTx is dependent on the geographic availability of those services. With the progressive rollout of FTTP by a number of Network Operators, this obstacle will decline on a forward-looking basis, even for end users located in rural Ireland in areas previously deemed 'commercially unviable'. On a forward-looking basis, NBI rollout in the IA will facilitate switching opportunities for end users currently reliant on CG copper over coming years and allow them to migrate across to FTTP. Over the lifetime of this market review, having regard to commercial FTTP network rollout and state-aided rollout by NBI, ComReg expects the number of CG-based broadband users to decline significantly as they migrate to FTTP.

4.81 ComReg considers that, while end users can migrate from copper to FTTP when it becomes available in their area, it is unlikely end users will migrate back from FTTP to copper once they have taken up an FTTP subscription.

Broadband provided over CATV

4.82 Having regard to the analysis set out in paragraphs 4.83 to 4.96 below, ComReg considers that broadband access provided over a CATV network is likely to be an effective demand side substitute for the focal product.

[247] From desk-based research ComReg has found only one SP which is active in the provision of copper broadband on a 'non-legacy' basis (Digiweb).

Product Characteristics of CATV-based broadband

4.83 As of Q2 2023, there were 359,669 CATV broadband subscribers in Ireland, amounting to 18% of all broadband subscriptions. VMI is the only operator of a CATV network in the State and offers CATV broadband in primarily urban areas covering **[✂** [redacted] **✂]** premises as of Q2 2023.[248] ComReg data suggest that VMI's CATV network passes 35% of premises in the State as of Q2 2023. VMI's customer base is primarily residential, constituting 95% of its subscribers.

4.84 VMI offers products with download speeds of up to 500 Mbps and 1 Gbps on its CATV network. This broadly resembles the download speeds offered by SPs who offer FTTx-based packages. Similar to FTTx, VMI's offerings come with an unlimited download allowance. A detailed examination of the speeds and packages offered by VMI is set out in Annex 8.

4.85 For residential end users with CATV-based broadband, the average download speed cited by respondents to the 2022 Market Research was 215 Mbps,[249] the highest across any platform, including fibre and above the overall average (claimed) download speed of 164 Mbps. For business end users of CATV broadband (which constitute only a small portion of VMI's overall customer base) the average reported download speed was 298 Mbps, again the highest speed of any platform, with the exception of leased lines.

4.86 Since the 2018 Decision, VMI has upgraded its network from DOCSIS 3.0 to DOCSIS 3.1. allowing it to offer higher speed products to its customers, moving from a previous maximum download speed of 360 Mbps, to 1 Gbps – directly comparable to speeds available over FTTP.

4.87 Despite the ability of CATV to technically deliver higher speeds, it is important to note the potential for disparity between the maximum advertised speed and actual speed experienced by end users. The 2022 Market Research found that the average (claimed) download speed amongst CATV subscribers was 215 Mbps, which was the highest across any platform, including fibre, which sat at 176 Mbps (although as noted earlier at paragraph 4.37, the 2022 Market Research did not distinguish between FTTC and FTTP).

[248] According to ComReg QKDR data, VMI also has an FTTP presence, with (as of Q2 2023), **[✂** [redacted] **✂]** premises which includes newly passed premises with GPON technology and existing RFoG premises. Liberty Global indicated in its Preliminary Q2 2023 results that VMI has passed 280,000 homes with fibre, accessed at: https://www.libertyglobal.com/wp-content/uploads/2023/07/Virgin-Media-Ireland-Fixed-Income-Q2-2023-Release.pdf. ComReg notes that for its FTTP rollout VMI adopts a different definition of passed premises to that used by ComReg for the purpose of its QKDR data collection. In summary, ComReg defines passed premises as those premises which are capable of being connected within standard provisioning lead times at the standard connection fee.

[249] See Slide 85 of the 2022 Residential Market Research.

Pricing

4.88 A synopsis of CATV broadband pricing is contained in Annex 8. CATV bundles vary from €44 to €69 per month, depending on the product speed and the bundle of products included in the plan, for residential customers. For business end users, CATV broadband prices are not publicly available.

4.89 The 2022 Market Research showed that residential respondents who purchased CATV broadband as part of a bundle paid an average of €75 per month for their bundle. For residential respondents who purchase standalone CATV broadband, the average spend was €53 per month. Contract lengths for CATV broadband are typically for a period of 12 months.

4.90 According to the 2022 Market Research, amongst those with a CATV-based broadband connection, 55% of bundle and 40% of standalone residential end users would do nothing in response to a hypothetical €4 price increase.[250]

Intended Use

4.91 The 2022 Market Research revealed that the main uses among CATV end users were browsing the internet (79%), using email (73%) and video calling (58%). Respondents with CATV-based broadband were more likely to use their broadband service for real-time video than other platforms, including those end users with fibre broadband.[251]

4.92 For end users with CATV broadband, the average time spent online per day was 5 hours, exactly equivalent to the overall average across all platforms, and marginally below the 5.5 hours per day reported by fibre-based end users.

4.93 As set out in the QKDR, average data consumption by CATV broadband users is 149 GB per month, the highest across any platform, highlighting that CATV is capable of supporting the requirements of even the most intensive broadband users. The data consumption figure is broadly comparable to that of FTTP, which sits at 142 GB per subscriber, per month.

[250] See Slide 56 and Slide 65 of the 2022 Residential Market Research (Caution - Small Base Size).

[251] See Slide 20 of the 2022 Residential Market Research.

Substitution

4.94 As of Q2 2023 CATV-based broadband subscriptions numbered 359,669 behind both FTTC subscriptions at 493,492, and FTTP subscriptions, at 576,856 which in Q1 2022 overtook CATV subscriptions in the State. CATV subscriptions have been in slow decline since Q3 2021 having declined by 17,861 subscriptions over this period. This decline potentially signals an end to the relatively static CATV subscription figures (a trend which corresponds with the lack of growth in VMI's CATV geographic footprint) over the last number of years.

4.95 Given the results of the market research and subsequent analysis outlined above, ComReg is of the view that a HM supplier of the focal product is unlikely to be able to profitably sustain a SSNIP in the range of 5-10% above the competitive level without a sufficient number of customers switching to CATV broadband (in those geographic areas where it is available).

4.96 Accordingly, it is ComReg's view that CATV is likely to be an effective demand-side substitute to the focal product, with the caveat of geographic availability in the longer run (given VMI's plans to overbuild its CATV network with FTTP). These plans will likely have ramifications for the availability of CATV-based broadband in the long term.[252] In discussion with ComReg **[✂** [redacted] **✂]**. As VMI is the sole operator of CATV, on completion of the upgrade to FTTP, CATV will ultimately no longer be available to end users in the State **[✂** [redacted] **✂]**, removing it (in the long term) as a possible substitute for other broadband platforms. Taking a forward-looking perspective, CATV can only act as a demand side substitute for as long as it is available to end users. However, given the lack of certainty around VMI's plans and likely timelines for FTTP rollout, ComReg expects at least some degree of CATV to remain during the lifetime of this market review.

[252] For more discussion on VMI's rollout plans see paragraphs 3.41 to 3.43.

4.97 In its Submission, Eircom[253] notes that Copenhagen Economics considered that ComReg's SSNIP assessment to test indirect constraints has not been applied correctly and when suggested flaws are corrected Eircom considered there is evidence that pricing of fibre is indirectly constrained by CATV. It therefore considered that the WLA market definition should be broadened to include CATV (based on indirect constraints), as ComReg included CATV in the retail broadband market.

4.98 Eircom[254] also questions the value of the retail broadband market assessment as, in its view, it is not reflected in the assessment of upstream wholesale markets, considering CATV is a substitute for fibre at the retail level, but that retail substitutability is insufficient to impose an indirect constraint on WLA.

4.99 ComReg disagrees with Eircom that the retail broadband market assessment is not reflected in the subsequent assessment of upstream wholesale markets.

4.100 ComReg notes that while CATV broadband has been included in the retail market definition as a direct demand-side substitute, issues relating to whether CATV broadband should be included in the WLA product market on the basis of indirect constraints are appropriately addressed in Section 5.

Mobile broadband ('MBB') provided over 3G/4G/5G

Product Characteristics of MBB

4.101 ComReg set out the key characteristics of MBB in Table 5 above. Mobile networks can be used to supply broadband access in either of two ways, via a mobile phone (either on the device itself or through another device via hotspot/tethering) or a dongle or MiFi device. In the analysis below, ComReg considers whether the product characteristics and functionality of MBB provided via a dongle/MiFi device are sufficiently similar to retail broadband access provided over FTTx and CATV networks, particularly in terms of throughput capacity, reliability, latency, issues relating to topography and contention. ComReg excludes MBB accessed via a mobile phone from the analysis as the functionality of broadband access over a mobile phone is limited by screen size, resolution and the availability of applications.

[253] Eircom Non-confidential Submission, pages 13-15.

[254] *Ibid*.

4.102 MBB is currently sold over 3G, 4G and 5G. Taking a forward-looking approach, 3G is set to be decommissioned by several operators over the period of this review. Vodafone has announced that it will commence the switch-off of its 3G network by the end of 2023, as part of plans to improve its 4G and 5G services for customers.[255] Similarly, Three has announced its intention to phase out its 3G network by the end of 2024, again to focus investment on 4G and 5G infrastructure.[256] In ComReg's recent Multi-Band Spectrum Auction ('**MBSA**'), all three mobile network operators (Three, Eircom and Vodafone) acquired spectrum across the 700 MHz band, 2.1 GHz, 2.3 GHz, and 2.6 GHz bands, enabling them to expand and improve their 4G and 5G networks. The analysis below will therefore focus on 4G and 5G-based MBB.

4.103 Research conducted by Ookla found that 5G availability across Ireland was 22% in Q1 2023.[257] In January 2023 Three offered 5G to all customers as standard at no additional fee while Vodafone and Eircom only offer 5G to customers with 5G enabled plans.

4.104 ComReg considers that, based on the evidence available to it, attainable download speeds over MBB are highly variable. Although MBB has a hypothetical and advertised maximum network download capability of up to 150 Mbps,[258] actual achievable download speeds are often lower. This is largely due to the fact that the access network layer[259] within the mobile broadband network is shared across multiple end users utilising the broadband services within that area, which has consequences for the download speeds experienced by individual end users. This is exacerbated by the mobile nature of the broadband service and the ability for end users to move across the mobile network, which means the number of users within the footprint of a specific mobile base station coverage area can be variable.

[255] https://www.irishnews.com/magazine/technology/2022/01/25/news/vodafone-to-begin-switching-off-its-3g-network-in-2023-to-improve-4g-and-5g-2569946/

[256] https://www.irishnews.com/magazine/technology/2022/05/10/news/three-to-switch-off-3g-network-by-end-of-2024-2707311/

[257] https://www.ookla.com/articles/three-5g-performance-uk-ireland-austria-q2-2023

[258] https://coveragemap.comreg.ie/map MSPs active in the Irish market include 48, An Post Mobile, Clear Mobile, Eircom, GoMo, Lycamobile, Tesco Mobile, Three, VMI and Vodafone.

[259] The area served by a mobile base station.

4.105 In some EU Member States, MBB is regarded as a substitute to fixed broadband (e.g. Austria), in particular, in areas where fixed networks have not been upgraded, and achievable speeds over mobile networks are similar (or even superior) to the speeds achievable over fixed networks and operators market MBB with generous or unlimited data volumes.[260] However, most EU Member State NRAs deem fixed and mobile broadband to be complements.

4.106 ComReg assesses 3G/4G/5G download speeds as part of the assessment of Mobile Network Operators' ('**MNO(s)**') compliance with spectrum license obligations. ComReg's latest assessment of 3G/4G download speeds ('**2023 Mobile Coverage Assessment**')[261] illustrates significant variation in download speeds, depending on the network used. The typical speeds experienced during the tests were significantly lower than the theoretical maximum speeds advertised for these MBB products.

4.107 The actual speed a MBB end user receives depends on the coverage of the SP and the strength of the signal. For example, and as noted in the terms and conditions to the Three MBB offering,[262] the variability of the download and upload speeds achieved, and the technology used to access data services may affect the end user experience of service, ability to access and distribute information and content and use applications.

Table 7: Mobile Broadband Download and Upload Speeds by Technology and SP[263]

Service Provider	Technology	Estimated Max Speed	
Eircom	3G	1 Mbps	0.1 Mbps
	4G	10 Mbps	1 Mbps
	5G	50 Mbps	5 Mbps
Three	3G	2.5 Mbps	0.49 Mbps
	4G	10 Mbps	2.8 Mbps
	5G	25 Mbps	5 Mbps

[260] 2020 Explanatory Note, p.38,

[261] https://www.comreg.ie/media/2023/05/ComReg-2345.pdf

[262] See https://www.three.ie/legal/terms/mobile-and-fwa-network-speeds.html

[263] Taken from the speeds advertised by the main providers of mobile broadband in the State. Eir; https://www.eir.ie/ourmobilenetwork/, Three; https://www.three.ie/legal/terms/mobile-and-fwa-network-speeds.html and Vodafone; https://n.vodafone.ie/support/mobile/data-speed-information.html

Vodafone	3G	3 Mbps	0.5 Mbps
	4G	10 Mbps	3 Mbps
	5G	25 Mbps	5 Mbps

4.108 ComReg's analysis of MBB retail packages shows that advertised download speeds range from up to 1 Mbps to up to 25 Mbps, depending on the underlying technology (3G, 4G or 5G). One SP – KonnectMe - claims that 5G MBB can reach speeds of up to 500 Mbps.[264] By comparison, retail broadband provided over FTTC, CATV and FTTP networks have maximum advertised download capabilities of 100 Mbps, 1 Gbps and 2 Gbps respectively.

4.109 Research conducted by Ookla suggest that the median 5G download speed in Ireland for Q1 2023 was 194 Mbps.[265] Further research conducted by Ookla (in May 2023) put the median download speed over MBB at 38 Mbps and 87 Mbps for fixed broadband.[266]

4.110 The 2022 Market Research found that, among respondents with MBB, the average (claimed) download speed was 118 Mbps.[267]

4.111 As set out in the QKDR, average data consumption by MBB users on a mobile network is 24 GB per month, as of Q2 2023 - the lowest data consumption figures across all platforms, followed by copper broadband.

4.112 ComReg considers that, while network capabilities on both fixed and mobile broadband networks have continued to improve as SPs have invested in their networks, the gap between the headline network download capabilities has declined, particularly in light of 5G (although this is not universally available).

264 https://konnectme.ie/5g-broadband/?ppc_5gbroadband_pmm&gclid=Cj0KCQjw8uOWBhDXARIsAOxKJ2HPhuNrPlcFrVyv1H9gqULsD4Rd4NtjUC0NW_a_PuA7pe3vTQ2CUoMaAl1HEALw_wcB.

265 https://www.ookla.com/articles/three-5g-performance-uk-ireland-austria-q2-2023

266 https://www.speedtest.net/global-index/ireland https://www.speedtest.net/global-index/ireland#mobile Here, 'mobile broadband' refers collectively to all mobile broadband plans i.e., those delivered over 3G, 4G or 5G.

267 See Slide 85 of the 2022 Residential Market Research *Small Base Size.

4.113 5G enabled MBB will provide higher bandwidth and enable SPs to provide tailor-made services for the different requirements of customers in terms of latency, reliability, bitrates, and end-to-end service levels. Although 5G rollout is ongoing, when more widely available, 5G MBB will likely enhance end user experience, potentially increasing the similarities, from a product characteristics perspective, of fixed NG broadband. However, the product characteristics, prices and intended use characteristics of 5G and fixed NG broadband are not sufficiently similar in this regard.

Pricing

4.114 A detailed examination of MBB pricing is contained in Annex 8. ComReg's analysis of MBB packages shows that prices range from as low as €20 up to €45 per month, with an average price of €35. Amongst the respondents to the 2022 Market Research, residential end users were paying an average of €33 and €53 per month for standalone and bundled MBB respectively.[268] In comparison to the pricing of FTTx and CATV plans, on average, MBB is advertised at a slightly lower price point, although there is some degree of overlap, depending on the plans being compared.

4.115 Contract lengths for MBB vary between no contract (marketed as 'rolling contracts, 30 days in duration'), prepaid services (marketed as 'Pay As You Go') and contracts of up to 24 months. According to the 2022 Market Research 42% of residential respondents with MBB were currently under contract with their SP, versus 45% who were not under contract.[269]

Intended Use

4.116 Retail broadband provided on FTTx and CATV networks is typically marketed on the basis of characteristics such as price, unlimited download allowances, download speed and availability within bundled offerings. Conversely, MBB offerings highlight product mobility, convenience and coverage. MBB offerings are, relative to fixed broadband, more constrained by the limited download allowances typically offered by MBB plans. This is likely to limit the substitutability of MBB (particularly over 3G and 4G) with fixed broadband services, which typically have much higher or unlimited download allowances and faster download speeds.

[268] See Slide 52 and Slide of the 2022 Residential Market Research.

[269] See Slide 43 of the 2022 Residential Market Research. The remaining respondents were unsure if they were under contract.

4.117 The 2022 Market Research revealed that the main uses among MBB end users were using email (80%), browsing the internet (77%) and online shopping (59%). Respondents with MBB were significantly less likely to use their broadband service for remote work, remote study and streaming services than across other platforms, particularly in comparison to end users with fibre broadband,[270] illustrating the contrasting usage intentions (and capabilities) of mobile versus fixed platforms.

4.118 For end users with MBB, the average time spent online per day was 4.3 hours, which was the lowest reported across any platform, although not by a significant degree, below the overall daily average of 5 hours. Average data consumption by users on a mobile network is 24GB per month.

4.119 In discussion with ComReg, NBI suggested that MBB services are complementary to fixed broadband rather than a direct substitute and that, as fibre connectivity becomes more widely available, consumers will migrate to these services instead, as they become available. NBI also suggested that for customers facing a choice between low speed fixed broadband services provided over the legacy copper network and MBB (which is increasingly reliable and relatively higher speed than copper) many end users have rationally opted for the latter.

4.120 As outlined in the 2020 Explanatory Note, 5G will have three main areas of application;[271]

(a) **eMBB** – Enhanced Mobile Broadband, which allows for up to 10 Gbps peak speed and average speed of 500-600 Mbps in dense urban areas;

(b) **mMTC** – Massive Machine-type Communication; and

(c) **uRLLC** – Ultra Reliable Low Latency Communications.

4.121 These applications and characteristics of 5G all mark improvements in the capabilities of 5G MBB vis-á-vis 4G MBB. However, despite the improvements that 5G will bring, the three usage cases above diverge significantly from many of the usage cases and characteristics of fixed NG broadband delivered over FTTx and CATV – therefore mitigating the degree to which MBB is able to act as an effective substitute for the focal product.

[270] See Slide 20 of the 2022 Residential Market Research.

[271] 2020 Explanatory Note.

4.122 The bandwidth capabilities of MBB fall below those of FTTx and CATV. With MBB achieving maximum speeds of up to 3 Mbps, 10 Mbps and 50 Mbps for 3G, 4G and 5G technology respectively,[272] it is unlikely that end users will migrate from FTTx services which achieve higher speeds. In light of end user behavioural changes (e.g., increased working from home arrangements arising from Covid-19), there is potential for end users to require broadband services offering higher bandwidth, i.e. higher download and upload speeds. MBB is therefore unlikely to be a substitute to retail broadband over FTTx.

Substitution

4.123 In its Submission, Eircom[273] agrees that FTTx retail broadband should be the focal product and that copper is unlikely to be a substitute for FTTx. However, Eircom disagreed with the exclusion of MBB (and FWA) in the retail broadband market and notes that while MBB, FWA and Satellite are not perfect substitutes, they could belong to the same retail markets if there is a chain of substitution between them.

4.124 ComReg considers that the differences identified above in speed capabilities, download allowances and pricing between MBB, FWA, and fixed networks, coupled with the evidence as regards the evolution of related subscriptions over time, is sufficient evidence for ComReg to not consider them effective substitutes. ComReg also notes that Imagine,[274] one of the largest FWA SPs, in its Submission agreed with ComReg that the inclusion of FWA in the retail broadband market is not warranted. ComReg nonetheless recognises that FWA has a role to play in retail broadband provision.

4.125 Having regard to the above, ComReg considers that MBB is not likely to be sufficiently functionally equivalent to retail broadband provided over FTTx and CATV networks. In particular, the variability and reliability in download speeds due to contention, coupled with more limited download allowances and its impact on intended use, suggests that MBB is less likely to be an effective demand-side substitute for the focal product.

[272] See https://n.vodafone.ie/support/mobile/data-speed-information.html and https://www.eir.ie/ourmobilenetwork/

[273] Eircom Non-confidential Submission, pages 13-15.

[274] Imagine Non-confidential Submission, page 1.

Broadband provided over a Fixed Wireless Access ('FWA') network

Product characteristics of broadband provided over FWA

4.126 FWA refers to the delivery of broadband access to a fixed location over a wireless network and generally advertises broadband services at speeds of up to 150 Mbps,[275] making it comparable to FTTC in terms of download speeds.

4.127 In Table 5 above, ComReg sets out the key product characteristics of FWA broadband. Rather than delivering internet access via copper, fibre or coaxial cables, FWA is delivered using wireless signals.

4.128 Despite previously being in decline, since Q2 2019, FWA subscriptions have risen (for 17 consecutive quarters since Q1 2019, except for a decrease in Q3 2022 and Q2 2023), increasing by 38,618 (81%) over the period to a total of 86,170 as of Q2 2023.[276] However, this remains well below the peak of FWA subscriptions at 123,456 in Q1 2008 and accounts for the second smallest segment of the overall retail broadband market, by platform (after satellite). To further contextualise FWA subscriptions, FWA household penetration sits at 3.8%, as of Q2 2023.

4.129 In terms of the download speeds attainable to FWA retail broadband end users, according to QKDR data, the majority of subscriptions (65%) are within the 100 Mbps to 500 Mbps range, broadly similar to FTTx.

4.130 In discussions with ComReg in early 2022, NBI was of the opinion that the increase in FWA subscriptions at that time was transitory and was, at least to some degree, linked to transitory delays in the rollout of NBI FTTP at that time,[277] exacerbated by increased end user broadband needs during the course of the Covid-19 pandemic, particularly amongst more rural-based end users, who were already more likely to opt for FWA broadband than end users in more urban areas, where higher-speed fixed broadband solutions tend to be available. ComReg data suggest that the majority of FWA subscriptions fall into the IA.

[275] See Annex 4 for a comprehensive overview of FWA-based broadband offerings in the retail broadband market. The main provider of FWA is Imagine, whose offerings are summarised here; https://www.imagine.ie/broadband/ An alternative provider of FWA is Digiweb; https://digiweb.ie/metro-broadband/.

[276] It should be noted that some of this increase is attributable to ComReg collecting data from new operators that previously would have fallen below reporting thresholds. A proportion of the increase in FWA subscriptions is not therefore new growth in subscriber numbers.

[277] *"Covid 19 gave rise to unavoidable delays over 2020 to 2021 which resulted in a delay of over 8 months to the rollout. However, NBI have advised that they remain confident that they can make up any lost time and complete the network build by the end of 2026."* Dáil Éireann Debate, Thursday - 27 April 2023. Response by Minister Ryan to written question from Deputy Mairéad Farrell.

4.131 NBI further noted that it has a relatively large number of retail partners who are Wireless Internet Service Providers ('**WISPs**') and **[✂** [redacted] **✂]**

Pricing

4.132 A detailed examination of broadband pricing and packages can be found in Annex 8. The price of FWA broadband ranges from €35 to €55 per month for residential packages and the only FWA plan targeted at business end users is charged at €48.77 per month (from Imagine). Contract lengths for broadband provided over FWA are typically for a period of 18 months for both types of end users. These prices are broadly comparable to those charged for FTTx broadband services, although new customers or connections can incur more significant connection or setup fees than FTTx broadband.[278]

4.133 The main providers of FWA broadband in Ireland are Imagine and Digiweb, with the rest of the market highly segmented between a large number of smaller, typically highly localised providers (collectively, WISPs).

Intended Use

4.134 FWA plays an important role in (predominantly rural) areas where NG broadband service over FTTx or CATV is not (yet) available to end users. Data gathered by ComReg suggest that approximately 62% of FWA subscribers are located within the IA[279], which consists of large rural areas. In general, coverage is relatively widespread, although end users can experience congestion-related issues, particularly where FWA services are delivered over license-exempt spectrum (although the main FWA provider in the State, Imagine, provides FWA over licensed, 36 GHz band spectrum and has recently acquired spectrum in the 2.3 GHz and 2.6 GHz bands).[280]

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[278] For example, Whizzy charges a €90 set up fee, outlined at: https://whizzyinternet.ie/fwa/ and Imagine charges a €121.95 installation and connection charge, outlined at: https://www.imagine.ie/wp-content/uploads/2023/02/imagine-product-pricing-SC13022023.pdf, whereas the majority of FTTx plans typically do not incur such charges at the initial stage of the contract.

[279] Of the 86,170 FWA subscriptions in Q2 2023, only 66,709 have Eircodes associated with them (77%). Of those FWA subscriptions that have an associated Eircode, 80% of those are in the NBI IA. It cannot be determined if the remaining 19,461 FWA subscriptions are within the NBI IA or not.

[280] Unless license exempt, all wireless telegraphy equipment requires a license. License exempt equipment operates on a non-interference, non-protected basis and in radio spectrum that is shared with other radio devices. License exempt equipment may not cause interference to other devices and may not claim protection from any interference received. See https://www.comreg.ie/industry/radio-spectrum/licence-

4.135 The average time spent online amongst respondents with FWA broadband was 4.6 hours[281] and the average traffic, per subscriber by broadband users on a FWA network is 100 GB per month.[282]

4.136 5G FWA represents a potentially closer substitute for FTTx-based broadband than 3G or 4G FWA-based broadband, given its enhanced capabilities in terms of download speed and bandwidth. The 2020 Explanatory Note suggests that consideration should be given to the inclusion of certain FWA products, in particular 5G FWA, as a substitute for fixed broadband.[283] On a forward-looking basis the EC expects that 5G FWA is likely to act as a substitute for fixed access, particularly in rural areas across Member States, as widespread 5G rollout advances. However, the 2020 Explanatory Note outlines that 5G FWA capabilities fall short of FTTP and substitutability would be less likely in Member States where FTTP is more widespread.

4.137 5G FWA is not currently available to end users in Ireland as no such rollout has yet occurred in the State. At least one operator (Imagine) has rights of use on the 3.6 GHz band, which is 5G spectrum. However, the product delivered by Imagine on that band is not itself a 5G FWA product. Imagine itself describes its network as a '5G ready fixed wireless network', rather than a network delivering 5G FWA,[284] as further discussed below.

4.138 Further to this, the 2020 Explanatory Note acknowledges that although 5G FWA offers *'more promise as a potential alternative'* to fixed broadband connections, its *'capabilities lie at the lower end of those available via FTTH'*.[285]

<u>Substitution</u>

4.139 ComReg's view is that a HM supplier of the retail broadband focal product is likely to be able to sustain a profitable SSNIP in the range of 5-10% above the competitive level, as a sufficient number of end users are unlikely to switch to FWA in response. Despite some overlap in the underlying product characteristics, usage and pricing of FWA and FTTx-based broadband, the degree of substitution between the two technologies is likely insufficient for FWA to sufficiently constrain FTTx, and thus be included in the retail market.

exemptions/#:~:text=Licence%20exempt%20radio%20equipment%20operates,protection%20from%20any%20interference%20received.

281 See Slide 22 of the 2022 Residential Market Research.

282 ComReg QKDR data.

283 2020 Explanatory Note at p. 53.

284 https://www.imagine.ie/broadband/, accessed on 3 July 2023.

285 2020 Explanatory Note at p. 63.

4.140 Although FWA subscriptions have been trending upwards, ComReg is of the view that this rise in demand will be relatively transitory in nature and subdue once FTTP rollout progresses further and end users (particularly in rural areas) have greater choice of high speed fixed broadband solutions. Moreover, the increase in FWA subscriptions has been modest, relative to growth in other platforms, particularly FTTP, over this same period.

4.141 As of 2022, NRAs have identified substitution between fixed and FWA technologies in Italy, Hungary, Romania, Belgium, the Czech Republic[286] but in other Member States, to date, FWA does not yet serve as a viable substitute. However, in view of expected short to medium term developments, 5G FWA in particular is expected to play a significant role as a substitute for fixed access, particularly in rural areas across some Member States.[287]

4.142 Although FWA subscriptions have increased over the period since Q4 2018, when coupled with the analysis presented above on intended usage, product characteristics and substitution dynamics, an insufficient number of end users are likely to consider FWA services to be an effective substitute for FTTx-based broadband. In particular, the lack of suitability for all applications, particularly those requiring higher bandwidth (including but not limited to video calling, gaming and remote work), suggests that, on a forward-looking basis, FWA is likely to be viewed by end users as a complement to, rather than a substitute for, FTTx-based broadband.

4.143 In its Submission, VMI[288] also agrees with the exclusion of MBB, FWA, Leased Lines and Satellite from the retail product market definition due to the differences in product functionality and price. However, VMI recommends that ComReg stay open to altering the assessment in circumstances where changes justify (e.g., FWA technology improves).

4.144 ComReg notes that the evidence at its disposal does not indicate that FWA technology improvements are likely over the period of the market review.

[286] BEREC opinion, BoR (20) 174 p.17

[287] Wireless technologies have been used for rural areas in the context of state aid programmes in Italy, Greece and elsewhere.

[288] VMI Non-confidential Submission, pages 9-10.

Satellite broadband

Product Characteristics of satellite broadband

4.145 ComReg sets out the key characteristics of satellite-based broadband in Table 5 above. As of Q2 2023, there were 5,295 subscribers to satellite broadband, an increase of 17% since the publication of the 2018 Decision.[289]

4.146 In Ireland, satellite services are typically advertised as offering download speeds of up to 75 Mbps, where this is an absolute maximum attainable download speed.[290] This is with the exception of Starlink, which offers higher speed satellite-based broadband via its low earth orbit satellites, and as of September 2023 advertises a maximum attainable download speed of 220 Mbps.[291] As of Q2 2023 there were **[✂** [redacted] **✂]** subscriptions to Starlink within the Irish retail broadband market (a share of approximately **[✂** [redacted] **✂]**[292] of satellite subscriptions).

4.147 QKDR data show that in Q2 2023, 19% of satellite subscriptions were at speeds of <30 Mbps, 1% were between 30 and 100 Mbps, and 80% were between 100 and 500 Mbps.[293] Satellite-based broadband packages are usually differentiated by download allowance and/or speed, the former of which makes satellite-based products much more restrictive relative to usage allowances on other fixed platforms and the latter which has implications for usage capabilities.[294] The different satellite broadband packages on offer to end users are outlined in Annex 8.

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[289] ComReg notes that in Q1 2023, Starlink began submitting figures as part of the QKDR, contributing to a quarter-on-quarter increase of 1,631 subscriptions (98%). Although the inclusion of Starlink markedly increases the absolute figure, as a proportion of the overall retail broadband market, satellite only constitutes 0.3%.

[290] See Annex 8 for further details on such packages/products. While Irish Satellite Broadband advertise Satellite broadband with speeds of up to 75 Mbps, accessed at: https://irishsat.ie/broadband/, Digiweb only offer speeds of up to 20 Mbps, accessed at: https://digiweb.ie/tooway-surfer-satellite-broadband/.

[291] https://www.starlink.com/legal/documents/DOC-1400-28829-70 The maximum download speed quoted is 220 Mbps, however, ComReg notes the ambiguity in the advertising around download speeds for Starlink customers.

[292] Between 70% and 80%.

[293] ComReg QKDR data.

[294] 'Unlimited' subject to the relevant fair usage policy of the SP.

Pricing

4.148 A detailed examination of satellite broadband pricing is contained in Annex 8. Generally, prices range from €45 to €85 per month for residential end users (depending on download speed and allowance, and whether it is part of a bundle). Satellite broadband typically incurs significant equipment, installation and activation costs/charges, ranging from €99 to €450.[295] Therefore, there is a significant difference in the cost of broadband provided over satellite relative to the cost of broadband provided over the focal product, including monthly rental and connection/installation fees.

4.149 Given the low number of satellite subscriptions in the State, the results for satellite broadband in the 2022 Market Research are based on small sample sizes and should therefore be treated with the appropriate degree of caution.

Intended Use

4.150 As noted at paragraph 4.145, in Q2 2023, satellite broadband accounted for 5,295 retail subscriptions, or 0.3% of overall broadband subscriptions. The very low number of satellite subscriptions is indicative of very low levels of demand for satellite-based broadband in the State, and taking a forward-looking perspective, given the increasing availability of NG broadband the number of end users with satellite broadband is unlikely to rise to any significant degree in the future, particularly relative to other platforms.

4.151 The average time spent online amongst respondents with satellite broadband was 4.7 hours.[296] As set out in ComReg's QKDR, the average data consumption of satellite broadband subscribers[297] is 133 GB per month, as of Q2 2023, below the data consumption on CATV and FTTP.

[295] From advertised plans on satellite providers websites, as of August 2023, installation and activations fees vary from €99, €299, and €450 (Digiweb, Irish Satellite Broadband, and Starlink).

[296] Slide 22.

[297] 'Average traffic per subscriber'.

Substitution

4.152 Some satellite broadband subscribers may, depending on the service, experience latency issues,[298] which becomes an issue for latency intensive uses of broadband, such as gaming, video streaming, video calling and OTT content. Given issues around latency, it is unlikely that, in response to a SSNIP, end users would switch away from the focal product, which typically has notably lower levels of latency and the ability to deliver higher quality, data intensive services, to satellite-based services. Furthermore, given the typically higher cost of satellite-based services,[299] in the event of a SSNIP it is unlikely that a satellite-based subscription would be a cheaper alternative to an FTTx-based product, as even following a SSNIP of the focal product, satellite is still likely to be more expensive.

4.153 A HM supplier of the focal product is therefore likely to be able to sustain a profitable SSNIP in the range of 5-10% above the competitive level because end users are unlikely to switch in sufficient numbers to satellite broadband in response to this price increase. This conclusion is supported by the continuing low numbers of subscribers on satellite broadband.

4.154 ComReg considers that satellite broadband is unlikely to be an effective demand-side substitute for broadband over FTTx and CATV networks.

Broadband provided over a leased line

4.155 As set out in the 2020 Explanatory Note, the Wholesale Dedicated Capacity (‘**WDC**’) market, which includes Leased Lines (‘**LL**’), constitutes a market deemed susceptible to *ex ante* regulation (Market 2/2020), which was previously known (under the 2014 Recommendation) as Wholesale High Quality Access provided at a fixed location (‘**WHQA**’) (Market 4/2014).

4.156 A leased line is a retail product typically used by business end users that involves the supply of dedicated high quality and reliable transmission capacity between fixed locations via a fixed or wireless connection. Leased lines typically include guaranteed high quality service levels (for instance, repair times), symmetric upload and download speeds, and guaranteed availability, in comparison to retail broadband services provided over copper, FTTx and CATV networks, which are generally asymmetric and contended services, with bandwidth that is typically lower than that for retail leased line services.

[298] Latency refers to signal delay/round trip delay. Latency is a key variable of interest when considering time sensitive applications of broadband. Latency is, in part, determined by the medium that is used (copper, radio waves, fibre), the number of medium conversions, the encryption/decryption used and the number of packet processing hubs in the connection.

[299] An average satellite-based subscription costs €64.95, compared to the average FTTx subscription at €54.06 (an average of standalone fibre-based broadband).

4.157 In H2 2022, the most recent period for which data are available, there were a total of circa 22,092 active retail leased lines in the State. Retail LL services are demanded by organisations to support a wide variety of Information and Communications Technology ('**ICT**') applications[300] and can also be used to build Virtual Private Networks ('**VPNs**') that allow business organisations to link business premises together, including data centres, so that offices can exchange data and access corporate applications – again, contrasting with the capabilities of FTTx-based business broadband. In addition, the Service Level Agreements ('**SLAs**') provided by SPs for retail broadband services (if any) are generally of a lower standard than those for leased lines.

4.158 A number of SPs are active in the provision of retail (and wholesale) LL services in Ireland, including BT, Colt, Eircom, and SFG.

4.159 Across various parameters leased lines have higher service levels than broadband delivered over other fixed platforms. Therefore, for a particular set of end users (businesses with specific and intensive requirements of their broadband connection), a leased line will be most capable of meeting those requirements – impacting the suitability of a leased line as a substitute for FTTx and CATV-based broadband, and vice versa. LLs fundamentally differ from the other technologies utilised by business broadband customers in terms of download and upload symmetry, and dedicated connectivity.

Product characteristics of leased lines

4.160 In this section, ComReg summarises the product characteristics of retail broadband compared to LL services in terms of the extent to which broadband may represent an effective retail substitute for either Traditional Interface ('**TI**')[301] or Modern Interface ('**MI**') Leased Lines.[302] The analysis will focus on business end users, as leased lines tend to satisfy business user demand. A LL will not typically be an attractive product for residential end users as, in comparison to FTTx or CATV broadband, LL services are significantly more expensive and encompass a range of services and features which are not typically demanded by residential end users.

[300] Such as access to the internet, private voice and data networks, cloud-based services, backup and disaster recovery, remote monitoring and telemetry applications.

[301] Traditional Interface refers to copper-based LL interfaces including Analogue, Digital and TDM.

[302] Modern Interface refers to fibre-based LL interfaces including Ethernet and xWDM.

4.161 The 2022 Market Research indicated that the average download speed experienced by business respondents (who were aware of their download speed) was 145 Mbps,[303] whereas for LL-based end users, the average download speed was 530 Mbps.[304] This clearly demonstrates the disparity in achievable download speeds over LL versus other retail broadband products. However, on a forward-looking basis, FTTP is increasingly able to support speeds in the same region as Leased Lines.

Pricing

4.162 The results of the 2022 Market Research indicate substantial cost differences between business retail broadband and LL services. The average monthly cost of a standalone broadband service cited by business respondents was €107.[305] The average monthly service cost amongst LL purchasers is likely to be multiples of this figure. The market research also found that leased lines tend to be used by larger companies, with 14% of businesses with 1-10 employees making use of a leased line, in comparison to 38% of businesses in the 51-249 employees cohort.[306]

4.163 Given that LLs are typically significantly more expensive than business broadband products delivered over FTTx networks, ComReg considers it unlikely that business broadband subscribers would switch to a LL service in response to a hypothetical price increase in their broadband service. Consequently, a HM of the focal product would likely be able to sustain a SSNIP without losing enough customers to render the increase unprofitable, to services delivered over LL.

Intended Use

4.164 As part of the 2022 Market Research respondents were asked to indicate what they used their broadband and/or LL services for. LLs were mostly used by businesses for email and internet access (88%), VoIP services (37%) and connectivity between premises (28%).[307]

[303] See Slide 22 of the 2022 SME Market Research.

[304] See Slide 23 of the 2022 SME Market Research. Caution - small sample size.

[305] See Slide 37 (Non-Bundle Users).

[306] See Slide 9 of the 2022 SME Market Research.

[307] See Slide 19 of the 2022 SME Market Research.

4.165 In comparison to end users with a fibre connection, those with a LL are significantly more likely to use this connection for disaster recovery services, connectivity between premises, VoIP and employee remote access. These results suggest that business end users who purchase and use FTTx business broadband versus those who opt for a LL-based solution use these broadband products in different ways. This suggests that FTTx business broadband and LLs are likely not substitutes from a demand side perspective.

4.166 The 2022 Market Research was based on SME respondents and although this is a representative sample of the firms operating in Ireland, it results in a relatively small sample of larger firms (specifically in the 51-249 employee cohort), who are more likely to have a LL and also likely have more specific needs and requirements for their broadband connection (which a LL is more capable of supporting than other technologies). ComReg therefore treats the LL related results from the 2022 Market Research with the appropriate degree of caution, given the small sample size.

Substitution

4.167 Having regard to the analysis set out in paragraphs 4.155 to 4.166, ComReg's view is that leased lines are unlikely to be an effective demand side substitute for the focal product over the lifetime of this market review.

Supply Side Substitution

4.168 ComReg must also consider whether any alternative products could represent an effective supply-side substitute to the focal products. Supply-side substitution measures how potential (rather than actual) competitors react to price increases. The HMT assesses whether a SSNIP of a focal product supplied by a HM would cause sufficient new entry into the relevant market by potential competitors, such that it would render the price increase unprofitable.

4.169 In analysing supply-side substitution, ComReg will examine whether, in response to a SSNIP of the focal product, an operator(s) in another market could potentially enter the market for the focal product in the short term, without incurring significant sunk costs. Where supply-side substitution is possible, a potential entrant could enter the market and render a hypothetical price increase unprofitable for the hypothetical monopolist. In this instance, it may be appropriate to broaden the market definition to include products similar to the focal product on the basis of the supply-side substitution. Of note, the impact of supply-side substitution must be equivalent to the impact of demand-side substitution, in terms of effectiveness and immediacy.

4.170 ComReg is of the view that there are no clear candidate supply-side substitutes to assess. ComReg has already assessed whether retail broadband already delivered over copper, FWA, MBB, satellite or leased line as part of its demand-side assessment above, and it is not necessary to reassess these products at supply-side substitution stage. Supply side substitution occurs in the instance where a potential entrant could enter the market and render a hypothetical price increase unprofitable for the incumbent hypothetical monopolist. However, all the platforms discussed above are already used (to varying degrees) to deliver retail broadband services, which removes the hypothetical nature of the potential substitution. Therefore, the potential for such platforms to act as supply side substitutes (and therefore warrant inclusion in the market) is moot.

Conclusion on Direct Constraints

4.171 Having considered the relevant demand-side factors, including functionality, pricing and usage patterns, alongside the evolution in observed demand for retail broadband delivered over copper and FTTx, ComReg's view is that:

(a) Copper-based broadband is unlikely to be a sufficiently effective substitute for the retail broadband focal product. End users are not likely to substitute away from the focal product to copper-based retail broadband in response to a hypothetical price increase in sufficient numbers to render that price increase unprofitable. Retail broadband delivered over copper and FTTx is characterised by asymmetric substitution (whereby end users substitute away from copper-based broadband towards FTTx broadband, but not vice versa);

(b) CATV-based retail broadband is sufficiently similar to the focal product, such that end users are likely to find it a good demand-side substitute (subject to availability and switching costs) and should therefore be included in the relevant retail broadband market;

(c) MBB is unlikely to be a sufficiently effective substitute for the retail broadband focal product as there are sufficient functional differences between MBB and fixed broadband. Primarily, MBB is limited in terms of download speed, reliability of service and download allowances, in comparison to fixed services and there is also evidence of differences in intended usage;

(d) FWA-based broadband is unlikely to be an effective substitute for the retail broadband focal product. Although retail market trends indicate that subscriptions for FWA-based broadband services have increased by a non-trivial degree during the period since the publication of the 2018 Decision, as a proportion of the overall broadband market, and relative to the peak of FWA subscriptions in Q1 2008, this trend does not warrant the inclusion of FWA in the retail broadband market; and

(e) Satellite broadband is unlikely to be an effective substitute for the retail broadband focal product. In its current form, the substantially different pricing structure, higher up-front cost and lack of suitability for some broadband applications, mean satellite broadband is not likely to be viewed by end users as a substitute for the focal product; and Leased lines are unlikely to be an effective substitute for the retail broadband focal product, given significant differences in product characteristics, usage and pricing, primarily around the dedicated capacity nature of a LL and the associated SLAs.

4.2.5 Residential and Business Users

4.172 ComReg has considered whether retail fixed broadband products[308] used by residential and business users form part of the same relevant retail market, or whether there are grounds to define separate residential and business end user markets. SPs tend to offer a broadly similar range of products to both business and residential end users. Some SPs differentiate service offerings and pricing by providing business customers with products that have higher specifications, such as lower contention ratios, higher upload speeds, timeline commitments for issue resolution or static IP addresses (with such components specified under the associated SLA).

4.173 Within the business subset of end users, there is a distinction between SMEs with relatively modest broadband requirements (more similar to residential end users) and larger corporations and institutional end users, with more intensive broadband requirements. For the purposes of the discussion below ComReg refers to the former as ‘Low Level’ business end users and the latter as ‘High Level’ business end users.

[308] Namely FTTx and CATV-based broadband, as the other forms of retail broadband access have been excluded from the retail broadband market based on the analysis set out above.

4.174 ComReg has considered, on the demand side, whether a subscriber to a residential broadband service would be likely to find a business broadband service to be an effective substitute, and vice versa. In terms of product characteristics, similar products are offered to both types of subscribers. A micro or SME business (see the discussion of low-level business end users below) is likely to have similar requirements in terms of download speeds and data allowances to a residential end user. While some SPs may structure their offers slightly differently, the analysis presented in Annex 4 shows that there are no significant differences in the range of broadband services which are available to residential and small business users.

4.175 However, the broadband requirements of large businesses and institutions (high level business users), for instance an office or university are likely to differ from those of residential or SME users. Although, broadly speaking, the offerings of SPs to residential and small business subscribers are similar, retail broadband requirements appear to vary for firms which have larger numbers of employees and wider scale operations (implying more intensive broadband requirements and the need for a broader range of services).[309]

4.176 In terms of usage, ComReg notes a strong trend amongst all users to subscribe to higher speed products. In Q2 2023, 30% of business users and 64% of residential users subscribed to fixed broadband at speeds at or above 100 Mbps,[310] which suggests strong demand for higher speeds by residential and business customers, but particularly amongst residential end users.

4.177 The main difference between business (particularly high-level) and residential products arises in the packages offered and ancillary services included (for instance, SLAs). Residential broadband subscribers are more likely to bundle their broadband service with RFTS, and/or TV services, while business subscribers are more likely to purchase broadband as a standalone product, in a bundle with fixed and/or mobile telephony or as part of a suite of business services e.g., cloud connectivity. Overall, both sets of end users show a tendency to purchase broadband as part of a bundle, but they can differ in the non-broadband components of those bundles.

[309] For example, VMI delineates its business broadband products by the number of employees, varying from Small, Medium, Enterprise, Construction to Public Sector. In a similar fashion, Eircom delineates its business broadband offering by employee numbers, 'eir Business' for 1 to 9 employees versus 'eir evo' for 10+ employees.

[310] ComReg QKDR data. =>100 Mbps to =<1 Gbps.

4.178 ComReg has also considered from the supply side whether an operator which supplied only residential broadband services would be able to switch to supply business broadband services, or vice versa, without incurring significant additional costs or risks and within a short timeframe.

4.179 While some operators choose to predominantly serve only the business market (e.g. BT or Goldfish) or the residential market (e.g. VMI), or to serve both but market them separately (e.g. Eircom and Vodafone), the definition of the product market is not only based on how operators currently behave, but also on whether they could provide an effective constraint on each other by altering their business model to offer services to the segment(s) of the market where they are not currently active. ComReg is of the view that SPs currently engaged in the provision of residential or business broadband could hypothetically move into the provision of the 'other' service, in the case where they are currently only active in one, serving to constrain SPs currently active in that portion of the market.

4.180 ComReg considers that the underlying inputs used to supply residential and business retail fixed broadband (primarily FTTx) are fundamentally comparable, regardless of whether that broadband is offered to a business or a residential customer (although SLAs can be particularly important for business users). It is possible that there may be differences in some elements of service provision, particularly amongst high level business end users – for example, business users may require more extensive customer support. However, ComReg does not view such service-related features as precluding an operator which is currently offering residential or business-only retail broadband from switching to supply the other group of customers within a reasonably short time period, and without incurring significant infrastructure and other sunk costs, and therefore acting as an effective constraint.

4.181 ComReg is of the view that, while a customer using the most basic residential broadband package would be unlikely to find the highest specification business package to be a good substitute, and vice versa (for high level business end users in particular), overlaps in product specification and pricing between adjacent broadband offerings indicate a chain of substitution across residential and non-residential retail broadband provided over FTTx.

4.182 In its Submission, BT[311] disagreed with ComReg's view and argued that switching from serving residential customers to business customers would require many overheads and so is in reality, unrealistic.

[311] BT Confidential Submission, pages 3-4.

4.183 ComReg notes it is still feasible in terms of the network and other inputs it would require, given the product characteristics are often similar between business and residential customers. Many retail SPs (both larger SPs such as Eircom and Vodafone and smaller SPs such as Westnet and Rapid Broadband) offer both business and residential products, showing that it is possible at either scale. ComReg acknowledges that there can be some costs of moving to service a business segment with broadband (such as billing systems developments etc), but these are not likely to be insurmountable.

4.184 Taking both the demand-side and supply-side considerations discussed above into account, ComReg is of the view that the retail market should not be differentiated by customer type.

4.2.6 Standalone versus Bundled Broadband

4.185 In this section ComReg considers how the prevalence of bundling at retail level may affect market definition at retail level, and whether it may be appropriate to delineate separate standalone and bundled retail broadband markets.

4.186 Guidance on how to treat bundling retail broadband services as part of a market analysis is limited. The 2014 Explanatory Note[312] notes that:

> *"…in the presence of a small but significant non-transitory increase in price there is evidence that a sufficient number of customers would "unpick" the bundle and obtain the service elements of the bundle separately, then it can be concluded that the service elements constitute the relevant markets in their own right and not the bundle".*[313]

4.187 The retail broadband (and related services) market in Ireland is characterised by the provision of broadband on a single-play (standalone) basis, or, together with various combinations of RFTS, TV services and mobile phone services, as part of a dual-play, triple-play or quad-play bundles. Examples of bundles and standalone products available to end users are outlined in Annex 8.

4.188 Bundling occurs where a firm sells two or more services together, as one combined offering at a joint price. Several SPs offer standalone and dual-play bundles, with Eircom, Sky, Vodafone and VMI offering triple-play bundles and Eircom, VMI and Vodafone offering quad-play bundles.

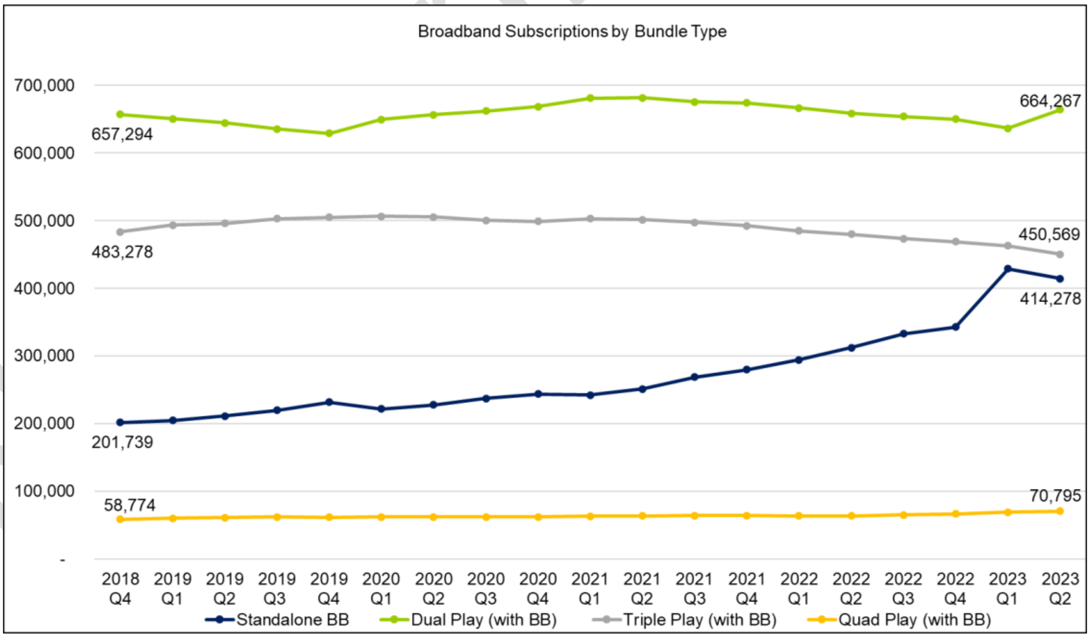
[312] The 2020 Recommendation provides no guidance on end users unpicking a bundle in response to a SSNIP.

[313] 2014 Explanatory Note.

4.189 Retail broadband services are typically bundled together by SPs to benefit from economies of scope in the supply of those services. Bundling products into one service offering is likely to achieve savings in production, distribution and transaction costs. Bundling may also offer suppliers the possibility of reducing churn in a market which is typically characterised by high customer acquisition costs,[314] and may increase the revenue per customer even where the price of individual services is decreasing on a marginal basis.

4.190 As shown below in Figure 22 since Q4 2018 the number of standalone retail broadband subscriptions has risen by 105%, from 201,739 to 414,276, which is clear evidence of the growth in demand for standalone services since the publication of the 2018 Decision. Over the same time period, dual play bundles (with a broadband component), remained relatively unchanged, increasing 1.1% from 657,294 to 664,267 and triple and quad play bundles decreased by 3.8% from 542,052 to 521,364. As illustrated in Table 9 below, between Q4 2018 and Q2 2023 standalone retail broadband subscriptions, as a percentage of overall retail subscriptions have risen from 14% to 26%. Together, these figures demonstrate that bundling remains commonplace in the retail broadband market, but also that, in comparison to 2018, demand for standalone broadband has increased.

Figure 22: Bundles with a Broadband Component, Q4 2018 – Q2 2023[315]



[314] Customer acquisition costs are the costs related to acquiring a new customer. In the context of telecoms and broadband the main component of these costs stems from marketing and advertising.

[315] ComReg QKDR data. Note a change in methodology for standalone broadband between Q4 2022 and Q1 2023. Where previously this was collected as subscriptions, it is now collected as lines.

4.191 As of Q2 2023, the most common bundle is a dual-play bundle of RFTS plus broadband (501,635), followed by a triple-play bundle of RFTS, broadband and TV services (319,936) and then dual-play broadband plus TV (153,216). Since the publication of the 2018 Decision, triple-play bundles of broadband, TV and mobile telephony have grown by 35%, contrasting with the decline in RFTS plus broadband bundles, which fell by 19%. Overall, since the publication of the 2018 Decision, standalone broadband subscriptions have risen by 105% and bundled subscriptions with a broadband component have declined by 1%.

4.192 There was a total of 1,185,631 bundled subscriptions[316] with a broadband component in Q2 2023, 56% of which were dual play, 38% triple play and 6% quad play (as illustrated in Table 8 below).

4.193 In terms of demand for standalone and bundled broadband, **[✂ [redacted] ✂]** indicated in its February 2022 IIR response that, although bundling of broadband, telephone and TV services at retail level continues, there is an inherent demand for standalone services within the market, evident in increased demand for standalone broadband over the period, and the fact that many consumers no longer see value in RFTS.[317] According to **[✂ [redacted] ✂]**, a growing proportion of <u>new</u> connections were standalone broadband (approximately 57% of **[✂ [redacted] ✂]** sales as of Q1 2022 were of standalone broadband).

4.194 Similarly, **[✂ [redacted] ✂]** noted that standalone broadband subscriptions have grown, again, driven by consumer demand. However, this anecdotal evidence from various SPs is contrary to the fact that Eircom (the SP with the largest retail market share across platforms) no longer offers standalone services as part of its main product offering.

Table 8: Breakdown of Bundled Broadband Subscriptions, Q2 2023

Broadband Bundle	Subscriptions	Share
Dual Play	664,267	56%
Triple Play	450,569	38%
Quad Play	70,795	6%
Total Bundled Subscriptions with Broadband Component	**1,185,631**	

[316] Overall, there were 1,193,724 bundled subscriptions (including those with and without a broadband component). Bundles with a broadband component therefore made up 99% of total bundled subscriptions as of Q2 2023.

[317] The views expressed here around RFTS are those of **[✂ [redacted] ✂]** rather than ComReg. However, according to ComReg data, cumulatively, RFTS subscriptions (both standalone and bundled) have declined by 16% between Q4 2018 and Q2 2023.

Table 9: Bundled and Standalone Broadband Subscriptions

Subscriptions with BB component	Q4 2018		Q2 2023	
	Subscriptions	Share	Subscriptions	Share
Bundled	1,199,346	86%	1,185,631	74%
Standalone	201,739	14%	414,278	26%
Total	1,401,085	100%	1,599,909	100%

4.195 Overall, a total of 1,599,909 subscriptions included a broadband component (either standalone or bundled with other retail broadband products), 414,278 (26%) of which are standalone subscriptions. Despite persistence in the incidence and take-up of bundled retail broadband packages, a non-trivial portion of end users opt for a standalone product.

4.196 SIRO reported a similar sentiment, noting that, from a consumer market perspective, in terms of advertisements and perceived relative importance of the various components of offers, it is clear that the broadband element is the key consideration for end users. However, SIRO is not itself an active participant in the retail broadband market, but only through its retail partners.

4.197 The 2022 Residential Market Research found that 62% of respondents with access to broadband at home bundle their broadband service with at least one other service.[318] Of those with bundled broadband access, the most common bundle was broadband and TV (32%), followed by broadband, RFTS and TV, and broadband and RFTS (both 21%).[319]

4.198 Overall, on the issue of bundling, based on the data and analysis above, ComReg is of the view that bundling remains commonplace in the retail broadband market, despite declines in certain bundles, primarily broadband and RFTS. However, also observable alongside the continued prevalence of bundling, is an increase in the demand for standalone broadband.

4.199 When assessing whether separate standalone and bundled retail markets exist, another factor for consideration is the prevalence of Over-The-Top (‘**OTT**’) services. As noted in the 2020 Recommendation,[320]

> *“An important factor when assessing whether a retail market for bundles exists is the increased use of services offered by OTT providers. Those services break the link between network access and service provision.”*

[318] See Slide 29 of the 2022 Residential Market Research.

[319] See Slide 33 of the 2022 Residential Market Research.

[320] 2020 Explanatory Note.

4.200 OTT services refers to any services or content which can be delivered via a broadband connection. Such services are described as 'over the top' as they are delivered 'on top' of an internet connection. For instance, video streaming services such as Netflix, Disney+ and Prime Video are examples of OTT services, as are voice-based services, which are classified as 'unmanaged VoIP', delivered over platforms such as WhatsApp and Skype.

4.201 The provision and availability of OTT services may reduce consumer incentives to purchase bundled plans, as standalone broadband is sufficient to access the OTT services they require. QKDR data and engagement with SPs suggest that a non-trivial proportion of end users demand standalone rather than bundled broadband services (26% of the retail broadband market), which could be suggestive that the provision of OTT services can facilitate 'breaking the link' between network access and service provision.

4.202 In response to information requests issued by ComReg in January 2022, several SPs submitted responses which included their views and experiences of OTT related trends.

4.203 Eircom noted that growth in OTT video content streaming services has driven demand for higher speed retail broadband services and that, on an ongoing basis, demand for higher speed broadband will continue to be driven by the evolution of end user device capabilities and end user expectations regarding broadband quality.

4.204 VMI similarly noted that the move towards an IP-based landscape has catapulted the rise of OTT services and that OTTs will continue to change the competitive landscape as new and innovative ways to deliver services at the retail level have emerged, which it sees as increasingly acting as a substitute — over NG broadband — for traditional offers from SPs.

4.205 NBI's perception is that there has been a shift away from triple- and quad-play bundled services in recent times, partly driven by the decline in linear TV services and a rise in demand for streaming video services, such as Netflix, Amazon Prime, Now TV and Apple TV.

4.206 SIRO noted that data usage by consumers has grown substantially, driven particularly by video services and the uptake in higher bitrate compatible viewing devices, such as HD/4K TVs, Next Gen Gaming Consoles and WiFi 6.

Broadband and RFTS bundles

4.207 Broadband bundled with RFTS is the most popular bundle consumed by retail broadband subscribers.[321] The cost and popularity of broadband and RFTS bundles suggests that the economies of scope may be sufficient to inhibit switching from bundled to standalone offerings. The prices of standalone broadband and standalone RFTS are sufficiently high, such that it is significantly more expensive to buy each on a standalone basis than it is to buy a broadband and RFTS dual play bundle. Often, the cost of a dual play broadband and RFTS bundle is the same as a standalone broadband plan or only slightly higher, with a very low marginal cost for the RFTS component, if added to the bundle.[322] As a result, it is likely that an insufficient number of customers would be likely to unpick a broadband and RFTS bundle in response to a SSNIP of the bundle price.

4.208 Some SPs do not offer standalone broadband (most notably Eircom) and oblige end users to purchase RFTS alongside broadband. This means that, for a portion of the 501,635 broadband plus RFTS bundles purchased as of Q2 2023, this may not have been an active choice by end users to purchase their most preferred option, but rather an outcome of the packages available.

4.209 Despite the 19% decline in subscriptions between Q4 2018 and Q2 2023, broadband and RFTS remains the most popular bundle for end users.[323]

4.210 Notably, in terms of the incidence of bundling broadband with RFTS, the 2022 Residential Market Research showed that broadband and RFTS bundles were significantly more common amongst end users with a copper-based broadband connection (47%), than those on other platforms.[324] Moreover, Eircom customers were significantly more likely to bundle their broadband with RFTS (39%) than customers of other SPs,[325] which may reflect the fact that Eircom no longer advertises a standalone broadband product.

[321] Both ComReg QKDR data and the 2022 Market Research results point to this conclusion.

[322] In support of this proposition (as of August 2023), Digiweb customers receive RFTS free with a range of broadband products, while Vodafone customers have the option to add on RFTS for €5 per month to an otherwise standalone broadband plan; VMI customers can add RFTS (‘World Talk Home Phone’) for an additional €3 per month, on any broadband plan.

In terms of the costs of standalone RFTS, this varies from €29 to €40 per month, substantially higher than the costs associated with adding RFTS to a bundle, with e.g. broadband.

[323] ComReg QKDR data.

[324] See Slide 33 of the 2022 Residential Market Research.

[325] *Ibid.*

Broadband and TV bundles

4.211 Eircom, Sky, VMI and Vodafone all offer broadband and TV bundles. As of Q2 2023, 153,216 customers subscribed to such a bundle (up 424% from 29,259 in Q4 2018). However, a significant number of customers also purchase these services separately. As of Q2 2023, 573,692 TV subscriptions were purchased on a standalone basis.

4.212 The 2022 Market Research showed that broadband and TV bundles were most popular amongst respondents, particularly those with a CATV (41%) or FTTx (37%)[326] broadband connection and amongst Sky customers (58%).[327]

Conclusion on bundled versus standalone broadband

4.213 Irrespective of whether it is appropriate to define separate standalone and bundled retail broadband markets, this is unlikely to have a material impact on the WLA and WCA market definitions. Upstream, the underlying wholesale products are the same, regardless of how the retail service is sold to the end user (i.e., bundled or standalone) at the downstream level. Therefore, in light of the analysis above of the various dynamics in demand for, and supply of, standalone and bundled retail broadband, ComReg considers that standalone and bundled broadband fall within the same market.

4.214 Overall, ComReg is of the view that a sufficient number of customers could (and would) 'unpick' a bundle if there were to be a hypothetical increase in the price of the bundle which included a broadband component, such as to render that price increase unprofitable. Despite the continued prevalence of bundling, there has been a slight shift since the 2018 Decision towards standalone broadband. Although only 26% of the market is made up of such subscriptions, the increase does suggest a willingness amongst end users to opt for a standalone product, and in a hypothetical price increase scenario, this is likely to manifest in a stronger willingness to switch from a bundle to a standalone plan i.e., 'unpick' the components of the bundle.

4.215 It follows, consistent with the reasoning in the 2020 Explanatory Note, that there should not be separate markets for standalone and bundled broadband.

Overall Conclusion on Likely Retail Product Market

4.216 As discussed above, ComReg is not required to conclude on, or precisely define the scope of, the retail market. However, it has carried out the preceding analysis to inform its analysis of the WLA and WCA markets.

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[326] *Ibid.*

[327] See Slide 34 of the 2022 Residential Market Research.

4.217 This section focuses on the extent to which different retail broadband products can act as effective substitutes for one another. The evaluation of the degree of substitutability between different products considers functional characteristics, pricing, intended usage and supply-side factors.

4.218 In summary, ComReg concludes that:

(a) Broadband provided over FTTx and CATV should be included in the retail broadband market, whereas broadband delivered over copper (arising from asymmetric substitution), MBB, FWA, satellite or a leased line should be excluded from the retail market;

(b) There is a chain of substitution between retail broadband products provided over FTTx and CATV, which are all hypothetically capable of delivering download speeds at or in excess of 100 Mbps. The analysis above of the product characteristics (intended use, speed, packages and prices) suggests that it is possible for a broadband subscriber to switch to a faster retail broadband product for a similar or cheaper price than they are paying for their existing service.[328] However, the availability of FTTx and CATV broadband products may limit the ability of customers to switch between platforms in response to a hypothetical price increase, particularly in rural areas, where these networks have not (yet) rolled out;

(c) The retail broadband market should not be segmented by customer type as there is insufficient difference between the provision of residential and business retail broadband, particularly between residential and low-level business end users; and

(d) The retail broadband market should not be segmented on the basis of whether end users purchase broadband on a standalone or bundled basis - as a sufficient proportion of end users, in the event of a SSNIP in their bundle, would 'unpick' that bundle in response.

4.219 Overall, ComReg defines a NG retail broadband market consisting of broadband provided over FTTx and CATV. It may separately be appropriate to define a CG retail broadband market consisting of broadband provided over copper-only networks.

[328] On Eircom, as of August 2023, a copper subscription with speeds up to 24 Mbps is €59.95 on a 12-month contract and a fibre subscription with speeds up to 500 Mbps is on average cheaper at €56.79. Magnet also offer standalone broadband with speeds up to 100 Mbps for €30 on a 12-month contract and a 500 Mbps fibre broadband subscription for €33.75 on a 12-month contract.

4.3 Geographic Assessment

4.220 The purpose of this section is to define the geographic scope of the retail broadband market. ComReg's approach follows that set out by the European Commission in the 2020 Recommendation.

4.221 ComReg assesses the geographic features of the retail market having regard to the following issues:

(a) Geographic differences in entry conditions over time (paragraphs 4.224 to 4.232);

(b) Evolution and distribution of market shares (paragraphs 4.233 to 4.259);

(c) Variation in the number and size of potential competitors (paragraphs 4.260 to 4.267);

(d) Evidence of differentiated pricing strategies or marketing (paragraphs 4.268 to 4.274); and

(e) Geographic differences in product functionality and demand characteristics (paragraphs 4.275 to 4.279).

4.222 Under the MGA, in an absent regulation scenario, ComReg assumes that Eircom would no longer provide upstream merchant market WLA or WCA. In that scenario, end users have four possible options:

(a) Ceasing to purchase retail broadband services;

(b) Switching to Eircom retail, as Eircom continues to offer retail services based on its own self supply of WLA and WCA inputs;

(c) Retaining their retail broadband service as the Access Seeker from which they purchase retail services is able to purchase alternative WLA and/or WCA inputs from SIRO or NBI (or, on a forward-looking basis, VMI); or

(d) Switching to a SP that is not reliant on Eircom wholesale inputs, namely VMI (which is vertically integrated), where the premises is passed by its DOCSIS 3.1 CATV network.

4.223 If Eircom were to withdraw merchant market WLA, then in the Revised Urban WCA market, where it currently offers merchant market WCA (despite the fact it has been deregulated) this WCA could also be withdrawn, as its provision is reliant on upstream merchant market provision of WLA.

4.3.1 Geographic differences in entry conditions over time

4.224 In considering the geographic scope of the market, ComReg assesses the extent to which sufficient differences in competitive conditions may evolve in particular areas over the lifetime of this market review. To this end, ComReg assesses the coverage and evolution of market shares of NG broadband networks over time, in order to identify any existing or potential geographic variations in entry and competitive conditions across geographic areas.

4.225 Taking the Exchange Area ('**EA**') as the geographic unit of assessment, differences in entry conditions across EAs are, in large part, governed by the presence (or absence) of different NG broadband networks capable of delivering retail broadband services over their own network based on self-supply, or offering merchant market provision of WLA and/or WCA inputs to Access Seekers. The presence or absence at an EA of NG networks at an appreciable level of both absolute and overlapping coverage is a key determinant in distinguishing differences in competitive conditions between EAs. This is because it reflects the ability of an SP to serve particular areas and the extent of competition, measured by the number of SPs in that area.

4.226 A number of networks have been rolled out, which vary by technology and presence. Eircom, SIRO, NBI and, on a forward-looking basis, VMI, all operate or intend to operate FTTx networks but are present to varying degrees in different areas of the State. Eircom operates the network with the most extensive coverage, whereas SIRO coverage is concentrated in regional areas and large towns. NBI coverage is within the IA and VMI's future FTTP presence is likely to be concentrated in urban areas (predominantly Dublin, Galway, and Limerick). Retail SPs which do not operate their own networks may purchase wholesale inputs from multiple Network Operators (where present) in order to provide broadband to end users, which mitigates the degree to which entry conditions vary across geographic areas.

4.227 However, absent regulation, Eircom merchant market WLA and WCA would not be available to SPs wishing to provide retail broadband to end users. This could impact the degree to which Access Seekers would purchase commercial wholesale services from SIRO and/or NBI, given that Access Seekers would, based on the smaller network footprints of these SPs, not be able to provide services on a national or near national basis (noting that the largest retail SPs' strategies to date have been to operate nationally). Thus, if Eircom withdrew merchant market provision of WLA and WCA (or continued to offer it, but under comparatively disadvantageous conditions compared to regulated supply), this could also have the effect of reducing Access Seeker demand for wholesale services delivered by SIRO or NBI, if an Access Seeker intends to offer retail services on a national basis or considers that end users would expect national level coverage of it. This is because retail broadband coverage over SIRO and NBI would be unlikely to replicate the near-national coverage of Eircom FTTx.

4.228 The presence and coverage levels of networks capable of delivering retail NG broadband varies across EAs, and the NG broadband options available to a given end user will depend on their location. In general, NG broadband availability is likely to be greater in areas of greater premises density. NBI rollout, as it progresses and is eventually completed, will facilitate greater NG broadband availability to areas of lower population density.

4.229 Access Seekers can supply retail broadband on the basis of Eircom, SIRO, and NBI wholesale inputs (and, on a forward-looking basis, VMI). ComReg has identified 85 retail SPs which – entirely or partially - offer retail broadband on the basis of WLA or WCA purchases from Eircom, SIRO and/or NBI, and many of these Access Seekers purchase wholesale inputs on multiple networks.[329] For instance, seven retail SPs purchase wholesale inputs from all of Eircom, SIRO and NBI,[330] two purchase wholesale inputs from both Eircom and SIRO,[331] nine from both Eircom and NBI[332] and three from NBI and SIRO.[333] This high-level overview suggests that at least 21 retail SPs already purchase wholesale inputs from more than one Network Operator. Additionally, VMI has agreed to commence the provision of wholesale services to Vodafone and has indicated that it is willing to supply wholesale services to other Access Seekers [✂ [redacted] ✂] As of October 2023, VMI has announced wholesale deals with both Vodafone and Sky.[334]

4.230 In an absent regulation scenario, where Eircom withdraws its merchant market WLA and WCA inputs (or continues to offer it, but under comparatively disadvantageous conditions compared to regulated supply), Access Seekers would only, hypothetically, be left to choose between purchasing inputs from SIRO or NBI (and, on a forward-looking basis, VMI). Even bearing in mind that Access Seekers have proven themselves willing to purchase inputs from multiple wholesale operators, their ability to purchase these inputs for the provision of retail broadband is governed by the presence of these operators in different geographic areas. For instance, SIRO is unlikely to materially extend its network presence into the IA (although some overlap is possible).

[329] ComReg data including QKDR data and Eircom; https://www.openeir.ie/our-customers/, SIRO; https://siro.ie/ and NBI; https://nbi.ie/where-can-i-buy/ accessed on 27 September 2023.

[330] Blacknight, Fastcom, Pure Telecom, Telcom, Viatel, Vodafone, and Westnet.

[331] Airwire and VMI.

[332] Atlantek Computers, BBnet, Eircom (self-supply), IFA Telecom, Ivertec, Lightnet, Magnet Networks, Net1 and Regional Broadband Ireland.

[333] Carnsore Broadband, Digiweb and Sky.

[334] For further discussion of VMI's entry into the wholesale market, see Section 5.

4.231 Although Access Seekers have the ability to purchase inputs from several Network Operators, in an absent regulation scenario, this is a moot point where those Network Operators are not present. At end user level, absent regulation, an end user could switch to purchasing retail broadband from VMI, where VMI CATV has rolled out. However, ComReg data suggest limited overlap between VMI CATV and SIRO, or between VMI CATV and NBI.

4.232 In terms of geographic differences in entry conditions over time, in an absent regulation scenario, ComReg is of the view that there may be differences in competitive conditions between areas where multiple Network Operators are present, and those areas where Eircom is the only Network Operator present, even allowing for the capacity of Access Seekers to purchase wholesale inputs from multiple operators in an absent regulation scenario. However, these differences are likely to decline over time as alternative FTTP network rollout progresses, such that fewer parts of the State are characterised by the presence of Eircom FTTP only. Thus, as network rollout progresses, at retail level, differences in geographic entry conditions sufficient to warrant defining separate geographic markets are likely to decline.

4.3.2 Evolution and distribution of market shares

4.233 As discussed above, the broadband options available to a given retail end user depend on their location. In general, although not a perfectly linear relationship, the availability of alternative platforms, to which the end user could hypothetically switch is correlated with population and premises density.

4.234 There are non-trivial differences in the geographic coverage and availability of the various networks over which retail broadband is delivered in Ireland. Eircom's copper network is ubiquitous, although given Eircom's FTTP coverage and upgrade plans, it would be expected to be concentrated largely within the IA and is likely to further decline, as end users express preferences for services delivered over FTTx. As of Q2 2023, Eircom's FTTC network passes approximately 986,000 premises in the State, and its FTTP network passes approximately 1.083 million premises.[335] At completion, Eircom's FTTP footprint (once the upgrade from copper only *and* FTTC is fully complete), is planned to reach 1.9 million premises over a five-year horizon. According to Eircom, this will result in its FTTP network passing 84% of premises.[336]

[335] https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf

Premises passed by FTTP and FTTC are in some cases non-mutually exclusive and there is a degree of overlap between the two, given the ongoing rollout of FTTP and upgrade of FTTC to FTTP by Eircom.

[336] See https://www.openeir.ie/broadband-reach-and-investment/

4.235 In its Submission, VMI[337] argued that absent a sufficient regulatory framework, other FTTP Network Operators will struggle to develop the scale and service level offerings, which would then affect the degree of competitive constraints imposed on Eircom.

4.236 ComReg notes that, at the retail level, there are already varying network overlaps between Eircom and SIRO and Eircom and VMI's CATV networks.

4.237 Copenhagen Economics in its Submission[338] noted that retail market shares, independent of Eircom's network are indicative of competitive constraints on Eircom's wholesale pricing. Copenhagen Economics suggested that taking only the 'high-speed' broadband segment of the market, Eircom's retail market share is lower than that of its competitors and Eircom's market share over time has declined. It argued that market share developments are not consistent with Eircom exploiting its alleged SMP to the detriment of other operators and Eircom's role in high-speed broadband is diminishing where competitors rely on their own or other operator's networks.

Noting differences in 'total premises' figures relied upon by Eircom versus ComReg. The ComReg figure for total premises in the State is higher, and therefore reduces the total percentage of premises passed by Eircom by FTTP on a forward-looking basis.

[337] VMI Non-confidential Submission, pages 9-10.

[338] Copenhagen Economics Non-confidential Submission, pages 27-29.

4.238 ComReg notes that Copenhagen Economics has not provided a sufficient rationale for segmenting the retail broadband market into a 'high-speed' segment of 100 Mbps or greater. This segmentation excludes all of Eircom's wholesale and self-supply FTTC sales, which is still a sizeable amount of the market at 494,653 subscriptions. ComReg considers that it is neither appropriate nor accurate to segment the retail broadband market in this way. In the provision of FTTP, Eircom holds the highest number of merchant market subscriptions, **[✄** [redacted] **✄]** as of Q2 2023, followed by SIRO with **[✄** [redacted] **✄]** subscriptions. At the retail level, and in the presence of regulation, Eircom holds the joint highest FTTP market share (with Vodafone) at 33% and has been gaining FTTP market share each quarter since Q1 2022. Eircom is the only provider of FTTC services with **[✄** [redacted] **✄]** merchant market subscriptions and **[✄** [redacted] **✄]** self-supply retail subscriptions. As noted earlier, FTTC subscriptions are declining slowly over time and having regard to Eircom's replacement of its FTTC network with FTTP ComReg expects this to result in FTTP becoming the predominant technology (and subscription base) over the market review period. In these circumstances, ComReg does not consider a market segmentation by speed to be appropriate given FTTP is capable of delivering a range of speeds, typically up to 2 Gbps, but potentially up to 10 Gbps. Additionally, ComReg observes a general consumer trend over time towards higher speed products suggesting substitution across speed bands over time.

4.239 In its Submission, SFG[339] argued that the distribution of market shares fails to consider what it termed the 'Rural Commercial Area' consisting of premises only served by Eircom FTTP. SFG suggested that Table 10 in the 2023 Consultation, (now Table 11 of this Decision) should have included an Eircom only FTTP scenario, which would have been the second or third highest footprint. If the market was split between a 'Rural Commercial Area' (where Eircom is the only FTTP Network Operator, consisting of the Rural 340k premises) and an 'Urban Commercial Area', SFG considered there would be a material difference, with Eircom having high market shares in the Rural Commercial Area.

[339] SFG Non-confidential Submission, pages 5-6.

4.240 Arguments pertaining to the geographic scope of the upstream wholesale markets are addressed in Section 5.[340] SFG's argument that there are sufficiently different competitive conditions in the Rural Commercial Area where Eircom is the only Network Operator present fails to consider that there is some overlap in this area and there are also premises across the State where Eircom is the only Network Operator. Given that these conditions are prevalent outside the Rural Commercial Area, this suggests it is not appropriate to define a geographic market on this basis. Any geographic differences at the upstream levels are likely to be immaterial in the downstream retail broadband market, given market shares at the retail broadband level are characterized by a small number of large SPs operating on a national basis (Eircom, Vodafone, Sky, etc.) and a larger number of smaller, localised SPs.

4.241 SFG[341] maintains there should be a Rural Commercial Area and that, absent regulation, there is no option in the Rural Commercial Area for consumers to choose alternative operators. SFG concludes that the geographic differentiation of the retail market is stronger than ComReg suggests, and that Eircom faces no competition in such areas.

4.242 Sky[342] also argued that a 'Rural Commercial' footprint consisting of the Rural 340k premises should be treated as a distinct separate market. Sky notes that Eircom could engineer price increases in this area in the next five years and no alternative providers are in this area, so there is no competition.

4.243 ComReg maintains that any differences in geographic network offerings are not material at the retail broadband level and are more appropriately reflected in the upstream markets, with consideration of this in Section 5.3 and in terms of competition in Section 6.

4.244 In carrying out a geographic market definition exercise, ComReg must assess whether *sufficient* – rather than *any* - differences in competitive conditions exist between geographic areas. The Rural Commercial Area is characterised by the presence of premises which are only passed by Eircom FTTP, but also premises which are passed by overlapping NG networks. Similar conditions also exist outside the Rural Commercial Area, which suggests that it is not appropriate to define a separate geographic market on the basis of the Rural Commercial Area.

[340] See Section 5.3.

[341] SFG Non-confidential Submission, pages 5-6.

[342] Sky Non-confidential Submission, page 3.

4.245 SIRO reports that its FTTP network passes over 515,000 premises[343] and once its network rollout reaches completion, it has stated that this figure is set to rise to 770,000 premises (although the timing is uncertain, having regard to SIRO's pace of rollout to date relative to its original timeframe).

4.246 VMI's network passes 970,200 premises in the State (as of Q2 2023),[344] largely concentrated in urban areas. As set out above, VMI has announced its intention to overbuild its network with FTTP, and as of Q2 2023 its FTTP network passes **[✂** [redacted] **✂]** premises in the State[345] although **[✂** [redacted] **✂]**. For more discussion of VMI's rollout plans, see paragraphs 3.41 to 3.43 above and Section 5 below.

4.247 Eircom argues in its Submission[346] that ComReg has not taken VMI's FTTP rollout into consideration when assessing the WLA market, as according to Eircom it believed 20% of VMI's footprint has been upgraded to FTTP. ComReg notes that, while VMI has announced in a press release its intention to overlay its CATV network with FTTP, this announcement cannot be taken as a reliable indicator of actual premises passed and ready for service. Contrary to Eircom's view, figures provided by VMI to ComReg[347] suggested that, as of July 2023, it has passed **[✂** [redacted] **✂]** with RFoG in the State – although noting that ComReg and VMI apply different definitions of premises 'passed'.[348] Additionally, VMI has recently indicated that it will purchase wholesale services from SIRO to provide retail services to its own end users

[343] The SIRO rollout map is available at https://siro.ie/roll-out/ The green represents areas in which the network is already partially or fully rolled out, the orange represents areas in which rollout is planned. Correct as of October 2023.

[344] https://www.libertyglobal.com/wp-content/uploads/2023/07/Virgin-Media-Ireland-Fixed-Income-Q2-2023-Release.pdf

[345] This figure includes **[✂** [redacted] **✂]**

[346] Eircom Non-confidential Submission, pages 13-15.

[347] At a meeting between VMI and ComReg dated 27 July 2023.

[348] VMI confirmed that while it has 'passed' **[✂** [redacted] **✂]** homes with XGS-PON, these are not all ready for service and so differ from ComReg's definition of homes passed (with this, in summary being, that the customer can actually order a service and be connected within standard lead times at standard prices). **[✂** [redacted] **✂]**

4.248 According to the NBI website,[349] NBI passed 182,250 premises within the IA as of September 2023[350] which is predominantly rural. Once fully rolled out, NBI's network will pass approximately 569,000 premises.[351]

4.249 Once Eircom, SIRO and NBI (and on forward-looking basis VMI) complete their respective rollouts, a proportion of premises in the State will be passed by more than one FTTP network – allowing Access Seekers to serve end users via a wider range of SPs. The propensity of Access Seekers to purchase from multiple Network Operators was illustrated above. Retail SPs are not necessarily constrained by the presence or absence of any one Network Operator where, absent regulation in an MGA scenario, they are willing and able to purchase WLA from multiple wholesale Network Operators, namely Eircom, SIRO and NBI.

4.250 ALTO[352] and BT[353] argued that ComReg is over-optimistic in its outlook on FTTP rollout and that changes in the economic environment will affect rollout and this over-optimistic view could lead to premature upstream deregulation. SIRO also notes that a slowing down of network rollout will leave many parts of the State served by Eircom FTTP only. ComReg addresses issues of wholesale deregulation in Section 10. The evidence to date also suggests that FTTP rollout is broadly maintaining its pace.

4.251 ComReg calculated FTTP overlap figures[354] (which give a more representative picture of FTTP availability in the State), which illustrate that certain premises will be passed by multiple FTTP networks on a forward-looking basis, although as noted above there is timing uncertainty on the pace of network rollout. Although it is unlikely to commence the provision of wholesale services before **[✂ [redacted] ✂],** ComReg nevertheless takes account of VMI FTTP on a forward-looking basis, given that it has commenced overlay of its CATV network with FTTP, and has signed agreements with Vodafone and Sky for the provision of wholesale services over that network.

[349] www.nbi.ie, accessed on 4 October 2023, reporting data as of 29 September 2023.

[350] The NBP interactive 'High Speed Broadband Map' is available at https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=99c229dc4c414971afc50818b25337ef. The Intervention Area is highlighted in amber and the Commercial Area is highlighted in blue.

[351] See https://nbi.ie/nbp-project-progress/ Accessed on 11 October 2023.

[352] ALTO Non-confidential Submission, pages 3-4.

[353] BT Confidential Submission, pages 3-4.

[354] Overlap figures are calculated based on Eircodes where more than one Network Operator has passed the premises with FTTP. This figure counts individual premises rather than the number of FTTP lines at each premises, to avoid artificially inflating FTTP coverage.

4.252 NBI[355] noted that there is little discussion of overlaps between NOs outside of the IA. It suggested future FTTP premises coverage scenarios could range from no network overlaps to one network only to two or more overlaps. NBI noted that overlapping networks have been addressed to an extent in Table 10 in Section 4 of the 2023 Consultation, but premises served by only one NG operator or no NG operator at all are not considered in the analysis.

4.253 ComReg notes that overlaps outside of the IA are considered under the NG WLA market Phase 2 geographic assessment criteria as set out in section 5.3, and not at retail broadband market level. Where premises are passed by only one NO, be that Eircom, SIRO, VMI or NBI, ComReg is of the view that these premises would be sufficiently dispersed throughout the State and would not give rise to sufficient differences in conditions of competition. With the focal product being designated as FTTx in the retail broadband market it is not appropriate to analyse overlaps solely in the context of FTTP, but rather by FTTC, FTTP and CATV. Should a given premises fall into the IA this is on the basis that, amongst other things, there is unlikely to be a material presence of Network Operators capable of providing services with minimum download speeds of 30 Mbps, with such premises to be served by NBI now and in future.

Table 10: Retail Broadband Lines by Technology and Network Operator, Q2 2023 [✂REDACTED✂]

Network Operator	Copper	FTTC	FTTP	CATV	Total Lines
Eircom	[redacted]				
SIRO					
NBI					
VMI					
Total					

Table 11: FTTP Network Overlaps, Q2 2023 [✂REDACTED✂]

FTTP Networks	Q2 2023
Eircom & SIRO	[redacted]
Eircom & NBI	
Eircom & VMI	
Eircom & SIRO & NBI	
Eircom & SIRO & VMI	
SIRO & VMI	
SIRO & NBI	
SIRO & VMI & NBI	

[355] NBI Non-confidential Submission, pages 4-5.

Eircom & SIRO & NBI & VMI	[redacted]	
Eircom & NBI & VMI	[redacted]	
NBI & VMI	[redacted]	

4.254 Absent regulation, Eircom would no longer be designated with SMP and could cease provision of wholesale inputs. In this instance, end users would be faced with various options. End users could stop purchasing broadband services completely, purchase the same broadband services (where their retail SP purchases wholesale inputs from a different Network Operator, namely SIRO or NBI), switch broadband services to a vertically-integrated provider (VMI) or in the absence of SIRO, NBI or VMI at their premises, continue to purchase from Eircom as a retail SP.

4.255 The change in market shares of retail SPs would be determined by the amount of overlap each Network Operator has with Eircom and if the retail SP has the option to switch to a different Network Operator.

4.256 SFG[356] argued that the information in Table 10 of the 2023 Consultation, now Table 11 of the Decision should have been published in the interest of transparency. ComReg, in publishing information seeks to strike a balance between transparency and protecting commercially sensitive information.

4.257 In a worst-case scenario, all services would revert back to Eircom retail broadband, where alternative FTTP wholesale inputs (from SIRO, NBI, or, on a forward-looking basis, VMI) were not present. In that scenario, Access Seeker retail market shares would likely decline.

4.258 ComReg considers that differences in the availability of broadband delivered over various platforms are, absent regulation, likely to be reflected in variations in the coverage of Network Operators in different geographic areas. Absent Eircom merchant market WLA or WCA, Access Seekers have the option to purchase wholesale inputs from other Network Operators, but only where Network Operator rollout has occurred. Absent Eircom provision of merchant market WLA/WCA, market shares of retail SPs who rely on these inputs would likely decline where SIRO or NBI are unavailable and Eircom, arising from its much greater coverage footprint, would gain a sizeable portion of these customers, thus increasing its retail market share.

4.259 ComReg accordingly considers that the likely evolution and distribution of market shares may be indicative of geographic differences in competitive conditions, but that, on a forward-looking basis, these differences may decline over time, arising from FTTP rollout by Eircom, NBI, SIRO, and VMI.

[356] SFG Non-confidential Submission, pages 5-6.

4.3.3 Variation in the number and size of potential competitors

4.260 In this section ComReg assesses the number of competitors within the retail broadband market and their relative sizes. The retail broadband market is characterised by several large operators servicing large portions of the State in addition to numerous smaller operators operating more locally, based on either their own limited network presence or via the purchase of upstream inputs from Network Operators.

4.261 Eircom, as a provider of WLA and WCA, faces a number of competitors in areas of higher premises density, where retail SPs purchase WCA and/or WLA inputs to provide retail services, or where retail SPs have built independent alternative networks to engage in self-supply only (e.g., VMI, whose coverage of 42% of premises is concentrated in urban areas). In an absent regulation scenario, whereby Eircom ceases provision of merchant market WLA or WCA services, retail SPs would risk losing end user custom if they were unable to procure alternative wholesale inputs from SIRO or NBI.

4.262 The least densely populated areas in the State tend to lie within the IA. Within the IA, NBI has 50 retail partners.[357] This figure is the cumulative total across the IA, and the 50 are not all present across the entirety of the IA, with some retail SPs focussing on supply of retail broadband on a local basis (for example, Clare WiFi serves premises in west Clare only).

4.263 Together, six SPs account for 91% of the retail broadband market,[358] measured by subscriptions – Eircom, VMI, Vodafone, Sky, Pure Telecom and Imagine. However, this is in the presence of WLA and WCA regulation. Only Eircom operates a network which has near national coverage, through a combination of its ubiquitous CG copper network and FTTx network (which will eventually be fully upgraded to an FTTP-only network). VMI has network coverage of approximately 42% of premises (largely households) as at Q2 2023 with its CATV and FTTP network.[359] Vodafone and Sky's (including via BT) retail NG broadband coverage is dependent on the coverage footprint of their respective upstream wholesale partners – Eircom, SIRO, NBI, and in the case of Vodafone and on a forward-looking basis, VMI.

[357] https://nbi.ie/where-can-i-buy/ accessed on 11 October 2023.

[358] ComReg QKDR data, as at Q2 2023.

[359] https://www.libertyglobal.com/wp-content/uploads/2023/07/Fixed-Income-Q2-2023-Release.pdf

4.264 The five main competitors to Eircom compete nationally and have national coverage, although in the case of Vodafone and Sky (BT), this is based on a significant degree of Eircom merchant market WLA and/or WCA, which in an absent regulation scenario would be withdrawn, or offered under comparatively disadvantageous conditions compared to regulated supply.

4.265 In addition to the Network Operators, and in the presence of regulation, there is also some localised competition from regional SPs such as Rapid Broadband,[360] Carnsore[361] or Westnet.[362] Accordingly, there appears to be a consistent pattern across the State, whereby several large operators with national presence have significant market shares while local operators whose identity varies geographically (such as Tipp Broadband in Tipperary, or Carnsore Broadband in Wexford) have the remaining market share.

4.266 However, in an absent regulation scenario, these market shares are likely to change where Access Seekers reliant on Eircom WLA or WCA are unable to source alternative wholesale inputs. The impact of these changes is likely to lessen over time as additional FTTP network rollout continues. Based on Q2 2023 data, there are likely to be instances of geographic differences in competitive conditions, measured by variation in the number and size of potential competitors.

4.267 However, bearing in mind expected future FTTP rollout by other Network Operators, the similarities and patterns in the makeup of market shares across EAs (i.e., several large SPs operating alongside smaller, more fringe, localised operators), are, on balance, likely sufficiently similar to warrant a national retail broadband market on a forward-looking basis.

4.3.4 Evidence of differentiated pricing strategies or marketing

4.268 Despite the geographic variations in network coverage, there is a lack of evidence of sufficiently differing competitive constraints on retail broadband pricing. ComReg's review of SPs' retail broadband packages does not indicate any variation in prices by geographic region, e.g., a retail broadband package with material price differentials between one part of the country and the other (see Annex 8 for a full overview of retail broadband pricing and packages). Retail broadband packages are advertised and sold to end users at the same price, regardless of location, illustrating that prices are national and not differentiated based on geographic criteria.

[360] http://rapidbroadband.ie/coverage/.

[361] https://www.carnsorebroadband.com/.

[362] https://www.westnet.ie/.

4.269 Retail broadband is provided on a national basis by a small number of large operators and on a more regional basis by a large number of small, more localised operators. Operators offering retail broadband on a national basis price retail broadband uniformly across the State, even where they purchase wholesale inputs from multiple operators (in the case of Vodafone, for example, from Eircom, NBI and SIRO).

4.270 SFG[363] argued in its Submission that retention strategies used by retailers make it difficult to take what retailers advertise on their websites as a true reflection of consumer prices. It stated that existing or prospective customers can negotiate pricing terms if they are located in the SIRO, VMI, or NBI footprints. Similarly, SPs can send door-to-door agents in competitive areas.

4.271 While some consumers may be able to negotiate discounted prices for the retail purchases they make, data on such discounting are not readily available and ComReg relies on the information provided by SPs on their websites.

4.272 SFG[364] also argues that Eircom reduced its wholesale connection/migration charges once it had achieved a high degree of FTTP penetration in the 'Rural Commercial Area', which followed the same timeline as Eircom's rollout into Urban Areas, suggesting customers in this footprint will derive the greatest retail pricing benefit from these wholesale price reductions. ComReg notes that Eircom's rollout of FTTP is not localised to any one given area, be that the 'Rural Commercial Area', urban areas, or any other given premises in the State. As such, any price differences that would materialise at the retail level, for the given technology that this connection/migration charge has been reduced for, would apply uniformly and not in any one given geographic area. For this reason, it would not be appropriate to have separate geographic markets as the resulting retail pricing benefits would be available in different areas across the State where the technology is available.

4.273 The only geographic difference in pricing which appears to arise is where the underlying access networks and the products offered over these networks vary. For example, where FTTP is available, retail broadband may be offered at a higher price – in line with the higher speeds and other features available. However, in areas where the competitive dynamic is enhanced by the existence of multiple suppliers of retail broadband, to date, there is no evidence to show disparities in the pricing of these products, compared to areas where fewer retail SPs are present.

[363] SFG Non-confidential Submission, pages 5-6.

[364] SFG Non-confidential Submission, pages 5-6.

4.274 Based on information collected, retail SPs appear to pursue a policy of uniform, national pricing, suggesting that, from this perspective, competitive conditions for retail broadband are sufficiently homogenous nationwide.

4.3.5 Geographic differences in product functionality and demand characteristics

4.275 In terms of product functionality, ComReg has not found evidence to conclude that any SP offers retail products with different functionalities in different geographic areas or bases its marketing on geographic differences in product functionalities or characteristics. The geographic location of an end user does not determine the products offered or the characteristics of that product (e.g., quality of service, download speed etc.), but rather, the product offering available to end users is determined by the technology available in their area.

4.276 SFG[365] noted in its Submission that there are geographic differences in product functionality between the Rural Commercial Area where Eircom FTTP is GPON, which supports 1-2 Gbps service, while the Urban Commercial Area supports XGS-PON, which supports 10 Gbps service.

4.277 ComReg notes that the difference between GPON and XGS-PON is an issue of product availability as both technologies provide Gigabit services to end users, in line with FTTP expectations. These product differences do not yet appear to be material at the retail level, having regard to demanded broadband download speeds. ComReg also notes that the transmission medium, fibre, is the same in both cases and XGS-PON remains a potential upgrade path.

4.278 Demand for retail broadband does not appear to vary on a geographic basis, but rather, is constrained by the geographic availability of different platforms required to meet derived demand for high-speed connections. The degree to which this demand is constrained by the absence of NG broadband networks capable of facilitating such end user requirements or expectations will likely decline over time in line with FTTP rollout by Eircom, SIRO, NBI, and – potentially – VMI, particularly in more rural, less densely populated areas, allowing for greater homogeneity in broadband product functionality.

4.279 Retail broadband can be provided over a range of inputs, through merchant market purchases of different combinations of WLA and/or WCA inputs, or self-supply by vertically-integrated SPs. Overall, although there are some variations in demand for retail broadband, these are largely dictated by supply-side factors such as availability and are insufficient to conclude that the provision of retail broadband is characterised by geographic differences in product functionality and demand characteristics.

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[365] SFG Non-confidential Submission, pages 5-6.

4.3.6 Overall conclusion on geographic market

4.280 Having regard to the five geographic factors considered above, ComReg is of the view that, absent regulation, a number of factors are indicative of the presence of geographic differences in competitive conditions in the provision of retail broadband in the State, while other factors suggest the presence of a national market. In particular, ComReg considers that the presence or absence of alternative Network Operators capable of providing wholesale and retail broadband inputs could be indicative of the presence of differences in competitive conditions.

4.281 However, ComReg also notes that the lack of differentiated pricing and limited differences in demand characteristics across geographic regions suggest that the retail broadband market is national in geographic scope.

4.282 Having considered the above, it is ComReg's view that, based on Q2 2023 data, there is some evidence of geographic differences in competitive conditions in the retail broadband market (in an absent regulation scenario). However, on a forward-looking basis, and assuming continued FTTP rollout by SIRO, NBI, and VMI, these geographic differences are likely to diminish over the lifetime of this market review period, as fewer and fewer areas are characterised by the presence of Eircom NG broadband only. Accordingly, ComReg considers that, on a forward-looking basis, and bearing in mind continued Network Operator FTTP rollout capable of delivering wholesale inputs to Access Seekers, there may be grounds to define a single national geographic market for the provision of retail broadband. However, ComReg leaves this conclusion open, on the grounds that it will not impact its determination in respect of the relevant upstream wholesale markets.

4.4 Conclusion on the retail broadband market

4.283 In paragraphs 4.19 to 4.219, ComReg analysed the retail broadband market from a product perspective and determines that it comprises two markets:

(a) The CG retail broadband market, consisting of:

i Retail broadband provided over Eircom's copper-only network; and

(b) The NG retail broadband, consisting of:

ii Retail broadband provided using Network Operator[366] FTTx (FTTC and FTTP) inputs on either a merchant market or a self-supply basis, and

[366] ComReg designates NBI, SIRO, and Eircom as Network Operators, that is, SPs capable of delivering wholesale inputs to the provision of NG retail broadband. VMI may also be considered as a Network

iii Retail broadband provided over VMI’s DOCSIS 3.1 CATV network.

4.284 In paragraphs 4.220 to 4.282, ComReg analysed the retail broadband markets from a geographic perspective and set out its view that, on a forward-looking basis, there is a single, national retail broadband market in Ireland based on the analysis of the five criteria laid out in paragraph 4.221.

4.285 Thus, ComReg defines two Relevant Retail Broadband Markets:

(a) A national CG Retail Broadband Market; and

(b) A national NG Retail Broadband Market.

together referred to as the ‘Relevant Retail Broadband Market(s)’.

Operator once it commences the provision of WLA on a merchant market basis, including its self-supply of FTTP services.

5 Relevant WLA Market Definition

5.1 Introduction

5.1 In its 2020 Recommendation, the European Commission established that the WLA market - which it refers to as '*Wholesale local access provided at a fixed location*' - is susceptible to *ex ante* regulation. This market was designated as Market 3A under the 2014 Recommendation but is now designated as Market 1 under the 2020 Recommendation.

5.2 This section considers which, if any, products or services might be considered by an Access Seeker to be an effective substitute for WLA, taking account of demand-side and supply-side considerations.

5.3 In defining the Relevant WLA Market(s), ComReg begins by identifying the appropriate focal product or products. ComReg examines whether this focal product constitutes a market of its own, or whether a broader market should be defined, taking into account direct supply-side or demand-side substitutes. ComReg also assesses the degree to which indirect retail constraints arising from downstream retail markets might effectively and sufficiently constrain behaviour in the WLA markets, before then assessing the geographic scope of the WLA markets.

5.4 The Notice on Market Definition defines a relevant market as follows:

(a) A relevant **product market** comprises all those products and/or services which are regarded as interchangeable or substitutable by the end user by reason of the products' characteristics, prices and intended use; and

(b) A relevant **geographic market** comprises the area in which the firms concerned are involved in the supply of products or services and in which the conditions of competition are sufficiently homogeneous.

5.5 In line with the MGA[367] ComReg's assessment starts from the assumption that regulation is not present in the market under consideration. However, regulation present in other related markets, or through other aspects of the regulatory framework, may be assumed to be present.

[367] See p. 9 of the 2020 Explanatory Note and p.8 of the 2014 Explanatory Note. The Modified Greenfield Approach requires NRAs to assess whether markets are effectively competitive from a forward-looking perspective in the absence of SMP regulation, in order to avoid circular reasoning whereby a market is deemed to be competitive on the basis of the presence of SMP regulation.

5.6 Market definition is not an end in itself and is undertaken to provide the context for the subsequent competition assessment. It allows ComReg to consider the competitive constraints imposed by demand and supply side substitutes (and, consequently, the buyers and suppliers of those substitute products/services) on a forward-looking basis; that is, taking into account expected or foreseeable technological or economic developments over a reasonable time horizon linked to this market review.

5.7 Accordingly, this section is structured as follows:

(a) Summary of the 2018 Decision (discussed in paragraphs 5.9 to 5.10);

(b) Identifying the focal product, which is the initial product against which potential substitute products are assessed (discussed in paragraphs 5.11 to 5.97 below);

(c) Whether any alternative products should be included in the Relevant WLA Market(s), having regard to the effectiveness of any direct constraints from demand-side substitutes or supply-side substitutes, including self-supplied inputs (discussed in paragraphs 5.98 to 5.145);

(d) Whether any retail products should be included in the Relevant WLA Market(s), having regard to the effectiveness of any indirect retail constraints from the retail market (discussed in paragraphs 5.146 to 5.290); and

(e) The geographic scope of the Relevant WLA Market(s) (discussed in paragraphs 5.291 to 5.385 below).

5.8 As part of its assessment, ComReg considers Respondent Submissions to the 2023 Consultation, the 2022 Market Research, information provided by SPs in response to ComReg requests for information, using both statutory information gathering powers (Statutory Information Requests ('**SIRs**'), and on a non-statutory basis (Informal Information Requests ('**IIRs**')), as well as other available data, including ComReg's QKDR. In addition, given the absence of clear and precise data regarding elasticities of demand for WLA and potential substitutes, ComReg considers the Hypothetical Monopolist Test ('**HMT**') in a general sense (see paragraph 5.99), and uses this as an additional tool to inform its assessment issues alongside qualitative and qualitative data.

5.9 In its 2018 Decision, ComReg defined a single national WLA market. ComReg concluded that the WLA focal product was Local Loop Unbundling (‘**LLU**’) provided by Eircom over its copper Current Generation (‘**CG**’) network. ComReg also included two demand-side substitutes to Eircom LLU, Virtual Unbundled Access (‘**VUA**’) provided by Eircom over its FTTx Next Generation (‘**NG**’) network, together with VUA provided by SIRO over its FTTP NG network. ComReg also included Eircom’s self-supply of LLU and VUA in the WLA Market since such supply is typically readily divertible to the wholesale merchant market.

5.10 The 2018 Decision concluded that no supply-side substitutes or indirect retail constraints were sufficiently effective to warrant inclusion in the WLA product market. In respect of the geographic scope of the WLA market, ComReg defined a single national WLA market, based on the existence of a small number of competitors in the WLA market, with Eircom having a high and relatively static market share, a lack of differentiated pricing and limited regional differences in demand characteristics.

5.2 Relevant Product Market Assessment

5.2.1 Identifying the Focal Product(s)

5.11 WLA is an input used by Access Seekers to provide various communications services either to end users or, in some cases, to their own wholesale customers. In practice, WLA provides the Access Seeker with connectivity between a point of interconnection (typically at an exchange or a street cabinet) and the end user premises.

5.12 The first step in defining the WLA market(s) involves identifying the relevant focal product(s). A focal product is a product where a competition bottleneck is believed to occur, that is, a product which Access Seekers rely on to offer effective competition on downstream markets. If a firm does not grant access to the focal product which it controls, then it is likely to be in a position to exclude competitors from downstream markets. According to BEREC,

> *“The focal product is defined as the main product under investigation and the focal area is the area under investigation, in which the focal product is sold. The definition of the focal product may depend on specific market conditions and on the issues that NRAs want to address during the market analysis.*

> *(…..) an NRA should start by identifying the focal product considering their national market conditions. One of the possible criteria chosen by NRAs might be to define the focal product as the one where competition problems are believed to exist."*[368]

5.13 The identification of the focal product is a thought exercise designed to identify where a competition bottleneck is likely to occur. Accordingly, in defining a focal product, it is necessary only to define the product itself and it is not necessary to identify a specific provider of the focal product. The focal product is, therefore, capable of being provided by one or more SPs.[369]

The 2020 Explanatory Note

5.14 In its 2020 Explanatory Note, the EC states that the WLA market consists of *"…physical access products as well as those virtual access products that mimic the capabilities of physical access (VULA) enabling transmission of internet and related data services"*, while also noting that LLU and SLU are used to a decreasing extent throughout the EU.[370] Thus, the 2020 Explanatory Note allows for the inclusion of both LLU and VUA in the WLA product market.

5.15 ComReg considers below whether LLU and VUA satisfy the 2020 Explanatory Note requirements for designation in principle as products capable of falling within the WLA market.

Designation of the appropriate focal product

5.16 Pursuant to the 2020 Recommendation, WLA continues to be deemed susceptible to *ex ante* regulation at EU level. Accordingly, there is a presumption in favour of continued regulation of WLA.

5.17 In the 2018 Decision, ComReg designated LLU as the WLA focal product, with VUA as a demand-side substitute to the focal product. ComReg considers that this designation is no longer appropriate, arising from the decline in CG broadband (over which LLU is delivered) and the increase in NG broadband (over which VUA is delivered) over the intervening time period, which indicate altered patterns of Access Seeker substitution. ComReg now considers it appropriate to define two WLA focal products, LLU and VUA, which are not fully mutually substitutable.

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[368] BEREC FMS Report, at p.12.

[369] See, for example, Ofcom's focal product assessment set out at paragraphs 6.25 to 6.33 of its 'Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26 - Volume 2: Market assessment', available online at https://www.ofcom.org.uk/__data/assets/pdf_file/0029/188822/wftmr-volume-2-market-assessment.pdf

[370] At p.48.

5.18 The focal product describes the main product under investigation, in respect of which competition problems may exist. ComReg considers that, if supply of either LLU or VUA were to cease, this would likely lead to competition problems if retail broadband SPs were unable to switch, in a short period of time, to an alternative means of facilitating the delivery of retail broadband.

5.19 However, the magnitude of any such competition problem would be much greater in respect of VUA than in respect of LLU. As of Q2 2023, ComReg data indicate that 7,164 LLU lines are sold in the State (all by Eircom, the sole supplier of LLU) – a decline from a figure of 30,517 at the time of the 2018 Decision. Trend data since 2018 suggest that this figure is likely to continue to decline. In contrast, over the same time period, ComReg data as at Q2 2023 indicates an equivalent figure of 426,220 merchant market VUA lines **[✂** [redacted] **✂]**. Accordingly, the magnitude of the potential competition problem arising from the withdrawal of VUA, even without taking into account VUA self-supply or VUA inputs to NG WCA, would be much more substantial – by a factor of more than 20 – than from the withdrawal of LLU, and this is likely to continue to be the case on a forward-looking basis.

5.20 Given the disparity in the size of LLU and VUA purchases, ComReg designates more than one focal product, for the reasons set out below.

Preliminary operator views

5.21 In January 2022, ComReg issued IIRs and asked operators whether, in their view, it was appropriate to continue to designate LLU as the WLA focal product or whether, given the market developments since the 2018 Decision, a different WLA focal product was appropriate. A number of Respondents also offered views on the appropriate focal product in their Submissions.

5.22 Of seven IIR respondents, only one argued that LLU delivered over copper should continue to be the WLA focal product. Four argued that VUA delivered over NG networks should be the relevant focal product subject to the support from relevant data, and two remaining respondents indicated that LLU was no longer appropriate, without specifying an alternative WLA focal product. No operator recommended defining LLU and VUA focal products.

5.23 **[✂** [redacted] **✂]** indicated that LLU may no longer be the appropriate WLA focal product, although it did not identify an alternative WLA focal product. In a similar vein, **[✂** [redacted] **✂]** argued that the WLA focal point should facilitate retailers migrating their base away from copper-based services in the context of the move towards an FTTP-only environment.

5.24 In contrast, **[✂ [redacted] ✂]** maintained that LLU delivered over copper continues to be the appropriate WLA focal product arguing, *inter alia*, that operators continue to sweat their copper assets and that vectoring and G.fast technologies allow copper to meet demand for higher speeds. **[✂ [redacted] ✂]** added that there was no evidence of significant changes since the 2018 Decision, or of likely significant changes in coming years. **[✂ [redacted] ✂]** argued that, despite significant growth in network deployment, FTTP (and therefore VUA) should not be the WLA focal product, due to its comparatively small scale of take-up, compared to xDSL (that is, DSL delivered over copper and VDSL delivered over FTTC).

5.25 **[✂ [redacted] ✂]** noted that, while the WLA focal product appeared to be migrating towards VUA, many LLU facilities need to be maintained to support the delivery of VUA, where LLU forms the physical basis of VUA connectivity. **[✂ [redacted] ✂]** expressed concern that difficulties with Eircom CEI could lead to LLU delivered over fibre being designated as the WLA focal product.

5.26 **[✂ [redacted] ✂]** argued that VUA is the appropriate WLA focal product, noting the ongoing decline of CGA, Eircom's copper switch-off proposals, and the continuing decline in broadband subscribers reliant on CGA.

5.27 **[✂ [redacted] ✂]** noted that, while DSL and VDSL continue to outnumber FTTP, the trend is shifting on an accelerating basis towards FTTP. Subject to a number of caveats and appropriate data analysis, **[✂ [redacted] ✂]** considered that VUA should be the more likely WLA focal product.

5.28 **[✂ [redacted] ✂]** argued that the WLA focal product should be delivered over FTTP (therefore VUA, rather than LLU), noting the sharp decline in LLU numbers.

VUA and LLU form separate focal products

5.29 Products may not fall in the same product market where they are not effective substitutes for one another. For the reasons set out below, ComReg is of the view that LLU and VUA are not sufficiently effective substitutes for each other, due to differences in competitive dynamics in the delivery of LLU and VUA since the publication of the 2018 Decision resulting in asymmetric substitution. Since LLU and VUA are not effective substitutes, it follows that they should not be included in the same relevant product market.

5.30 Accordingly, and for the reasons set out below, ComReg defines separate LLU and VUA focal products. In its Submission,[371] NBI suggested that there may be no need to define an LLU focal product on the basis that most premises currently served by LLU are likely to be passed by FTTP allowing an Access Seeker to switch to purchasing VUA to deliver retail broadband with little or no financial penalty.

5.31 This argument, however, is predicated on an assessment of CG network overlap by NG networks to determine how many premises served by LLU are also passed by NG networks capable of delivering VUA. ComReg does assess network overlap, but predominantly at geographic market definition stage, rather than at product market definition stage (although ComReg nonetheless recognises there are linkages between the two).

5.32 In considering substitution from a product market definition perspective, LLU continues to be purchased by Access Seekers, even if in small numbers (7,164 line as of Q2 2023), and it is therefore appropriate to consider LLU, while recognising that it is constrained by VUA, where NG broadband capable of delivering NG WLA is available.

5.33 Moreover, even where premises are passed by both CG and NG networks, this does not, in ComReg's view, invalidate the justification for defining separate LLU and VUA focal products, given that each product will still exhibit different speed and quality characteristics, and will likely therefore be characterised by asymmetric substitution. For these reasons, ComReg remains of the view that it is appropriate to define separate LLU and VUA focal products, even if a premises were passed by both CG and NG networks capable of delivering LLU and VUA, respectively.

5.34 Recent informative precedent exists for defining separate copper and fibre WLA markets. In its draft 2019 notification, the Swedish NRA (PTS) defined separate markets for WLA over fibre and WLA over copper. In respect of the copper WLA market, PTS noted that this market had declined considerably in recent years as customers switched to better-performing networks.[372] Similar market dynamics are evident in Ireland, as set out below.

[371] NBI Non-confidential Submission, p.6.

[372] EC comments letter to PTS dated 6 December 2019 regarding Cases SE/2019/2216-2218. The PTS Decision was vetoed, but on the basis of the fibre WLA network geographic market definition. The EC did not take issue with the definition of separate copper and fibre WLA networks.

5.35 Similarly, in its 2021 notification, the Danish NRA (DBA) defined separate high-capacity infrastructure (consisting of CATV and FTTx) and low capacity infrastructure (consisting of copper and FWA) wholesale broadband markets consisting of both WLA and WCA. In doing so, DBA noted that VUA had almost entirely replaced LLU delivered over copper.[373]

LLU and VUA exhibit different speed and quality characteristics

5.36 Due to the higher download speeds attainable over FTTx compared to full copper, VUA products can be used to provide a broader range of services than copper-only CG LLU. In principle, G.fast technology[374] is capable of delivering high speeds (between 100 Mbps and 1 Gbps) over full copper, comparable to speeds available over FTTx. However, speeds at the higher end of the scale are generally only achievable over very short loops of less than 500 metres in length, and G.fast is not available on Eircom's CG full copper network. Accordingly, while LLU and VUA have similar intended uses deriving from downstream demand for retail broadband, the quality of broadband delivered over VUA and LLU differs, due to the increased speeds which FTTx, which delivers VUA, can provide compared to full copper, which delivers LLU.

5.37 This difference in quality is reflected in retail end user demand for broadband capable of delivering data-intensive uses such as streaming, video calling, or online gaming, all of which require bandwidth and speeds which may not be available over full copper. QKDR data indicate that, as of Q2 2023, 61% of retail broadband subscriptions were for speeds of at least 100 Mbps, with significant differences in speeds across platforms. All retail broadband subscriptions delivered over copper-only DSL are at speeds below 30 Mbps, while 93.5% of FTTC subscriptions are at speeds of 30-100 Mbps, and 99.8% of FTTP subscriptions are at speeds of at least 100 Mbps. The greater speeds available over FTTC and FTTP facilitate more and better usage cases than DSL delivered over full copper, such that copper would not meet the usage expectations of a sufficiently significant cohort of retail broadband end users.

[373] EC comments letter to DBA dated 1 December 2021 regarding Cases DK/2021/2346. The EC opened a Phase II investigation into the DBA's proposed findings of SMP against certain operators, following which DBA altered aspects of its SMP findings.

[374] G.fast is a digital subscriber line (DSL) protocol standard for local loops shorter than 500 metres in length, with performance targets between 100 Mbps and 1 Gbps, depending on loop length.

LLU and VUA are characterised by asymmetric substitution

5.38 ComReg's analysis indicates the presence of asymmetric substitution from LLU to VUA, but not from VUA to LLU. This implies that VUA is a substitute for LLU, but LLU is not a substitute for VUA. Thus, LLU and VUA cannot be included in the same relevant product market, as LLU would not exert a sufficiently effective demand-side constraint on VUA.

5.39 Asymmetric substitution occurs where Product A is a substitute for Product B, but Product B is not a substitute for Product A. In assessing asymmetric substitution, the starting point is critical – a more advanced product may be a substitute for an older legacy product, but the converse may not be the case.

5.40 According to the 2020 Explanatory Note, most NRAs, to date, have not shown breaks in the chain of substitution between NG WLA and CG WLA products. Therefore, *"at least in the near term, access to FttH, FttB or FttC/VDSL (either PtP or PtMP) network should be considered as a substitute to traditional copper LLU."*[375] That is to say, VUA (NG WLA) should be considered a substitute for LLU (CG WLA). The 2020 Explanatory Note focusses on substitution from LLU to similar products delivered over FTTx (i.e. VUA), but is silent on substitution in the opposite direction, from VUA to LLU.

5.41 If the proposition of asymmetric substitution is correct, ComReg would expect to observe significant Access Seeker substitution from LLU to VUA, but little or no substitution from VUA to LLU. While ComReg does not hold data at the individual line level to measure substitution patterns, ComReg can draw inferences from aggregate VUA and LLU data over time. According to QKDR data, Eircom (full and shared) LLU sales have declined every quarter since the publication of the 2018 Decision, from 30,517 lines in Q4 2018 to 7,164 lines in Q2 2023, a decline of 23,353 lines, or 77%. Together, BT and Magnet account for 99.9% of LLU purchases,[376] with BT alone accounting for **[✂ [redacted] ✂]** of all LLU purchases. Since Q1 2019, BT purchases of LLU have declined by **[✂ [redacted] ✂]**, and Magnet purchases have declined by **[✂ [redacted] ✂]**.

[375] 2020 Explanatory Note, p.48.

[376] Colt, which purchases **[✂ [redacted] ✂]** LLU lines, and MTS Media, which purchases **[✂ [redacted] ✂]** LLU lines, are the only other purchasers of CG WLA from Eircom.

5.42 Over the same time period (Q1 2019 to Q2 2023), Eircom NG merchant market VUA lines increased nationally from **[✂** [redacted] **✂]** (while Eircom NG WLA lines, including both merchant market and self-supply of VUA and implicit supply as an input to NG WCA, increased from **[✂** [redacted] **✂]**). This **[✂** [redacted] **✂]** increase in Eircom merchant market VUA lines is therefore more than twice as large, and the 157,187 increase in total Eircom NG WLA lines is more than six times as large, as the 23,353 decline in (full and shared) LLU lines over the same period. The net increase in VUA lines, coupled with the net decrease in LLU purchases by BT and Magnet is consistent with a pattern of asymmetric substitution from LLU to VUA where demand for higher speeds at the retail level is not being met over LLU, but can be met over VUA. It is also consistent with the retail trend described earlier of end users adopting higher speed broadband products, where available.

5.43 On a current and forward-looking basis, LLU demand is likely to continue to decline, suggesting that there would be insufficient switching to LLU for it to be capable of acting as an effective demand-side constraint on VUA. This is consistent with the comparative magnitude of LLU and VUA. At the time of the 2018 Decision, total LLU lines amounted to 13% of total VUA lines. As of Q2 2023, total LLU lines amounted to less than 3% of total VUA lines.

5.44 As SIRO and NBI FTTP network rollout continues, Eircom overlays FTTC with FTTP, and VMI overlays its CATV network with FTTP, it is likely that FTTP will become the largest transmission medium within the lifetime of this market review period, bearing in mind the continuing decline in copper driven, in particular, by end user demand for higher broadband speeds capable of meeting usage expectations.

Figure 23: Broadband subscriptions by platform, Q4 2018-Q2 2023

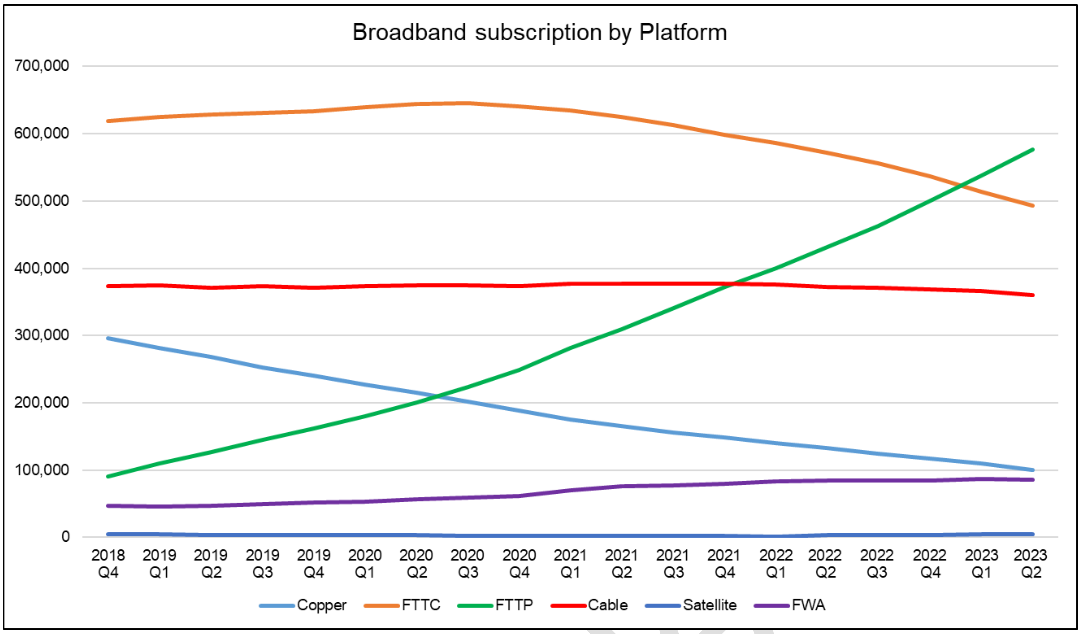

Figure 24: NG WLA Lines by Line Type and Network Operator, Q1 2019 – Q2 2023[377] [✂REDACTED✂]

[redacted]

[377] WLA lines include merchant market and self-supply figures for VUA, including VUA inputs used to supply Bitstream.

5.45 In its Submission NBI argues that ComReg does not carry out any detailed analysis of substitution from LLU to VUA, and rather dismisses[378] the possibility of such substitution occurring where a premises is not passed by both CG and NG networks. Given the rapid decline of LLU, NBI argues that it may make more sense for ComReg *"not to consider only those premises actively using LLU products today rather than all CG premises"* since only a limited number of EAs have been unbundled, and within those only shorter lines capable of supporting a reasonable broadband offering (i.e. with a high 'pre-qual' value) have actually been used for LLU.[379]

5.46 ComReg disagrees with NBI's view. NBI appears to suggest that the market definition exercise should consider all CG premises, rather than premises actively using LLU products. The market definition perspective assesses whether sufficient users of actual LLU would switch to viable alternatives such as VUA. In this context current LLU users are, in ComReg's view, the appropriate starting point.

5.47 VUA is a substitute for LLU, but only where a premises served by a copper network capable of delivering LLU is also passed by a NG network capable of delivering VUA. Where this is not the case, there is no practical possibility of an Access Seeker switching from LLU to VUA.

5.48 ComReg also notes that while the provision of LLU is notionally possible where a premises is passed by a full copper network, the evidence of actual LLU usage shows that only a certain number of EAs appear to be commercially viable for LLU (with this declining over time as FTTx networks are rolled out). In this context, ComReg remains of the view that, when considering substitution from LLU, it is appropriate to consider where LLU is present (and on a forward-looking basis likely to be present) since what is being assessed is the potential for actual switching to constrain a SSNIP by a HM.

5.49 The impact of asymmetric substitution is also taken into account at competition assessment stage including prospective future use of LLU.

5.50 Accordingly, the provision of LLU and VUA is characterised by asymmetric substitution. ComReg defines separate LLU and VUA focal products and carries out its product market assessments from these points.

[378] At paragraph 5.86 of the 2023 Consultation.

[379] NBI Non-confidential Submission, p.6.

Local Loop Unbundling ('LLU') focal product

5.51 LLU is a CG WLA product which also includes Full Unbundling,[380] Line Share ('**LS**')[381] and Sub-Loop Unbundling ('**SLU**') products. It is a passive local access[382] service offered over copper only that, similar to VUA, allows Access Seekers to provide downstream retail and/or wholesale end users with a range of services. The 2018 Decision defined LLU as the sole WLA focal product and Eircom supply of LLU is currently subject to the obligations set out in the 2018 Decision. The details of Full Unbundling and Line Share products (and associated facilities) offered by Eircom pursuant to its regulatory obligations are set out in its Access Reference Offer ('**ARO**').[383]

5.52 Access Seekers can use LLU to provide a range of downstream services at the wholesale and retail level, including (but not limited to) broadband access, telephony, and other services.

5.53 Eircom is the sole provider of copper-based LLU, LS and SLU products and these products are therefore, in principle, available on a ubiquitous basis on Eircom's nationwide legacy copper network. However, in practice, LLU, SLU and LS are purchased by a small number of Access Seekers, and demand for these products has declined by 77% since the publication of the 2018 Decision. As of Q2 2023, Eircom offered a total of 7,164 full or shared LLU lines across its copper network, less than 3% of the equivalent number of Eircom VUA lines.

5.54 In their Submissions to the 2023 Consultation, BT and ALTO each stated that SLU should be included in both the CG WLA and the NG WLA product markets because technically and practically, SLU is an essential part of FTTC, as FTTC uses copper wires from the street cabinet to the end user premises.[384]

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[380] Full Unbundling allows Access Seekers to use the entire physical copper access path located between Eircom's telephone exchanges (or equivalent) and the customer's premises for the purposes of supplying voice, broadband and other services. Eircom describes its Full Unbundling product as 'Unbundled Local Metallic Path' ('**ULMP**').

[381] Line Share allows an Access Seeker to only rent part of the copper access path, specifically the frequencies which enable delivery of a broadband service. Line Share requires the presence of a narrowband connection, so the retail end user must also maintain a line rental service.

[382] Passive access products enable an Access Seeker to utilise the network facilities of a wholesale supplier, where those facilities are supplied without active powered equipment. VUA products are active in the sense that they are supplied and function over powered electronic equipment.

[383] https://www.openeir.ie/reference-offers/#:~:text=The%20Access%20Reference%20Offer%20(ARO,and%20Unbundled%20Local%20Metallic%20Path.

[384] BT Non-confidential Submission, p.6 and ALTO Submission, pp.4-5.

5.55 ComReg disagrees with this proposition. The proposal to define separate LLU and VUA focal products (and, therefore, separate CG WLA and NG WLA product markets) arises from the presence of differences in quality and speed characteristics, as well as asymmetric substitution, based on the underlying capabilities of copper and fibre. SLU could only be included in the VUA focal product (and, therefore, the NG WLA market) if it had the necessary product characteristics as described at paragraphs 5.56 to 5.60 below, not just because it is an input to a NG product (FTTC WLA). Moreover, were SLU to be included in both the LLU focal product and the VUA focal product, this would suggest, arising from asymmetric substitution, that SLU would constrain itself in one direction (from VUA to LLU), but would not constrain itself in the opposite direction (from LLU to VUA). This is not a tenable proposition. The presence of asymmetric substitution (along with the lack of any actual use of SLU by Access Seekers to date) suggests that SLU is appropriately excluded from the NG WLA market as, in response to a SSNIP of VUA, there would likely be insufficient switching to SLU.

Virtual Unbundled Access ('VUA') focal product

5.56 The 2020 Explanatory Note[385] sets out three criteria to assess whether VUA is functionally equivalent to physical unbundling, and therefore capable of being included in the WLA market:

(a) **Criterion 1** - Access occurs locally in principle,

(b) **Criterion 2** - Access is generic and provides Access Seekers with a service-agnostic transmission capacity uncontended in practice, and

(c) **Criterion 3** - Access Seekers have sufficient control over the transmission network.

5.57 For the purposes of the product market definition exercise, the focal product is deemed to be offered by a HM. In practice, three operators – Eircom, SIRO, and NBI – offer VUA at varying coverage levels throughout the State which meets the three EC criteria set out above. In October 2022, VMI announced that it would commence the provision of wholesale services over FTTP to Vodafone, but ComReg understands that, as of October 2023, service delivery has not yet commenced **[✂** [redacted] **✂]**.

[385] At p.49.

5.58 VUA may be delivered over FTTC, which consists of a fibre component to the cabinet and a copper component to the end user premises, or FTTP, which consists of a full fibre path. Since the publication of the 2018 Decision in Q4 2018, fibre rollout has increased, and the percentage of merchant market VUA delivered over Eircom, NBI and SIRO FTTP has increased, as set out at Figure 25 below:[386]

Figure 25: Eircom, SIRO & NBI merchant market VUA, Q1 2019- Q2 2023[387] [✂REDACTED✂]

[redacted]

[386] Based on data reported in Eircom quarterly results, available at https://www.eir.ie/investorrelations/

[387] Eircom's self-supply is generally reported as Bitstream, thus reporting of VUA lines is merchant market only.

Figure 26: WLA Lines including Merchant Market and Self-Supply, Q1 2019 – Q2 2023 [✂REDACTED✂]

[redacted]

5.59 Figure 25 makes clear that merchant market FTTP VUA as a proportion of total VUA has increased since 2019 both relatively (from **[✂** [redacted] **✂]** to **[✂** [redacted] **✂]**)[388] and absolutely (from **[✂** [redacted] **✂]** lines to **[✂** [redacted] **✂]** lines),[389] while VUA delivered over FTTC has declined in relative terms (from **[✂** [redacted] **✂]** to **[✂** [redacted] **✂]**[390] of total VUA lines). In this regard, since Q4 2022, FTTP has overtaken FTTC to account for the majority of VUA. Over the lifetime of this market review, ComReg expects that FTTP will continue to increase its proportion of VUA. These dynamics are driven partially by new FTTP connections to greenfield sites, but also by Eircom replacing existing FTTC with FTTP by overlaying the copper connection from the premises to the cabinet with fibre. Thus, FTTP rollout is a combination of brand new rollout to newly-constructed premises and upgrading existing FTTC rollout to FTTP.

5.60 Taking these likely market dynamics into account, on a forward-looking basis, it is appropriate to include VUA delivered over FTTC and VUA delivered over FTTP in the VUA focal product.

[388] From 10-20% to 50-60%.

[389] From 0-100,000 to 200,000-300,000 lines.

[390] From 80-90% to 40-50%.

NG WLA focal product

5.61 In its Submission, NBI argued that, had the 2023 Consultation fully accounted for the presence of all networks at individual premises, ComReg could have potentially concluded that FTTC was not a focal product, and that FTTP was a focal product, but only in the 'Rural GPON' area.[391]

5.62 ComReg disagrees with this proposition. ComReg must first define the relevant product market(s) before defining the relevant geographic market(s) (although ComReg recognises there is a relationship between both). The decision as to whether to treat the Rural GPON Area separately from a market definition perspective also falls for consideration at geographic market definition stage. Additionally, NBI's suggestion implies that no focal product be identified outside the Rural GPON Area. The first step in the product market definition exercise is identifying a focal product in respect of which a competition bottleneck may occur. Having done so, ComReg then examines substitutability from potential alternative products or services. Accordingly, ComReg cannot properly conduct a product market definition exercise without first having identified a focal product.

5.63 ComReg understands NBI's argument to imply that there should be different focal products - and therefore the possibility of separate product markets - on the basis that, since there is no FTTC in the Rural GPON Area, FTTP should be the appropriate focal product in that area. ComReg considers that, on balance, it remains appropriate to define a VUA focal product delivered over both FTTC and FTTP for the reasons set out at paragraphs 0 and 5.60 above. Even though both FTTC and FTTP (where available) are ultimately considered to fall into the same product market, FTTP will, towards the end of the review period, likely be the predominant transmission medium. ComReg also notes that a HM supplier of both FTTC and FTTP is unlikely to constrain itself through substitution across each of these media.

[391] NBI Non-confidential Submission, p.7. *"Similarly, ComReg might have reached a conclusion that FTTC is not a focal product, but that (only in the "300k rural area") FTTP is a focal product."* The '**Rural GPON Area**' is the term which ComReg uses to describe those premises described in paragraph 3.31 above, together with additional premises in the Commercial NG WLA Market served by Eircom on the basis of GPON technology. As of Q2 2023, the Rural GPON Area consists of c.380,000 premises.

5.64 As set out at paragraph 3.31 above, the Rural GPON Area consists of premises originally included in the IA, but which were removed from the IA after Eircom provided DECC with binding commitments to provide FTTP on a commercial basis. This presumably underpins NBI's argument that FTTP should be the focal product in respect of the Rural GPON Area. However, as set out at paragraph 5.60 above, ComReg defines an NG WLA focal product consisting of VUA delivered over both FTTC and FTTP, in view of the continuing significance of FTTC VUA, but also the persistent shift towards FTTP VUA on an ongoing basis. In any event, ComReg expects that, over the lifetime of this market review, FTTC VUA will decline overall, with FTTP becoming the predominant means of delivering VUA.

Eircom VUA

5.65 Eircom's FTTx-based VUA products are available on an extensive, but not national, basis where Eircom has rolled out its FTTx network.

5.66 As of Q2 2023, Eircom provided **[✂** [redacted] **✂]** merchant market VUA lines over its FTTC and FTTP networks. These products are purchased by a number of Eircom's wholesale customers (including BT, Vodafone, Magnet and Digiweb) in those areas where Eircom has rolled out its FTTx network. As of Q2 2023, Eircom reported that it had passed 986k premises in the State with FTTC and just over 1 million premises with FTTP, amounting to total FTTx coverage of 90% of premises.[392] Eircom is therefore capable, in principle, of delivering VUA over FTTC or FTTP to 90% of premises in the State, according to its own calculations.

5.67 Table 12 below sets out Eircom's FTTP rollout to date which, as of Q1 2023, has passed over 1 million premises, with Eircom having grown its FTTP footprint by over 258,000 premises in the year to this date.

Table 12: Eircom FTTP Rollout to date, as of Q2 2023[393] [✂REDACTED✂]

Quarter	Premises passed
Q2 2023	[redacted]
Q1 2023	[redacted]
Q4 2022	[redacted]

[392] Eir Group Results, Q2 2023, at page 7 www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf. Eircom calculated the figure of 90% based on an estimated 2.3 million total premises in Ireland, based on total GeoDirectory address points.

[393] ComReg QKDR data, as of Q2 2023.

Q3 2022	[redacted]
Q2 2022	[redacted]
Q1 2022	[redacted]
Q4 2021	[redacted]
Q3 2021	[redacted]
Q2 2021	[redacted]
Q1 2021	[redacted]
Q4 2020	[redacted]
Q3 2020	[redacted]
Q2 2020	[redacted]
Q1 2020	[redacted]
Q4 2019	[redacted]
Q3 2019	[redacted]
Q2 2019	[redacted]
Q1 2019	[redacted]

<u>Eircom Remote VUA and Local VUA fall into the VUA focal product</u>

5.68 ComReg distinguishes two types of Eircom VUA product:

(a) **Local VUA** – where the Eircom MDF/ODF[394] and the customer traffic handover point (being the serving Agg node/WEIL)[395] are co-located in the same exchange; and

(b) **Remote VUA** – where the Eircom MDF/ODF and the customer traffic handover point (being the serving Agg node/WEIL) are not co-located in the same exchange.

[394] Main Distribution Frame ('**MDF**') and Optical Distribution Frame ('**ODF**') respectively. The Main Distribution Frame is a termination point within the local exchange where exchange equipment and terminations of local loops are connected via jumper wires. The ODF uses fibre cable.

[395] Aggregation Node ('**AGG node**') and Wholesale Ethernet Interconnection Link ('**WEIL**'). The WEIL is the interconnection service provided by Eircom which provides a handover for various wholesale products including its NGA and NGN wholesale products.

5.69 In the case of Eircom Local VUA, the customer traffic handover point is at the local exchange. Therefore, the local access condition is likely satisfied for Local VUA, which therefore should form part of the WLA focal product. In the case of Eircom Remote VUA, the traffic handover point is not at the local exchange, but at a higher point in the network hierarchy.

5.70 For FTTx, the access path is either fibre (in the case of FTTP) or a combination of copper and fibre (in the case of FTTC). Fibre optic cables use optical signals which can transmit customer data over much greater distances than their copper equivalent. Therefore, the traffic handover point between the access and core networks over FTTx no longer needs to be as close to the customer premises as over copper. The shift to FTTx access paths accordingly has consequences for network build and the positioning of traffic handover points.

5.71 Services delivered over FTTx allow network SPs to optimise network architecture compared to copper, by reducing the number of traffic handover points in the network, while providing similar or improved services to retail and wholesale customers. FTTx diminishes or removes the physical distance limitation associated with the copper access path that pre-determined traffic handover points. It is therefore no longer necessary to connect customers to the core network at the nearest local exchange to provide retail services, and customer traffic can be aggregated more efficiently at a higher point in the network hierarchy (i.e. at larger, more centralised exchanges). This approach benefits both the network SP and potential wholesale customers, because the network SP can optimise its investment, and the wholesale customer can offer retail or wholesale services based on VUA at exchanges that may not have been economically viable to unbundle without aggregating customer traffic.

5.72 As Eircom's FTTx network rolled out, initially at larger exchanges with high customer density, local traffic handover points were maintained. However, as FTTx rolls out to less densely populated locations, the traffic handover points are moved from the local exchange to a larger nearby exchange, in order to optimize the network investment. The 2014 Explanatory Note notes that such changes are likely and that the number of interconnection points does not need to be equivalent to the copper network's points of interconnection.[396]

5.73 ComReg is accordingly of the view that the local condition can be fulfilled by Remote VUA, even if the point of interconnection is not at the local exchange, but at a suitable location in the network hierarchy i.e. at a higher point in the network. Eircom Local VUA and Remote VUA therefore both meet the local access condition for inclusion in the VUA focal product.

[396] 2014 Explanatory Note, page 43. The 2020 Explanatory Note does not address this point.

SIRO VUA

5.74 SIRO offers VUA over its FTTP network which is purchased by a number of Access Seekers. SIRO considers itself to be active in the provision of WLA, and ComReg included SIRO VUA in its 2018 WLA product market definition.

5.75 The SIRO network is being rolled out to 154 towns across Ireland in two phases. By May 2023, Phase 1 had completed, and Phase 2 had commenced. The planned SIRO footprint overlaps with Eircom's FTTC/FTTP network over which VUA products can also be purchased, but only has a marginal overlap with the NBI IA, at **[✂** [redacted] **✂]**.[397]

5.76 As set out in Table 13, as of Q2 2023, the SIRO network has passed over 502,000 premises, and is available in 111 towns.[398] SIRO's Phase 2 plans suggest an intention to rollout to an additional 344,000 premises, with the eventual announced intention being to pass 770,000 premises overall in 154 towns.[399] In the four-year period to Q2 2023, SIRO increased its network footprint by circa 250,000 premises, passing just over 61,000 additional premises in the year to Q2 2023.

Table 13: SIRO rollout to date, as of Q2 2023[400] [✂REDACTED✂]

Quarter	Premises passed
Q2 2023	[redacted]
Q1 2023	
Q4 2022	
Q3 2022	
Q2 2022	
Q1 2022	
Q4 2021	
Q3 2021	
Q2 2021	

[397] Between 5,000 and 15,000 premises

[398] In November 2023 SIRO announced that it had passed over 535,000 premises. https://siro.ie/

[399] https://www.irishtimes.com/business/technology/siro-announces-620m-investment-to-upgrade-broadband-network-1.4712850

[400] ComReg QKDR data, as at Q2 2023.

Q1 2021	[redacted]	
Q4 2020	[redacted]	
Q3 2020	[redacted]	
Q2 2020	[redacted]	
Q1 2020	[redacted]	
Q4 2019	[redacted]	
Q3 2019	[redacted]	
Q2 2019	[redacted]	
Q1 2019	[redacted]	

5.77 SIRO VUA is delivered over its FTTP network, which is capable of delivering speeds of up to 10 Gbps in most of its network locations.[401] Accordingly, SIRO VUA is capable of meeting similar intended usage cases to Eircom VUA (and exceeding intended usage cases over LLU).

NBI VUA

5.78 NBI's Reference Offer describes six VUA products:[402]

Table 14: NBI VUA products

Product name	Downstream	Upstream
VUA Consumer Standard	500 Mbps	50 Mbps
VUA Consumer Premium	1 Gbps	100 Mbps
VUA Consumer Elite	1 Gbps	200 Mbps
VUA Business Standard	500 Mbps	100 Mbps
VUA Business Premium	1 Gbps	200 Mbps
VUA Business Enterprise	2 Gbps	400 Mbps

[401] https://siro.ie/news-and-insights/why-10-gigabits-why-now/

[402] Standard Access Agreement relating to Wholesale Bitstream and VUA Broadband Products, V2.3, dated 21 December 2022 (the '**NBI Reference Offer**'). Available online at https://nbi.ie/service-provider-portal/?id=c3ba04aa-3258-4623-a3c4-772d8511c933 Correct as at August 2023.

5.79 NBI describes the products it offers for sale in the IA as VUA, subject to the provisos that it has deployed network and the Access Seeker has the required wholesale infrastructure in place to facilitate service for an end user.[403]

5.80 NBI's pricing of its VUA and Bitstream products is constrained by the terms of the NBP Contract. In particular, NBI is required to set its prices by reference to a Benchmark Reference Price ('**BRP**') which is set against a comparable regulated wholesale product, if such a product exists. Otherwise, the BRP is set against the average wholesale prices which prevail in other, more competitive, parts of the State.

5.81 In any year, NBI may not increase its prices by more than 10%, unless the BRP increases by that amount. NBI is not obliged to price at the BRP and may price at any level below it. ComReg understands that, if NBI increases its prices, and to the extent this leads to generation of additional revenues, such revenues would be regained by the State through the clawback mechanism.[404] Aside from the pricing obligations already in place, this may reduce incentives to engage in excessive pricing.

5.82 NBI is required to seek Ministerial approval to alter its VUA prices and, in doing so, must not exceed the BRP or cause a wholesale margin squeeze.

5.83 NBI VUA is delivered over its FTTP network, which is capable of delivering speeds of up to 2 Gbps and is future-proofed to deliver speeds of up to 10 Gbps.[405] Accordingly, NBI VUA is capable of meeting similar intended usage cases to both Eircom VUA and SIRO VUA, and of exceeding intended usage cases over Eircom LLU.

[403] NBI Reference Offer, at p.56.

[404] https://www.gov.ie/en/publication/c1b0c9-national-broadband-plan/ - Project Governance and Compliance.

[405] https://nbi.ie/faqs/#:~:text=The%20NBI%20network%20is%20being,as%20your%20data%20needs%20do.

VUA offered by new market entrants

5.84 ComReg recognises the possibility of market entry in the provision of VUA and notes, in particular, announcements by VMI to this effect in November 2021 and October 2022.[406] VMI has publicly announced its intention to overlay its CATV network with FTTP, and to commence provision of wholesale services over that FTTP network. It announced in October 2022 that it had reached agreement with Vodafone for the provision of wholesale services and announced in October 2023 that it had reached agreement with Sky for the provision of wholesale services. ComReg interactions with VMI over 2022 and 2023 suggest that it is unlikely that such service provision will commence at any level of materiality before **[✂** [redacted] **✂]**

5.85 When VMI offers a VUA product over FTTP which meets the characteristics set out at paragraph 5.56 above (on the basis of the information available to ComReg understands that a VUA product offered by VMI would meet these criteria) and such a product is used by Access Seekers it is ComReg's position that this forms part of the VUA focal product offered by a HM – and is therefore part of the WLA market.

5.86 In October 2022, VMI announced that it had reached agreement with Vodafone for the provision of wholesale services over its FTTP network, despite the fact that material overlay of its CATV network with FTTP had not yet occurred at that time. VMI also announced a wholesale agreement with Sky in October 2023 **[✂** [redacted] **✂]** While VMI has begun rollout of fibre, it has not, as of October 2023, provided ComReg with detailed forward-looking deployment plans, as detailed at footnote 102 above.[407] The rollout of VMI's new FTTP network is in addition to its FTTP footprint of **[✂** [redacted] **✂]** premises passed with RFoG as of Q1 2023,[408] technology, which was not capable of supporting wholesale services, as detailed at footnote 103 above. However, this RFoG FTTP footprint is capable of being readily converted to XGS-PON and can be used for the supply of wholesale broadband services.

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[406] https://www.virginmedia.ie/about-us/press/2021/virgin-media-ireland-announces-national-fibre-network-upgrade and https://www.virginmedia.ie/about-us/press/2022/virgin-media-announces-wholesale-deal-with-vodafone-ireland/.

[407] VMI, Eircom and SIRO have all indicated to ComReg that they are unable to forecast deployment plans with a high degree of accuracy more than one to two months in advance.

[408] Throughout this Decision, ComReg mostly relies on data as of Q1 2023 which was made available by SPs to ComReg on 9 May and processed for publication by ComReg on 15 June 2023. Operators are obliged to provide certain data to ComReg on a quarterly basis to facilitate, *inter alia*, the publication

5.87 [✂ [redacted] ✂].

5.88 As of October 2023, VMI does not yet offer a VUA product [✂ [redacted] ✂], with [✂ [redacted] ✂]. VMI's overlay of CATV with FTTP is still at the early stages and as at Q2 2023 is estimated to pass some [✂ [redacted] ✂] premises, which includes previous RFoG FTTP passed premises it had already passed prior to its FTTP network upgrade announcement.

5.89 VMI has indicated to ComReg that it intends to have completed its FTTP network overlay [✂ [redacted] ✂], towards the end of the market review period covered by this Decision. As of November 2023, VMI does not currently offer VUA and has not provided ComReg with detailed plans for where and when it plans to do so (other than the intention to completely overlay its CATV network), but has indicated that it intends to do so by the end of the five-year lifetime of the market review period. ComReg therefore considers that VUA offered over VMI FTTP is included in the VUA focal product but, noting that VMI FTTP rollout and wholesale service provision is still at the early stage of development and the associated uncertainties, it is only possible to account specifically for VMI FTTP rollout on a forward-looking basis in its geographic market assessment where it has provided sufficiently detailed and reliable deployment plans.

by ComReg of its Quarterly Key Data Report (QKDR), with such information also used for carrying out other regulatory functions including market analyses. Given the need to check and clean and analyse these quarterly data, ComReg has relied on Q1 2023 quarterly data. ComReg has also noted, where relevant, Q2 2023 QKDR data provided to ComReg (this data being made available by SPs to ComReg on 2 August and processed for publication by ComReg on 7 September 2023) or other public data sources for later periods – and draws attention to where this later data shows that previous trends have materially changed. Data provided to ComReg as of Q2 2023 by VMI suggest that the number of premises passed by VMI FTTP had increased from [✂ [redacted] ✂] in Q1 2023, to [✂ [redacted] ✂] premises in Q2 2023. This is a sizeable increase on the previous quarter, noting that average quarterly VMI FTTP rollout in the period Q1 2019 to Q1 2023 had been [✂ [redacted] ✂] premises. However, VMI FTTP nevertheless continues to form a small proportion (in the range of 10-20%) of its overall CATV and FTTP network deployment. VMI has indicated to ComReg that its current FTTP rollout and investment pattern leads to homes becoming serviceable in lumpy and bulk volumes. This suggests that VMI FTTP rollout figures may be characterised by unevenness and irregularity, such that reporting in one quarter may not give reliable indicators of activity in subsequent quarters.

5.90 Eircom contends in its Submission that ComReg should have taken VMI FTTP rollout into account in the WLA market definition exercise, as it did when assessing the retail broadband market, when it designated VMI as a Network Operator on the basis of its incipient FTTP rollout and intention to ultimately offer wholesale services over that network. As Eircom notes, ComReg took VMI FTTP overlap into account at paragraph 4.230 of the 2023 Consultation in its assessment of the geographic parameters of the retail broadband market CATV. However, it does not follow, as Eircom suggests, that ComReg should take the exact same approach in its assessment of the WLA market.[409]

5.91 As set out above, ComReg includes VUA offered over FTTP in the VUA focal product. From a product market definition perspective, this includes VUA offered over VMI FTTP once service provision commences, given that VMI has publicly announced its intention to provide wholesale access to both Sky and Vodafone and is currently engaged in a network investment and upgrade programme to allow it to do so. Accordingly, ComReg considers that VMI is likely, with a very high degree of probability, to have the ability and intention to supply of VUA over the lifetime of this market review (although ComReg notes that **[✂** [redacted] **✂]**. ComReg accordingly takes future VMI WLA market entry into account, but cannot, based on data provided to it by VMI (or the non-availability of such data), state with certainty precisely what locations and when VUA provision will commence at local level. However, in the absence of sufficiently reliable deployment plans as to the timing and location of its FTTP overlay, it is only possible to take VMI FTTP rollout into account at geographic market definition stage where such data are made available to ComReg.[410]

5.92 ComReg has therefore included VUA over FTTP to be provided by VMI in the focal product, although as noted above, VMI has yet to commence VUA service provision. Additionally, in the context of the assessment of the geographic scope of the NG WLA market discussed in section 5.3 below, ComReg assesses VMI FTTP network coverage where it could potentially be used to supply VUA on the basis of information and evidence available.

[409] Eircom Non-confidential Submission, paragraph 24.

[410] ComReg also assesses whether VMI is capable of acting as a constraint on the supply of VUA on the relevant market in the competition assessment at Section 6.5.2 below.

VUA and LLU self-supply form part of the LLU and VUA focal products

5.93 SIRO and NBI are both active at the wholesale level only (although SIRO is a 50:50 joint venture between ESB and Vodafone, with Vodafone being active at the retail level). In contrast, Eircom provides wholesale inputs to its own retail arm (self-supply), as well as to Access Seekers (merchant market wholesale supply). Similarly, and on a forward-looking basis, VMI intends to provide VUA to its own retail arm (self-supply), as well as to Access Seekers (merchant market wholesale supply) on its FTTP network. For the purpose of this market definition exercise, ComReg considers that Eircom self-supply of LLU and VUA falls within the appropriate focal products, alongside its merchant market supply to Access Seekers. This is because, in ComReg's view, Eircom's self-supply could be relatively easily converted into external merchant market supply within a reasonable timeframe and without incurring significant costs or risks. In this respect, the 2020 Explanatory Note states:

> *"NRAs should commence the exercise of defining the relevant product or service market by grouping together products or services that are used by consumers for the same purposes (end use). Where self-supply and external supply are undistinguishable from a consumer perspective and services are functionally similar and interchangeable, such self-supply should be considered to be part of the same product market as the services supplied externally."*[411]

5.94 For example, Eircom implicitly provides LLU to its own retail business (self-supply), as well as to Access Seekers (external merchant market supply) using its copper network inputs and provides VUA on the same basis using its FTTx network inputs. Similarly, ComReg considers, in principle and on a forward-looking basis, that the retail self-supply of other SPs active in the merchant wholesale market would also fall within the relevant WLA markets.

5.95 ComReg specifically considers that Eircom's implicit self-supply of LLU forms part of the LLU focal product, and Eircom self-supply of VUA forms part of the VUA focal product, on the grounds that both Eircom LLU self-supply and Eircom VUA self-supply are readily convertible to merchant market wholesale supply. For the same reasons, and on a forward-looking basis, ComReg considers that VMI self-supply of VUA over its FTTP network[412] – once that network is rolled out and being used to supply merchant market VUA – would form part of the VUA focal product, on the grounds that VMI VUA self-supply would likely be readily convertible to merchant market wholesale supply.

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[411] At p.34.

[412] Arising from the fact that [✂ [redacted]

Overall View on WLA Focal Products

5.96 ComReg designates the following two focal products (collectively, the '**WLA focal products**'):

(a) VUA products provided over Eircom's FTTx NG network (including VUA delivered over both FTTC and FTTP), over SIRO's FTTP network, over NBI's FTTP network and, on a forward-looking basis, VMI's FTTP network (the '**VUA focal product**'), and

(b) LLU products provided over Eircom's copper CG network (including Line Share and SLU) (the '**LLU focal product**').

5.97 For the avoidance of doubt, the VUA focal product includes Eircom self-supply of VUA and, on a forward-looking basis, VMI self-supply of VUA on its FTTP network, and the LLU focal product also includes Eircom self-supply of LLU.

5.2.2 Assessment of Direct Constraints

5.98 The designation of two separate WLA focal products implies the presence of two different WLA product markets – a **NG WLA product market** and a **CG WLA product market**, collectively, the **WLA product markets**. ComReg considers the strength of any direct constraints on the WLA focal products to determine whether the Relevant WLA Markets should be broadened beyond the VUA focal product and the LLU focal product to include effective substitutes. In particular, ComReg considers:

(a) Potential demand-side substitution (paragraphs 5.99 to 5.107 below); and

(b) Potential supply-side substitution, including the self-supply of vertically-integrated SPs (see paragraphs 5.108 to 5.145 below).

[redacted] ✂]

Demand-Side Substitution

5.99 Demand-side substitution measures how customers react to small but significant and permanent price increases. The measurement of demand-side substitution is formalised in the HMT. The HMT assesses whether a small but significant non-transitory increase in price (a '**SSNIP**') above the competitive level – taken to be in the range of 5% to 10% - of a focal product supplied by a HM would induce a sufficient number of customers to switch to an alternative product, such that it would render the price increase unprofitable. If enough customers switch to the alternative product, rendering the price increase unprofitable, then the alternative product is also included in the relevant product market. The HMT is carried out for any number of alternative products which, by means of their characteristics, prices and intended use, may constitute an effective substitute to the focal product. If switching to these alternative products renders the SSNIP (above the competitive level) of the focal product (and any alternatives already deemed substitutable) unprofitable, then these are also included in the relevant product market.

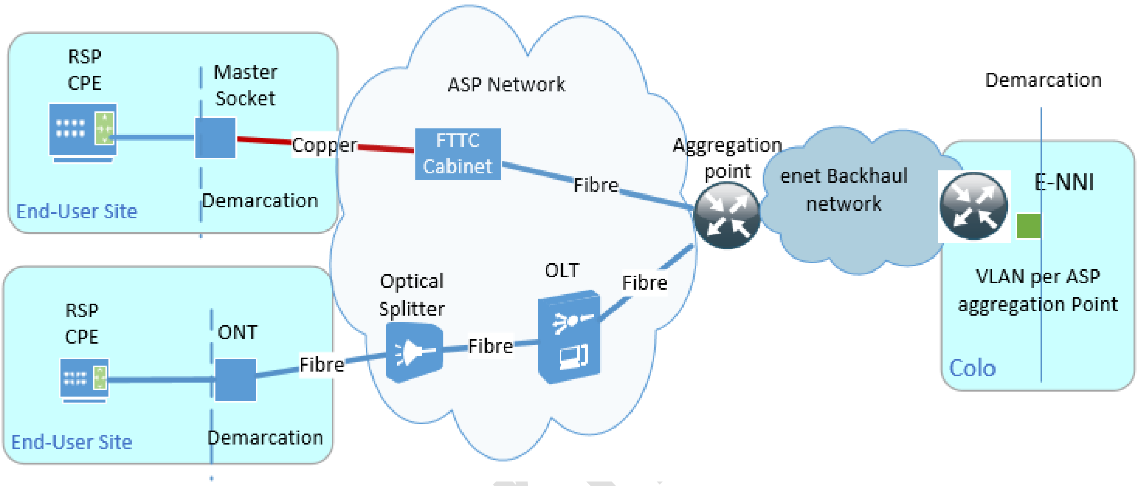
5.100 On the demand side, ComReg considers what, if any, products can act as an effective direct constraint on the WLA focal products (and therefore may fall to be included in the same relevant markets). ComReg notes that WLA is only provided over copper, FTTC, and FTTP networks. In particular, VMI does not offer WLA – nor does it intend to offer – WLA over its widespread CATV network. As noted above, ComReg includes WLA to be offered by VMI over its FTTP network – although service delivery has not yet commenced commercially, as of October 2023 – in the NG WLA focal product.

Alternative FTTP networks

5.101 Eircom, SIRO and NBI operate copper and FTTx networks with substantial regional or national presence. Aside from these networks, a number of smaller SPs (for example, Magnet Plus, Digiweb, or Enet) operate FTTP networks with local reach. In principle, these FTTP networks may be technically capable of providing VUA. At the time of publication of this Decision, however, neither Magnet nor Digiweb offer wholesale merchant market access to their networks. In the absence of appropriate billing systems and other systems necessary to facilitate the delivery of wholesale broadband to Access Seekers, the self-supply by such operators of broadband inputs is not readily transferable to wholesale supply. Accordingly, ComReg considers that alternative FTTP networks such as Magnet Plus or Digiweb are unlikely to generate sufficiently effective direct demand-side constraints on the LLU focal product or the VUA focal product.

5.102 In contrast to SPs such as Magnet or Digiweb, Enet markets a range of wholesale products which rely on Enet's own network, as well as Eircom and SIRO network inputs, which enable Access Seekers to provide high speed broadband and telephony services to their own retail end users. ComReg understands that these products share characteristics which are more similar to WCA than WLA, as Enet provides the backhaul component of the service (as set out at Figure 27 below). For this reason, ComReg considers that Enet does not offer a WLA product.

Figure 27: Enet Broadband Enabler product[413]



Accounting for asymmetric substitution

5.103 As set out at paragraphs 5.38 to 5.53, ComReg considers that VUA and LLU are characterised by asymmetric substitution. Asymmetric substitution raises analytical challenges in a market review process. In determining how best to account for asymmetric substitution, ComReg has had regard to BEREC guidance, as set out in the BEREC FMS Report. The BEREC FMS Report notes that NRAs may address asymmetric substitution in either of two ways.

5.104 Under **Practice A**, an NRA assesses asymmetric substitution at market definition stage, having first identified the focal product. If there is substitution from the focal product to the alternative product, but not vice versa, the alternative product is included in the same market as the focal product. If, on the other hand, there is no substitution from the focal product to the alternative product, but substitution from the alternative product to the focal product, the alternative product should not be included in the market.

[413] Broadband-Enabler-WebPD-V1.2.pdf (enet.ie). Correct on website as at September 2023.

5.105 Under **Practice B**, the NRA does not include the focal product and the alternative product in the same market, regardless of the direction of substitution between the products. The NRA considers that the alternative product belongs to a distinct adjacent product market exercising competitive constraints on the focal product market. Any competitive constraints arising from asymmetric substitution are taken into account at competition assessment stage, on a forward-looking basis.

5.106 Based on the particular circumstances of VUA and LLU provision in the State, as well as having regard to retail market dynamics, which strongly suggest that NG broadband will be the predominant retail broadband offering over the projected five-year market review period, ComReg considers that Practice B is more appropriate, and considers the implications of asymmetric substitution at competition assessment stage, rather than at market definition stage. This will not affect the outcome of the analysis as the impact of asymmetric substitution on competition is appropriately taken into consideration. While VUA may, in principle, be a substitute for LLU on the basis of asymmetric substitution, it will not be a substitute in practice where a premises is not passed by both CG and NG networks. ComReg considers it highly likely that many of the premises within the NBP IA are copper-only premises and, pending NBI rollout, do not have alternative FTTx networks available to them.

5.107 Accordingly, ComReg addresses asymmetric substitution at competition assessment stage.

Supply-Side Substitution

5.108 ComReg must also consider whether any alternative products could act as an effective supply-side substitute to the focal products. Supply-side substitution measures how potential (rather than actual) competitors react to price increases. The HMT assesses whether a SSNIP of a focal product supplied by a HM would cause sufficient new entry into the relevant market by potential competitors, such as to render the price increase unprofitable.

5.109 The Notice on Market Definition makes clear that the impact of supply-side substitution must be equivalent to the impact of demand-side substitution, in terms of effectiveness and immediacy:[414]

> *"Supply-side substitutability may also be taken into account when defining markets in those situations in which its effects are* ***equivalent to those of demand substitution in terms of effectiveness and immediacy****. This means that suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and*

[414] See paragraph 20. ComReg emphasis added.

permanent changes in relative prices. When these conditions are met, the additional production that is put on the market will have a disciplinary effect on the competitive behaviour of the companies involved. ***Such an impact in terms of effectiveness and immediacy is equivalent to the demand substitution effect****.”*

5.110 In particular, ComReg considers whether an SP would be likely, in response to a HM’s SSNIP of the LLU focal product or the VUA focal product above the competitive level, to switch into provision of WLA in the immediate to short term (typically within one year), without incurring significant costs, and start supplying services of equivalent characteristics to the focal products. ComReg also considers whether supply-side substitution would render the HM’s price increase unprofitable through any consequential demand-side substitution.

5.111 Aside from the demand-side substitution possibilities identified at paragraphs 5.99 to 5.107 above, constraints on the focal products may also arise from potential competitors who, by means of supply-side substitution, offer merchant market WLA to Access Seekers, and/or self-supply WLA as an input to the provision of their own retail broadband or WCA. This could include, *inter alia*, WLA supplied by vertically-integrated SPs (not supplying merchant market services).

5.112 In carrying out this assessment, ComReg has considered Respondent Submissions to the 2023 Consultation, SPs’ responses to the IIRs, particularly views and evidence provided by SPs that indicate the strength of any direct constraint arising from supply-side substitution (including from vertically-integrated SPs).

5.113 ComReg considers below the potential for WLA supply-side substitution by SPs (including self-supply where relevant) over the following platforms:

(a) CATV (paragraphs 5.114 to 5.125 below);

(b) FWA (paragraphs 5.126 to 5.129 below);

(c) Localised alternative FTTP (paragraphs 5.130 to 5.134 below);

(d) Mobile services (paragraphs 5.135 to 5.137 below); and

(e) Leased lines (paragraphs 5.138 to 5.143 below).

Supply-side substitution (including self-supply) over CATV

5.114 VMI offers retail broadband over its CATV network on a standalone basis, as well as in a bundle together with RFTS, Pay TV or mobile telephony. ComReg considers the possibility of LLU or VUA supply-side substitution arising from VMI’s vertically-integrated CATV network.

5.115 In assessing any direct supply-side constraint posed by VMI CATV, ComReg notes that VMI has not expressed any interest in providing WLA on its CATV network. Moreover, as set out at paragraphs 5.89 to 5.92 above, VMI announced its intention to commence provision of wholesale services to Vodafone (in October 2022) and Sky (in October 2023) over its FTTP network. Such wholesale services will include VUA. Bearing these plans in mind, ComReg assesses the likelihood of supply-side substitution over CATV from both a technical and a strategic perspective.

5.116 In terms of whether it is technically feasible to provide WLA over a DOCSIS 3.x CATV network, the conclusions reached by independent consultants WIK ('**WIK**') in respect of the possibility of providing WLA or WCA over CATV and set out in a report published in March 2016 ('**WIK CATV Report**')[415] remain technically valid:

(a) It is not technically feasible to deliver VUA products over DOCSIS 3.0 due to the complexity associated with VUA delivery;

(b) DOCSIS 3 does not support the Layer 2 (Ethernet) protocol, which is typically associated with VUA products;

(c) In well-established CATV networks, there is no capacity left for VUA-like access services with dedicated bandwidth; and

(d) VUA products are unlikely to be possible over the DOCSIS 3.1 standard as it is adopted.

5.117 Noting that the conclusions of the WIK CATV Report continue to be technically valid, ComReg considers that, over the lifetime of this market review, it is unlikely to be technically feasible to provide VUA over a CATV network. ComReg understands that it may be possible to offer VUA over the newer DOCSIS 4.0 standard[416] but, in light of VMI's announced moves to overlay CATV with FTTP, considers it unlikely that VMI would incur the investments required to upgrade its CATV network to DOCSIS 4.0.

[415] Available online at https://www.comreg.ie/publication/technical-feasibility-providing-wholesale-broadband-access-cable-tv-infrastructure-ec-market-3-2

[416] 2020 Explanatory Note, pp. 26 and 49.

5.118 Apart from the likely technical infeasibility, an Access Seeker would incur significant costs when switching from WLA on an existing FTTx network, to WLA hypothetically offered on VMI's CATV network (for example, the costs involved in interconnecting with VMI's local access handover points and in migrating retail customers to the CATV platform). Furthermore, switching to VUA delivered over CATV could involve stranding existing investments made in backhaul and associated equipment (such as WEILs) in procuring WLA on FTTx networks. It is also likely that Access Seekers would need to further develop their own IT and order handling systems in order to integrate with any VMI order handling/management systems.

5.119 Access Seekers providing retail services would also need to replace their retail customers' customer premises equipment ('**CPE**') (such as modems) with specific CPE designed for operating on a DOCSIS CATV network.

5.120 Such factors would likely discourage Access Seekers from switching to a hypothetical CATV-based VUA product, and even if they were to switch, the transition process would likely take a sufficient period of time such that it would undermine the immediacy of any competitive impact.

5.121 From a strategic perspective, WLA provided over CATV is unlikely to be an effective supply-side substitute to the LLU or VUA focal products. This is because VMI has publicly signalled its intention to replace its CATV network with FTTP, and to offer wholesale services over that network. Accordingly, over the lifetime of this market review, and on a forward-looking basis, VMI is likely to progress switching from CATV to FTTP, and is unlikely to commit to the investment required to offer WLA services on its CATV network (assuming it was technically possible to do so). From an Access Seeker perspective, it is unlikely that WLA offered over a network which would eventually be decommissioned would be an attractive commercial prospect, since Access Seekers would need to switch to alternative WLA provision as the CATV network shrunk.

5.122 These technical and strategic factors are likely to undermine the strength of any direct constraint arising from potential supply-side substitution from CATV networks. For these reasons, ComReg considers that CATV networks are unlikely to provide an effective supply-side constraint on the provision of LLU or VUA by the HM over the lifetime of this market review.

5.123 In its Submission, Copenhagen Economics suggests[417] that there appears to be an inconsistency between ComReg's view that VMI CATV will not exercise an effective supply-side constraint on the focal products during the regulatory period because of VMI's plans to upgrade its CATV network to FTTP[418] while also arguing[419] that *"it is not possible or appropriate to take VMI FTTP rollout into account on a forward-looking basis in its geographic market assessment or its competition assessment […]"*.

5.124 ComReg does not see any inconsistency between these positions as VMI CATV is incapable of acting as a supply-side substitute for the focal products for four broad reasons:

(a) The absence of indicators from VMI that it would be willing to provide such a service over its CATV network;

(b) The technical infeasibility of offering WLA over a DOCSIS 3.1 network;

(c) The costs[420] an Access Seeker would have to incur to switch to WLA provided over CATV (which in any event would be replaced over time by FTTP); and

(d) The low incentives for VMI to invest in WLA over CATV, given its announced intention to overlay CATV with FTTP.

5.125 ComReg has relied on a number of factors in concluding that **VMI CATV** is unlikely to act as a sufficiently effective supply-side substitute to the focal products. Furthermore, ComReg assesses below the impact of VMI's future supply of VUA over its FTTP network in the context of the definition of the geographic scope of the relevant market.

[417] Copenhagen Economics Non-confidential Submission, footnote 90.

[418] At paragraph 5.97 of the 2023 Consultation.

[419] Copenhagen Economics Non-confidential Submission, paragraph 5.72.

[420] Such costs would include, for example, CPE which would not be capable of working across both CATV and FTTP WLA.

Supply-side substitution (inc. self-supply) over Fixed Wireless Access ('FWA')

5.126 Although broadband provided over FWA is unlikely to fall within the retail broadband market,[421] ComReg nonetheless considers the potential for supply-side substitution arising from vertically-integrated FWA SPs entering the WLA markets, as well as FWA self-supply. Digiweb and Imagine both offer FWA-based broadband services. Following a protracted period of decline from 2008 to 2016, FWA retail broadband subscriptions have rebounded, roughly doubling from a low of 41,742 in Q2 2016 to 86,170 in Q2 2023. However, some of this increase can be explained by the collection of data for the first time from certain FWA SPs who met reporting thresholds for QKDR purposes, which accounts for approximately 7,200 subscriptions growth since Q4 2021.

5.127 Neither Digiweb nor Imagine currently provide LLU or VUA. However, with respect to the potential for WLA supply-side substitution over FWA:

(a) ComReg is not aware of any intentions by FWA SPs to commence the provision of WLA;

(b) It is unclear whether it would be possible to provide a suitable technical substitute for LLU or VUA over FWA. In particular, ComReg is not clear that FWA would be capable of supporting a local access service of sufficient quality to meet the expectations of Access Seekers (and, ultimately, an Access Seeker's retail or wholesale customers) which meets the test for WLA designation set out at paragraph 5.56 above;

(c) It is unlikely that there would be significant wholesale demand for a WLA service provided over FWA networks, even if it were technically possible to provide such a service. In this respect, while demand for broadband and other services provided over FWA networks has increased since 2016, and as at Q2 2023 stood at 86,170 subscribers, FWA still only accounts for 5% of total retail fixed broadband subscriptions, compared to 22% in the case of CATV, 36% in the case of FTTP, and 30% in the case of FTTC. As a platform, FWA therefore appears to be less attractive than other access platforms with greater reach. This is likely to dampen demand for any retail and/or wholesale service and, therefore, any derived demand for WLA products provided over FWA;

[421] As set out at paragraphs 4.126 to 4.144 above.

(d) The fragmented nature of any hypothetical WLA service on FWA networks is likely to hinder effective supply-side substitution. In this respect, ComReg notes that there are two larger FWA SPs and a number of smaller regional operators, and no individual FWA network would likely be in a position to offer ubiquitous, or extensive WLA coverage comparable to Eircom's LLU or VUA product availability422 (nor is there likely to be seamless national coverage of WLA, taking all of the FWA networks collectively). This means that Access Seekers would need to purchase wholesale services from (and interconnect with) multiple FWA-based WLA SPs in order to reach the retail and/or wholesale customers that are currently serviced on the basis of Eircom VUA. This could impose significant additional costs associated with switching away from LLU or VUA or, indeed, using it in parallel; and

(e) Access Seekers would be likely to incur costs when switching to an alternative FWA-based WLA provider, for example, establishing new backhaul (and associated interconnect) or installing CPE capable of receiving signals from a FWA service. Switching to a WLA product could also lead to stranding existing interconnects and backhaul with Eircom. These factors may discourage Access Seekers from switching.

5.128 For the reasons set out above, there is unlikely to be sufficient demand from Access Seekers for any hypothetical FWA-based WLA product. Similarly, ComReg considers that self-supply of WLA by an FWA SP should not be included in the WLA markets:

(a) It is unlikely that an FWA SP could provide merchant market WLA to Access Seekers in the short term without incurring significant additional costs or risks;

(b) There is unlikely to be significant demand from Access Seekers for a WLA product offered over FWA; and

(c) It is not clear that FWA SPs would be in a position to start supplying a WLA service of equivalent characteristics in the short term in response to small and permanent changes in relative prices of WLA.

5.129 Accordingly, ComReg's view is that FWA networks are unlikely to provide an effective direct supply-side constraint on the WLA focal products over the period of this market review. Similarly, ComReg's view is that self-supply by vertically-integrated FWA SPs should not be included in the WLA markets.

[422] The largest FWA SP – Imagine – advertises national rural coverage of 74% on its website (as of August 2023), although it does not specify whether this measures premises, land area, or population.

Supply-side substitution (including self-supply) over localised alternative FTTP networks

5.130 At paragraphs 5.101 to 5.102 ComReg concluded that localised alternative FTTP networks would be unlikely to generate a sufficiently effective demand-side constraint on the LLU focal product or the VUA focal product. ComReg now considers whether those networks are, instead, likely to be capable of generating a sufficiently effective supply-side constraint.

5.131 ComReg is unaware of any intentions by operators of localised alternative FTTP networks (e.g. Magnet Plus, Digiweb, Enet) to commence provision of WLA. The total take-up of FTTP-based retail products (either broadband, TV and/or RFTS) over localised alternative FTTP networks remains very limited. As of Q2 2023, of a total of 576,856 active FTTP lines, approximately 7,000 lines are provided over localised alternative FTTP networks (<1.5%).

5.132 ComReg considers that it is unlikely that a WLA service offered over localised alternative FTTP networks would meet the expectations of Access Seekers, given the very limited geographic coverage of these networks at present, bearing in mind that an alternative FTTP SP could only offer a WLA service in fragmented and localised geographic areas. It is accordingly unlikely that an Access Seeker would switch from the (widely available) LLU or VUA focal products to WLA provided over these localised alternative FTTP networks.

5.133 Similarly, ComReg considers that self-supply of WLA by these localised alternative FTTP SPs does not fall within the WLA markets:

(a) It is unlikely that such an alternative FTTP operator could provide a WLA product to third parties in the short term without incurring significant additional costs or risks;

(b) There is unlikely to be significant demand from Access Seekers for such a WLA product over localised alternative FTTP networks; and

(c) It is not clear that an FTTP SP would be in a position to start supplying a WLA service of equivalent characteristics in the short term in response to small and permanent changes in relative prices of WLA.

5.134 For these reasons, ComReg is of the view that, over the period of this market review, localised alternative FTTP networks are unlikely to provide a sufficiently effective direct supply-side constraint on the WLA focal products and should not be included in the relevant product market. Similarly, self-supply by alternative vertically-integrated FTTP SPs should not be included in the WLA markets. However, even if included, given the small scale of these networks, they would likely have no material bearing on the analysis.

Supply-side substitution over mobile networks

5.135 ComReg considers the potential for supply-side substitution arising from Mobile Service Providers ('**MSP(s)**') that provide MBB services. Three Mobile Network Operators ('**MNOs**') (Vodafone, Three, and Eircom) currently provide MBB to end users. For the reasons set out in Section 4, ComReg concludes that MBB provided over 3G, 4G or 5G mobile networks does not fall within the retail broadband product market. ComReg nonetheless considers the potential for supply-side substitution arising from vertically-integrated MNOs entering the WLA markets, as well as self-supply.

5.136 ComReg is unaware of any MNO having expressed an intention to provide WLA products over their 3G, 4G or 5G networks. ComReg also notes that an MNO wishing to offer WLA to Access Seekers would likely incur significant and sunk costs associated with rolling out a (CG or NG) fixed access network. Network rollout would also likely take a number of years to complete in view of the need to procure material, contract out labour, secure funding, and apply for the necessary wayleaves and licenses to lay infrastructure. Given the stipulation set out in the Notice on Market Definition recalled at paragraph 5.109 above that the impact of a supply-side substitute in terms of effectiveness and immediacy should be equivalent to demand substitution, even if an MNO were to undertake a programme of fixed network rollout, this would be insufficiently immediate to make it an effective supply-side substitute for the LLU focal product or the VUA focal product.

5.137 3G, 4G or 5G networks are unlikely to generate a sufficiently effective supply-side substitute for the WLA focal products. Vodafone, Three and Eircom self-supply 3G, 4G and 5G data services, but Vodafone also separately purchases WLA (and WCA) services from NOs to offer retail broadband services, while Eircom operates CG and NG fixed access networks, together with its 3G, 4G and 5G mobile networks (rather than solely relying on their mobile networks to provide retail services). This suggests that 3G, 4G or 5G MBB is more likely to be a complement to, rather than a substitute for, WLA services.

Supply-side substitution over leased lines

5.138 Leased lines are technically capable of supporting various wholesale and retail services, including access and data transmission services at the wholesale level. At paragraph 4.167 above, ComReg found that leased lines should not be included in any notional retail broadband market.

5.139 Retail broadband is capable of being delivered over a variety of platforms. ComReg has considered the degree to which leased lines (also known as '**Wholesale Dedicated Capacity**, or '**WDC**'[423]) could be used to potentially provide wholesale broadband access, and the extent to which this might act as a supply-side constraint on the WLA focal products.

5.140 It is unlikely that leased lines could act as a supply-side substitute for the WLA focal products. For large corporate end users, full leased line solutions are used to provide a full spectrum of connectivity beyond broadband alone, comprising multiple services such as voice, data, email, instant messaging and disaster recovery, such that substitution from WLA may only arise if the organisation is expanding or in a greenfield scenario. Unless the requirements of the end user change due to expansion (or other factors), the extra costs associated with the acquisition of a leased line solution and the extra investment required to upgrade IT systems and equipment to support the new infrastructure is likely to result in an unwillingness to switch.

5.141 ComReg therefore considers that there is currently insufficient evidence that leased lines are likely, within the short to medium term, to pose an effective direct competitive constraint on the provision of WLA.

5.142 This conclusion is supported by ComReg research which suggests that, from a pricing perspective, there is a break in the chain of substitution between VUA and LLU on the one hand, and leased lines on the other hand. As Table 15 indicates, Ethernet leased line prices are significantly more expensive than wholesale LLU and VUA prices (which are set out at Table 16 below), measured by monthly rental costs. This suggests that, in response to a SSNIP of the WLA focal products, insufficient switching to leased lines would occur, to render that SSNIP unprofitable:

Table 15: Indicative Ethernet leased line monthly rental costs, Q3 2023[424]

Same Region Handover 10 Mbps circuit speed				
		Zone B		Zone B
	Medium Density		High Density	
Option 1	€ 698.83	€ 240.42	€ 317.33	€ 109.17
Option 2	€ 392.58	€ 135.08	€ 199.67	€ 68.67
Option 3	€ 219.83	€ 75.58	€ 133.33	€ 45.83
Option 4	€ 196.92	€ 67.75	€ 124.58	€ 42.83

[423] Prior to the 2020 Recommendation, WDC was known as '**Wholesale High Quality Access**', or '**WHQA**'.

[424] Pricing data taken from Tables 4A, 4B, 5A, and 5B from Open Eir Network Price List Effective Rates, v.9.0, available online at https://www.openeir.ie/wp-content/uploads/2023/05/Network-Price-List-Effective-Rates-V9_0-Unmarked-310123.pdf.

Option 5	€ 173.75	€ 59.75	€ 115.67	€ 39.75
Option 6	€ 582.17	€ 200.25	€ 272.50	€ 93.75
	Same NGN Node Conveyance			
	€ 96.75	€ 38.58	€ 94.83	€ 58.67

5.143 ComReg considers, based on the significant differences in pricing and functionality between leased lines on the one hand, and VUA and LLU on the other hand, that WLA delivered over leased lines would not be an effective supply-side substitute for the LLU focal product or the VUA focal product.

Summary of overall conclusions on direct constraints

5.144 In paragraphs 5.98 to 5.143 above, ComReg has considered whether demand-side and supply-side constraints (including, in some cases, self-supply) exercised by alternative platforms, including CATV, FWA, localised alternative FTTP networks, mobile networks and leased lines, are likely to exert a sufficient timely and effective direct constraint on the WLA focal products, such that products provided over these alternative platforms warrant inclusion in the relevant WLA product markets.

5.145 VUA products provided over FTTx networks with substantial footprints (Eircom, SIRO, NBI and, on a forward-looking basis, VMI) are likely to be a sufficiently effective demand-side constraint on the provision of the LLU focal product. In all other cases, ComReg considers that none of the above identified potential direct constraints are likely to provide a sufficiently immediate and effective competitive constraint - from either the demand side or the supply side - on a HM's provision of the LLU focal product or the VUA focal product, such that it would warrant their inclusion in the WLA markets.

5.2.3 Assessment of Indirect Retail Constraints

5.146 Aside from direct demand-side or supply-side constraints, a vertically-integrated alternative SP's self-supply of WLA (where that SP is not active in the merchant market supply of WLA) could fall within the WLA market(s) if its presence on downstream retail markets were to exert a sufficiently strong, immediate and effective indirect pricing constraint on a HM's pricing of LLU or VUA. In this respect, retail customer behaviour may, through demand-side substitution at the retail level, indirectly impact the ability of the HM WLA supplier to profitably sustain a SSNIP of WLA prices above the competitive level, i.e. indirect retail constraints arising from the retail market may affect wholesale price setting behaviour in the provision of CG WLA or NG WLA.

5.147 ComReg assesses whether retail (demand-side) substitution to alternative networks in response to an increase in the price of WLA by the HM indirectly prevents the HM from imposing a profitable SSNIP of WLA. This might occur, for example, if the HM faced a reduction in overall profitability after increasing the price of WLA due to a decline in VUA or LLU sales. Such a fall in profitability might occur if, and to the extent that, Access Seekers bearing the WLA price increase passed that increase through to the retail prices they charge their own end users. This in turn results in their retail customers switching away in sufficient numbers to other SPs (not dependent on the HM's WLA products) or lowering their consumption of existing WLA services.

5.148 From an Access Seeker (and, therefore, retail end user) perspective, the cost of WLA is an input to the overall costs of the provision of retail services (such as telephony, broadband access or TV services, including bundles). ComReg considers it likely that an increase in the price of WLA would (at least to some extent) be passed through by the purchasing Access Seeker to retail prices charged to end users. ComReg's indirect retail constraints assessment examines a retail end user's most likely response to an increase in the price of their retail service arising from the pass-through by the Access Seeker of a SSNIP of WLA (that is, LLU or VUA).

5.149 To this end, ComReg assesses the magnitude of possible indirect retail price constraints emanating from network platforms that form part of the retail broadband product market, as set out in Section 4. In line with EC guidance[425] on the assessment of indirect retail substitution effects arising from a SSNIP by a HM at wholesale level, ComReg assesses the following relevant factors:

(a) Whether and to what extent Access Seekers would be forced to pass a hypothetical wholesale price increase onto their retail end users based on the wholesale/retail price ratio,[426] i.e. how a SSNIP of WLA would be likely to impact on the retail market (paragraphs 5.151 to 5.175);

(b) Whether there would be sufficient demand substitution at the retail level in response to the pass-through of the SSNIP of WLA into retail prices such as to render the SSNIP of WLA unprofitable i.e. the likely response in retail demand which would be required to make a SSNIP unprofitable (paragraphs 5.176 to 5.268); and

[425] 2020 Explanatory Note, p.50.

[426] This is the wholesale price as a proportion of the overall retail price.

(c) Whether the retail customers of Access Seekers purchasing WLA would switch to a significant extent to the retail arm of the integrated HM, in particular if the HM does not raise its own retail prices when it raises its WLA prices (paragraphs 5.270 to 5.275).

5.150 ComReg has carefully considered guidance from the EC on indirect retail constraints in assessing each of the above three criteria below. ComReg also has regard to other evidence available in assessing indirect constraints, including but not limited to evidence on actual usage of broadband services over different platforms. ComReg's conclusions are set out at paragraphs 5.277 to 5.278.

Criterion 1: How is a SSNIP of WLA likely to impact downstream markets?

5.151 The assessment of indirect retail constraints is designed to determine the likely impact of a 5% to 10% increase in the price of WLA on the relevant downstream retail price by assessing likely retail end user behaviour in the form of substitution.

5.152 ComReg assesses the relationship between wholesale and retail prices by considering the extent to which Access Seekers purchasing WLA would be likely to pass through a potential wholesale price increase imposed by a HM supplier of LLU or VUA to their own retail end users.

5.153 The intensity of competition in downstream retail markets could impact whether and, if so, to what extent, WLA price increases would be passed on by Access Seekers to their own retail end users. For example, faced with a strong competitor which had the ability to absorb a WLA price increase (i.e. not pass it through into higher retail prices), a competing SP would need to consider, in response to a WLA price increase, the degree to which it would raise its retail prices, and whether its end users would switch to a competing SP in response. If the WLA price increase were not passed on, this would be a cost to the Access Seeker which it did not recoup from its own end users.

5.154 Assuming that all other elements of the downstream retail service were provided at a competitive price level,[427] an increase in the price of WLA could result in a retail price increase, as an Access Seeker would otherwise be providing the retail service at a loss in the long run.[428] If the retail market was not fully competitive, the Access Seeker purchasing WLA may choose not to pass through some or all of the wholesale price increase, but instead may choose to absorb the wholesale price increase. In such circumstances, an indirect retail constraint may be less capable of constraining the price-setting behaviour of a HM than a direct constraint where some or all of the wholesale price increase is not passed-through.

5.155 Moreover, even where the Access Seeker purchaser of WLA intends to pass through some or all of the WLA price increase into retail prices, any wholesale price increase will be diluted once it is translated into a retail price increase. This is because the cost of LLU or VUA is just one of numerous inputs to the price of retail broadband. In this respect, an increase of 10% in the price of WLA would be unlikely to give rise to a 10% price increase at the retail level. In the context of assessing indirect retail constraints, establishing the ratio between the price of LLU or VUA and downstream retail prices is central to the application of the *second factor* and *third factor* set out in paragraphs 5.149(b) and 5.149(c) above for assessing indirect retail constraints.

5.156 The EC's *second factor* also notes the need to establish whether there would be sufficient demand-side substitution at the retail level to render the wholesale price increase in question unprofitable.

[427] In general, this is a price level sufficient to cover its costs plus a reasonable rate of return.

[428] Assuming, in the case of bundles, no cross-subsidisation to retail broadband from other services.

5.157 In establishing the wholesale/retail price ratio, that is, the relationship between the wholesale input cost and the retail price (the '**Price-Cost Ratio**'), it is first necessary to determine which prices to use to calculate this ratio. The pricing of retail services making use of WLA inputs is multifaceted and complicated by non-linear pricing components such as bundling and discounts. A bundle may include two or more of RFTS, broadband, TV or mobile telephony. The 2022 Market Research revealed that 62% of residential respondents with broadband access at home bundle their broadband with at least one other service, with 69% of those on a copper line bundling with at least one other service.[429] The bundling breakdown is as follows: broadband and home phone (21%), broadband, home phone and TV (21%), broadband and TV (32%), broadband, home phone and mobile phone (5%), broadband and mobile phone (11%) and broadband, home phone, TV and mobile phone (9%).[430]

5.158 In deciding whether or not to switch SP in response to a price increase, end users may also take into account non-price factors such as product characteristics, bundling offers, or product speeds. However, the SSNIP in this instance would only apply to those components of the retail bundle reliant on VUA or LLU inputs, rather than to all of the inputs used to create the bundle.

5.159 For SPs that only offer retail services provided using WLA inputs as part of a broader bundle of services, it is not possible to be definitive about the retail price associated with the WLA-related element of the bundle, due to the difficulty of separating the wholesale costs of each component, together with costs common across the bundle, such as advertising. However, ComReg does consider the price of WLA in the context of the overall retail price for the service bundle provided by the SP.

5.160 Having regard to the above, ComReg calculates the margin between retail prices on the one hand and LLU and VUA prices on the other hand based on the following proxy values:

(a) A notional retail price based on an estimated average monthly spend for a package or bundle which includes services reliant on upstream LLU or VUA (which may also contain other services); and

(b) A notional estimate of the LLU or VUA costs that would be incurred by an Access Seeker to provide the average retail package or bundle which includes services reliant on upstream WLA (given that a notional SSNIP would only apply to WLA).

[429] See Slide 29 and Slide 30 of the 2022 Residential Market Research.

[430] See Slide 32 of the 2022 Residential Market Research.

5.161 The prices which Eircom charges for LLU and FTTC-based VUA are currently subject to a cost orientation obligation. In the case of FTTP-based VUA, Eircom is subject to an obligation not to engage in a margin squeeze with respect to either FTTP-based Bitstream or the price of a retail product, sold singly, which is delivered over FTTP-based VUA. ComReg uses the prices for these services arising from Eircom's regulatory obligations as a proxy for cost in a competitive market outcome.

5.162 The current regulated monthly cost for Eircom LLU and VUA is as follows:[431]

Table 16: Eircom LLU and VUA monthly rental prices, September 2023

Product	€ at 5 July 2023	
LLU	€11.52	
Line Share	€0.62	
SLU	€6.12	
SLU Line Share	€0.62	
FTTC-based VUA	**Standalone**	**POTS-based**
	€19.12	€5.56
FTTP-based VUA	**Standalone**	**POTS-based**
150/300/500 Mbps	€23.50	€9.09
500/100 Mbps	€27	€12.59
1000 Mbps	€28.50	€14.09
1000/150 Mbps	€32	€17.59
2000 Mbps	€33.50	€19.09

Residential Retail Prices

5.163 To estimate average residential retail prices, ComReg examines bundles that include broadband, RFTS and TV. The operators included are Eircom retail, Sky, Digiweb, Vodafone, Pure Telecom and Magnet. Table 17 below outlines the estimation of the residential prices and a full outline of the derivation of these prices is given in Annex 10. The average prices are lower than the findings from the 2022 Market Research amongst residential customers.[432]

[431] Open Eir Access Reference Offer Price List v.26.0, 5 July 2023. Available online at https://www.openeir.ie/wp-content/uploads/2023/07/ARO-Price-List-V26_0-Unmarked-05072023.pdf

[432] Findings outlined in Annex 10. The average national spend on broadband (in a bundle) is €75 (see Slide 38 of the 2022 Residential Market Research), with those on a fixed phone line (copper network) paying €70 and those on a fibre network paying €84. For those not in a bundle the average spend is

Table 17: Estimation of residential retail prices for products based on Eircom VUA inputs – including VAT (August 2023)

	Standalone broadband	Broadband and RFTS	Broadband and TV	Average price across all Broadband plans[433]
Min	€22.50	€34.95	€45	
Average	€40.09	€40.65	€82.63	€47.83
Max	€70.00	€54.95	€125.00	

Table 18: Estimation of residential retail price for products based on LLU inputs - including VAT (August 2023)

	Broadband and RFTS	Average Price across all Broadband plans
Min	€59.95	
Average	€59.95	€59.95
Max	€59.95	

5.164 Having regard to the above assumptions, ComReg estimates the ratio of the VUA price relative to the residential retail product (the '**Price-Cost Ratio**') to be approximately **[✂ [redacted] ✂]**,[434] and estimates the Price-Cost Ratio for LLU to be approximately **[✂ [redacted] ✂]**.[435]

5.165 The VUA Price-Cost Ratio (**[✂ [redacted] ✂]**)[436] reflects the proportion of the total bill for a package or bundle containing retail services that would likely be affected by a SSNIP of Eircom VUA. This can be used to derive the dilution effect, which is the percentage increase in retail prices that would occur in response to the pass-through of a SSNIP of the VUA focal product.

5.166 The LLU Price-Cost Ratio (**[✂ [redacted] ✂]**)[437] reflects the proportion of the total bill for a bundle containing retail services that would likely be affected by a SSNIP of LLU, which can be used to derive the LLU dilution effect.

€43 (See Slide 51), with those on a fixed phone line (copper network) paying €43 and those on a fibre network paying €47.

[433] This is the average across all broadband plans, both standalone and bundled, that are potentially provided for on the basis of Eircom VUA inputs.

[434] Computed as the simple average price of standalone FTTx VUA divided by the combined average price of retail products making use of Eircom VUA inputs: **[✂ [redacted] ✂]**/€47.83. Between 70 and 80%.

[435] Computed as **[✂ [redacted] ✂]**/€59.95. Between 10% and 20%.

[436] Between 70% and 80%.

[437] Between 10% and 20%

5.167 The dilution effects for Eircom VUA are set out in Table 19 below. ComReg estimates that a SSNIP of VUA would translate into approximate retail price increases of [✂ [redacted] ✂][438] and [✂ [redacted] ✂][439] for a SSNIP of 5% and 10% respectively. In future, ComReg expects that VUA delivered over FTTP will become more pervasive and VUA delivered over FTTC will decline.

Table 19: Dilution Ratios - increase in residential retail prices from SSNIP of Eircom VUA [✂PARTIALLY REDACTED✂]

Access Seeker Marginal Cost €	SSNIP %	Wholesale Price Increase €	Price-Cost Ratio	Pre-SSNIP Retail Price[440]	Effective Retail Price Increase €	% Retail Price Increase
[✂ [redacted]][441]	5%	[✂ [redacted] ✂][442]	[✂ [redacted] ✂]	€47.83	[✂ [redacted] ✂][443]	[✂ [redacted] ✂]
	10%	[✂ [redacted] ✂][444]			[✂ [redacted] ✂][445]	[✂ [redacted] ✂]

5.168 The approximate dilution effects for LLU are set out in Table 20 below. ComReg estimates that a SSNIP of LLU would translate into retail price increases of [✂ [redacted] ✂][446] and [✂ [redacted] ✂][447] for a SSNIP of 5% and 10%.

Table 20: Dilution Ratios - % increase in residential retail prices from SSNIP of LLU [✂PARTIALLY REDACTED✂]

Marginal Cost to Access Seeker €	SSNIP %	Wholesale Price Increase €	Price-Cost Ratio	Pre-SSNIP Retail Price[448]	Effective Retail Price Increase €	% Retail Price Increase

438 Between 1% and 10%.

439 Between 1% and 10%.

440 The estimation of these retail prices is outlined in Table 15 above.

441 This is the simple average price of standalone FTTx VUA: the price of (standalone) FTTC VUA is €19.12. Higher prices are charged for FTTP: €23.50 (150 Mbps), €23.50 (300 Mbps), €23.50 (500 Mbps), €28.50 (1 Gbps) - Open Eir Access Reference Offer price list v.26 – pg. 26: https://www.openeir.ie/wp-content/uploads/2023/07/ARO-Price-List-V26_0-Unmarked-05072023.pdf. While FTTP (2000 Mbps) is offered at €33.50, it has not been included as subscriber numbers are currently too small. ComReg has also taken into account the retail cost an Access Seeker would bear when purchasing a wholesale VUA product.

442 Between €0 and €10.

443 Between €40 and €50.

444 Between €0 and €10.

445 Between €50 and €60.

446 Between 1% and 10%.

447 Between 1% and 10%.

448 The estimation of these retail prices is outlined in Table 18 above.

[✂[redacted]][449]	5%	[✂[redacted]✂][450]	[✂[redacted]✂]	€59.95	[✂[redacted]✂][451]	[✂[redacted]✂]
	10%	[✂[redacted]✂][452]			[✂[redacted]✂][453]	[✂[redacted]✂]

Business Retail Prices

5.169 ComReg undertook a similar analysis for business end users. The estimation of business retail prices is outlined in Table 21. Business bundles tend to include broadband and RFTS as well as other business services, but not TV. Eircom appears to be the sole provider of business services over LLU.[454]

Table 21: Estimation of business retail prices for products based on VUA inputs – including VAT

	Standalone broadband	Broadband and RFTS	Broadband and Mobile	Average price across all Broadband plans[455]
Minimum	€35.00	€34.99	€49.99	€56.34
Average	€48.99	€58.71	€67.99	
Max	€64.95	€99	€89.99	

Table 22: Estimation of business retail prices for products based on LLU inputs – including VAT

	Standalone broadband	Average price across all Broadband plans
Min	€65.00	€76.33
Average	€76.33	
Max	€99	

[449] This is the weighted average of the prices of LLU (€11.52) and Line Share (€0.62). LLU and Line Share are weighted according to their prevalence i.e. lines sold. ComReg has also taken into account the retail cost an Access Seeker would bear when purchasing a wholesale LLU product.

[450] Between €0 and €10.

[451] Between €60 and 70.

[452] Between €0 and €10.

[453] Between €60 and €70.

[454] Eircom price list (No. 3 2023), eir broadband (Asymmetric Digital Subscriber Line). https://www.eir.ie/opencms/export/sites/default/.content/pdf/pricing/Part3.1.pdf correct at August 2023.

[455] This is the average across all broadband plans, both standalone and bundled, that are potentially provided for on the basis of Eircom VUA inputs.

5.170 Having regard to the above assumptions, ComReg estimates the ratio of the VUA price relative to the business retail bundle product (the '**Price-Cost Ratio**') to be approximately **[✂ [redacted] ✂]**,[456] and estimates the Price-Cost Ratio for LLU to be approximately **[✂ [redacted] ✂]**.[457]

5.171 The VUA Price-Cost Ratio (**[✂ [redacted] ✂]**)[458] reflects the proportion of the total bill for a package or bundle containing business retail services that would likely be affected by a SSNIP of Eircom VUA. This can be used to derive the dilution effect, which is the percentage increase in retail prices that would occur in response to the pass-through of a SSNIP of the VUA focal product.

5.172 The LLU Price-Cost Ratio (**[✂ [redacted] ✂]**)[459] reflects the proportion of the total bill for a bundle containing business retail services that would likely be affected by a SSNIP of LLU, which can be used to derive the LLU dilution effect.

5.173 The business end user dilution effects for VUA are set out in Table 23 below and are similar to those for residential retail prices. The WLA prices are symmetric across business and residential customers. ComReg estimates that a SSNIP of VUA would translate into approximate retail price increases of **[✂ [redacted] ✂]**[460] and **[✂ [redacted] ✂]**[461] for a SSNIP of 5% and 10% respectively.

Table 23: Dilution Ratios - % increase in business retail prices from SSNIP of VUA [✂PARTIALLY REDACTED✂]

Marginal Cost to Access Seeker	SSNIP	Wholesale Price Increase €	Price-Cost Ratio	Pre-SSNIP Retail Price	Effective Retail Price Increase €	% Retail Price Increase
[✂ [redacted] ✂]	5%	[✂ [redacted] ✂]	[✂ [redacted]]	€56.34	[✂ [redacted] ✂][462]	[✂ [redacted] ✂]
	10%	[✂ [redacted] ✂]			[✂ [redacted] ✂][463]	[✂ [redacted] ✂]

[456] Computed as the simple average price of standalone FTTx VUA divided by the combined average price of retail products relying on Eircom VUA inputs: **[✂ [redacted] ✂]**/€56.34. Between 60% and 70%.

[457] Computed as **[✂ [redacted] ✂]**/€76.33. Between 10% and 20%.

[458] Between 60% and 70%.

[459] Between 10% and 20%.

[460] Between 1% and 10%.

[461] Between 1% and 10%.

[462] Between €50 and €60.

[463] Between €50 and €60.

5.174 The approximate business end user dilution effects for LLU are set out in Table 24 below and are similar to those for residential retail prices. The WLA prices are symmetric across business and residential customers. ComReg estimates that a SSNIP of LLU would translate into approximate retail price increases of **[✂ [redacted] ✂]**[464] and **[✂ [redacted] ✂]**[465] for a SSNIP of 5% and 10% respectively.

Table 24: Dilution Ratios - % increase in business retail prices from SSNIP of LLU

Marginal Cost to Access Seeker €	SSNIP	Wholesale Price Increase €	Price-Cost Ratio	Pre-SSNIP Retail Price	Effective Retail Price Increase €	% Retail Price Increase
[✂ [redacted] ✂]	5%	[✂ [redacted] ✂]	[✂ [redacted] ✂]	€76.33	[✂ [redacted] ✂][466]	[✂ [redacted] ✂]
	10%	[✂ [redacted] ✂]			[✂ [redacted] ✂][467]	[✂ [redacted] ✂]

5.175 An Access Seeker purchasing LLU or VUA inputs may choose not to pass through some or all of the SSNIP of WLA, and instead absorb the wholesale price increase. However, in the long run, a SP operating in a competitive market which is not covering its costs may have to exit that market. This would likely further limit the extent to which retail substitution by end users might undermine the profitability of the SSNIP. While it is uncertain whether the WLA price increase would be fully or partially passed through to the price of retail services or other associated prices, ComReg forms the working assumption of full pass-through for the purpose of market definition, since this will prevent underestimation of any indirect retail constraints on the WLA markets arising from the pass-through of a VUA or LLU price increase into retail prices.

Criterion 2: What response in retail demand would be likely required to make a SSNIP unprofitable?

5.176 The threshold at which changes in retail demand may undermine the profitability of a SSNIP is estimated by means of a Critical Loss Test (‘**CLT**’). The CLT forms part of a SSNIP analysis by providing an estimate of the percentage of customers that would have to divert away from the focal product in response to a SSNIP (in this case the pass-through of a wholesale SSNIP to retail prices) to render the focal product price increase unprofitable.

[464] Between 1% and 10%.

[465] Between 1% and 10%.

[466] Between €70 and €80.

[467] Between €70 and €80.

5.177 Any increase in a retail price will typically have two opposing effects: a fall in sales (as customers switch to other providers) leading to reduced profits, but higher profits on sales to customers who remain with the HM. The CLT estimates the point at which the two effects directly offset each other, such that overall HM profit levels after the SSNIP remain unchanged. This point is known as the Critical Loss Value (‘**CLV**’).

5.178 An estimate of actual sales loss from the price increase can then be compared to the CLV. If the degree of demand substitution from the focal product(s) to another given product is less than the CLV, then the SSNIP is likely to be profitable and the market is no wider than the focal product. If the degree of demand substitution from the focal product(s) to another given product is greater than the CLV, then the SSNIP is likely to be unprofitable, and that alternative product should be included in the same market as the focal product.

5.179 The CLT requires detailed information regarding, for example, profitability and the marginal cost of WLA products in a competitive environment.[468] The CLT is by no means conclusive on its own and is considered by ComReg alongside other relevant indicative factors referred to throughout this Decision, including observable actual market dynamics such as changes in numbers of subscribers on particular broadband platforms.

5.180 ComReg has estimated the following CLVs associated with a 5% and 10% SSNIP of the focal products for residential end users:[469]

Table 25: Estimated residential and SME CLVs [✂REDACTED✂]

SSNIP	LLU		VUA	
	Residential	SME	Residential	SME
5%	[redacted]	[redacted]	[redacted]	[redacted]
10%	[redacted]	[redacted]	[redacted]	[redacted]

5.181 These estimates represent the proportion of retail end users (who are currently purchasing retail services reliant on VUA or LLU inputs) that would have to switch to a retail product provided on an alternative platform in order for that alternative product to be potentially included in the WLA markets on the basis of a sufficient indirect retail constraint.

468 Assuming that, in a competitive environment, prices would, over the long run, be set at long run marginal cost.

469 The detailed calculations underpinning these figures are set out at Annex 10.

5.182 For the purposes of this analysis, and in order to take a prudent approach to assessing potential substitutes due to the presence of effective indirect retail constraints, ComReg assumes that all of the SSNIP of the focal products by the HM would be passed through by the Access Seeker to prices at the retail level. Such retail price increases could manifest in a number of ways, including individual service elements of bundles or overall bundle charges. The dilution effects discussed in paragraph 5.165 suggest that a wholesale price increase would likely result in a lower price increase at the retail level.

5.183 As identified in paragraphs 5.164 and 5.170, the Price-Cost Ratio for residential and business customers is calculated at **[✂ [redacted] ✂]**[470] and **[✂ [redacted] ✂]**[471] respectively for VUA and **[✂ [redacted] ✂]**[472] and **[✂ [redacted] ✂]**[473] for LLU. ComReg has also calculated that a 5% SSNIP of VUA would result in an increase in the price of related retail services of **[✂ [redacted] ✂]**,[474] while a 10% SSNIP of VUA would result in an increase in the price of related retail services of **[✂ [redacted] ✂]**[475] for residential retail customers. Therefore, the potential maximum retail price increases arising from the pass-through of a 5% and 10% SSNIP of VUA are **[✂ [redacted] ✂]**[476] and **[✂ [redacted] ✂]**[477] respectively. A 5% SSNIP of LLU would result in an increase in the price of related retail services of **[✂ [redacted] ✂]**,[478] while a 10% SSNIP of LLU would result in an increase in the price of related retail services of **[✂ [redacted] ✂]**.[479] Thus, the potential maximum retail price increases from the pass-through of a 5% and 10% SSNIP of LLU are **[✂ [redacted] ✂]**[480] and **[✂ [redacted] ✂]**.[481]

[470] Between 70% and 80%.

[471] Between 60% and 70%.

[472] Between 10% and 20%.

[473] Between 10% and 20%.

[474] Between 1% and 10%.

[475] Between 1% and 10%.

[476] Between 1% and 10%.

[477] Between 1% and 10%.

[478] Between 1% and 10%.

[479] Between 1% and 10%.

[480] Between 1% and 10%.

[481] Between 1% and 10%.

5.184 ComReg calculates that a 5% SSNIP of VUA for business customers would result in an increase in the price of related business retail services of **[✂ [redacted] ✂]**,[482] while a 10% SSNIP of VUA would result in an increase in the price of related business retail services of **[✂ [redacted] ✂]**.[483] The potential maximum price increases arising from a pass-through of a 5% and 10% SSNIP of VUA are **[✂ [redacted] ✂]**[484] and **[✂ [redacted] ✂]**[485] respectively. A 5% SSNIP of LLU would result in an increase in the price of business retail services of **[✂ [redacted] ✂]**,[486] while a 10% SSNIP of LLU would result in an increase in the price of related business retail services of **[✂ [redacted] ✂]**.[487] Therefore, the potential maximum price increases arising from the pass-through of a 5% and 10% SSNIP of LLU are **[✂ [redacted] ✂]**[488] and **[✂ [redacted] ✂]**[489] respectively.

5.185 Only those retail end users which purchase retail services (whether on a standalone basis or as part of a bundle) from an Access Seeker that purchases WLA inputs are affected by the SSNIP. These end users face potential retail price increases arising from the pass-through the SSNIP, and the profitability of that SSNIP will be influenced by the responses of Access Seekers' end users. ComReg data suggest that, as of Q2 2023, approximately 7,164 end users on CG technology and **[✂ [redacted] ✂]**[490] end users on NG technology would be affected by the SSNIP. If a sufficient number of these retail customers switched to alternative platforms in response to the SSNIP of WLA by the HM, the scope of the WLA product markets could broaden to include those platforms.

[482] Between 1% and 10%.

[483] Between 1% and 10%.

[484] Between 1% and 10%.

[485] Between 1% and 10%.

[486] Between 1% and 10%.

[487] Between 1% and 10%.

[488] Between 1% and 10%.

[489] Between 1% and 10%.

[490] Between 400,000 and 500,000. This is total number of VUA products made available by a hypothetical monopolist in Q1 2023 to wholesale purchasers, according to ComReg QKDR data. This consists of **[✂ [redacted] ✂]** end users using Eircom FTTC and FTTP VUA products, **[✂ [redacted] ✂]** using SIRO and **[✂ [redacted] ✂]** using NBI. Since the SSNIP test is predicated on the supply of a focal product by a hypothetical monopolist, ComReg counts NG WLA merchant market supply from all active Network Operators, and not just Eircom.

5.186 End users are likely to take a wide range of factors into account when deciding whether to switch supplier and/or reduce their consumption of services, including factors not related to the price of their retail service (including where it is a component of a broader bundle of services). For example, end users may incur costs associated with switching between SPs,[491] or may demonstrate inertia arising from preferences around other aspects of a retail package or bundle (for example, regarding choice of broadband provider).

5.187 NBI suggested in its Submission that ComReg may be over-estimating end user switching costs by including (at footnote 387 of the 2023 Consultation) the cost of new CPE, since, in practice, retail SPs tend to supply the relevant CPE. End users may need to reprogramme CPE or re-establish WiFi connections using a newly supplied modem, but CPE purchase is likely not a material barrier to switching.[492]

5.188 ComReg notes that CPE acquisition is given as one of the possible examples of potential switching costs listed in the footnote along with search costs, installation charges, early contract termination fees, and service disruption. It is therefore not a switching cost which will be incurred with certainty by all end users - although ComReg notes that many retail SPs tend to supply new CPE when onboarding their retail customers. Even if CPE were deemed not to generate a switching cost, end users would likely still consider the other switching costs listed in the footnote.

5.189 According to the 2022 Residential Market Research (Slide 35), 52% of residential respondents were definitely aware of the monthly cost of their retail package or bundle, while 19% were not aware of the monthly cost. Such levels of awareness are likely to impact the potential response of end users to price changes resulting from a SSNIP of WLA. In particular, end users who demonstrate awareness of the cost of their retail package are more likely to identify and respond to any price increases.

[491] Possible switching costs include search costs and costs associated with the purchase of new customer premises equipment ('**CPE**') if not provided by the retail SP, installation charges and potential costs for early contract termination (given that, particularly in the case of bundles, customers are usually tied to contracts). Service disruption during the switching process may also be a factor, particularly for business customers.

[492] NBI Non-confidential Submission, p.6.

5.190 The 2022 Market Research reported a relatively low incidence of churn between retail SPs, with just 8% of residential respondents and 17% of business respondents having reportedly switched in the 12 months prior to the survey date. In contrast, 64% of residential and 36% of business respondents had never switched.[493]

5.191 The low rate of churn suggests the presence of a level of inertia amongst end users which is likely to deflate switching behaviour, some of which may be explained by the increased prevalence of bundled retail services, which tends to increase the complexity of purchasing and switching decisions, compared to the purchase of services on a standalone basis. ComReg notes in this regard that Eircom has announced its intention to increase - or has already increased - its retail price annually. Most recently Eircom has stated on its website that *"The annual CPI rate published in January 2023 was 8.2%. While this would result in an increase of 11.2%, eir have capped the 2023 increase at 8% of the standard monthly price of services, excluding any discounts for residential customers."*[494] Some (but not all) other SPs have similarly announced their intention to increase retail prices on different technologies on an annual basis.[495] Despite these announcements (the impact of which may not yet have passed through to certain end users, depending on where they are in their contract lifecycle), retail subscriptions delivered over FTTx platforms have increased, from 709,272 in Q4 2018 to 1,070,348 in Q2 2023. At the same time retail broadband subscriptions based on CATV networks have declined to 359,669, a decline of 4.7% from the Q1 2021 peak (377,570).

5.192 Annex 6 and Annex 7 summarise outputs from the 2022 Market Research concerning residential and SME respondents' reported behaviour in response to a notional €4 increase in the **retail price** of broadband in a bundle, or €2 in the case of standalone broadband. In the context of an assessment of indirect retail constraints, this notional €2 or €4 retail price increase may overestimate the behavioural responses of retail end users, having regard to the maximum retail price increases arising from the pass-through of a 5% and 10% SSNIP in WLA. Nevertheless, reported behavioural changes in response to these price increases can inform the indirect retail constraints assessment.

[493] See Slide 72 of the 2022 Residential Market Research and Slide 42 of the 2022 SME Market Research slides.

[494] Eircom proposes to increase the price of monthly plans in April of each year, in line with the Consumer Price Index (CPI) plus an additional 3%, https://www.eir.ie/annual-price-increase/.

[495] Vodafone and Three will both increase their monthly price plans each April based on CPI plus 3%, https://n.vodafone.ie/annual-price-adjustment.html and https://www.three.ie/legal/terms/annual-price-adjustment.html.

5.193 ComReg considers whether retail services provided over CATV or alternative FTTP networks could pose a sufficiently immediate and effective indirect retail constraint, such that they warrant inclusion in the WLA product markets.

5.194 Copenhagen Economics argues[496] that ComReg misapplies the SSNIP test by investigating whether the number of end users that would switch to a specific alternative would be sufficient to render the SSNIP unprofitable, instead of assessing the overall SSNIP profitability, thus underestimating the full extent of demand-side substitutability in response to a SSNIP.

5.195 Copenhagen Economics quotes ComReg's approach to the assessment of CATV as an indirect retail constraint and suggests that this provides evidence that ComReg departs from the analytical framework set out in the SMP Guidelines. In this respect, Copenhagen Economics states:

> *"ComReg states directly that its assessment seeks to answer not whether a SSNIP would be profitable but whether retail broadband provided over a CATV network should be included in the WLA markets on the basis of the indirect retail constraint it is capable of generating. That is, in response to a 5 per cent to 10 per cent SSNIP (…) would a sufficient number (…) customers switch to CATV-based retail services such that it would render the SSNIP unprofitable?"*[497]

5.196 Copenhagen Economics suggests that this diverges from the guidance given in the SMP Guidelines and states:

> *"It is not necessary that all consumers switch to a competing product;* [in assessing demand side substitutability] *it suffices that enough or sufficient switching takes place so that a relative price increase is not profitable."*[498]

5.197 Copenhagen Economics' Figure 7 suggests that ComReg has failed to account for various demand-side responses and, by implication, had departed from the framework set out in the SMP Guidelines. ComReg disagrees with Copenhagen Economics' reasoning and has not, as it asserts, departed from the analytical framework set out, *inter alia*, in the SMP Guidelines. ComReg has, nevertheless, assessed the potential impact on its indirect retail constraints assessment of including additional demand-side responses and, as set out below, considers that the addition of these demand-side responses would not materially alter ComReg's conclusions.

[496] Copenhagen Economics Non-confidential Submission, paragraph 3.31.

[497] Copenhagen Economics Non-confidential Submission, paragraph 3.32.

[498] SMP Guidelines, footnote 24, quoted in Copenhagen Economics Non-confidential Submission, paragraph 3.33.

5.198 Copenhagen Economics seeks to give the impression that ComReg has not sought to carry out an overall assessment of the profitability of a SSNIP. This is not correct, and Criterion 2 of ComReg's assessment of indirect retail constraints is entitled 'Criterion 2: What response in retail demand would be likely required to make a SSNIP unprofitable?'.

5.199 It is first worth noting that ComReg does not only, as Copenhagen Economics appears to suggest, assess whether retail broadband provided over CATV could exercise an indirect retail constraint on the NG WLA focal product. As set out at paragraphs 5.178 to 5.185 of the 2023 Consultation, ComReg also assesses potential indirect constraints arising from retail broadband provided over localised alternative FTTP networks, satellite, FWA, and mobile.

5.200 Copenhagen Economics also suggests[499] that ComReg, in using the SSNIP test to define the parameters of the relevant market, should have taken into account demand-side responses other than switching (as set out in Figure 7 of its Submission) to assess the overall impact on HM profitability of a SSNIP, and that this would have been consistent with the SMP Guidelines.

5.201 Figure 7 misrepresents ComReg's analysis by indicating that ComReg only considered one of six identified categories of consumer in its product market definition assessment. ComReg correctly considered four of the categories in Figure 7 (Switch to cable, Switch to copper, Switch to fixed wireless, and Switch to mobile) and correctly excluded from consideration, for the reasons set out below, the remaining two categories (Stay but downgrade, Cancel entirely). By way of a sensitivity analysis, ComReg has, nevertheless, considered what, if any, impact the inclusion of these two categories of demand-side responses would have on the indirect retail constraints assessment, including having regard to actual market dynamics.

5.202 Copenhagen Economics argues that, in assessing indirect constraints, an approach which focusses on whether a SSNIP would be profitable overall, rather than focusing on individual component effects only, is closer to the established framework set out in the SMP Guidelines than ComReg's approach (although it does not at any point in its reasoning reference a specific supporting reference from EC guidance):

[499] Copenhagen Economics Non-confidential Submission, p.34.

> *"Instead of assessing whether a SSNIP would be profitable overall, ComReg instead focuses on a partial effect only, by investigating merely whether the number of end-users that would switch to a specific alternative technology would be sufficient alone to render the SSNIP unprofitable. This entails a bias by underappreciating the full extent of demand-side substitutability constraints."*[500]

5.203 ComReg disagrees with this assertion and considers that ComReg's approach is consistent with EC guidance that, at market definition stage, the function of the SSNIP is to assess substitutability.

5.204 The Notice on Market Definition focusses on the use of the SSNIP test to determine substitutability. In this conception, the profitability of the SSNIP is a function of customer switching activity:

> *"17. The question to be answered is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range 5 % to 10 %) but permanent relative price increase in the products and areas being considered. If substitution were enough to make the price increase unprofitable because of the resulting loss of sales, additional substitutes and areas are included in the relevant market."*[501]

5.205 The 2020 Explanatory Note makes clear that the function of the SSNIP test is not to assess the profitability of a HM SSNIP in the abstract, but rather as a means of determining substitutability:

> *"The SSNIP test assumes a non-transitory price increase of approximatively 5-10 % and <u>assesses if such price increase would lead to customers switching away from the product subject to the price increase towards a potential substitute product</u>."*[502]

5.206 Copenhagen Economics argues that the key question that the SSNIP test attempts to answer in the context of market definition is whether a HM would be able to profitably apply a SSNIP on the focal product and partially quotes paragraphs 29 and 30 of the SMP Guidelines in support of this proposition:

> *"The key question that the SSNIP test attempts to answer is whether a hypothetical monopolist would be able to profitably apply a SSNIP on the focal product. As explained by the European Commission in the guidelines on market analysis and the assessment of significant market power (SMP Guidelines):*

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[500] Copenhagen Economics Non-confidential Submission, paragraph 3.31.

[501] Notice on Market Definition, paragraphs 15 to 17.

[502] 2020 Explanatory Note, at p.10.

• *"Under this test [SSNIP test], an NRA should ask what would happen if there was a small but significant and non-transitory increase in the price of a given product or service (…)."*

• *"[…] the key issue is to determine whether the sales lost by the operators would be sufficient to offset their increased profits, which would otherwise be made following the price increase."*[503]

5.207 However, Copenhagen Economics has selectively quoted the SMP Guidelines. The full text makes clear that the assessment of profitability is to be made in the context of customer switching to alternatives, each of which must be considered in its own right, and that the SSNIP test is designed to identify whether substitute products to the focal product exist. In particular, the 'sales lost' alluded to by Copenhagen Economics is specified by the EC in the specific context of customers switching to alternative products or services:

> *"29. One possible way of assessing the existence of any demand and supply-side substitution is to apply a so-called 'hypothetical monopolist' or SSNIP test. Under this test, an NRA should ask what would happen if there was a small but significant and non-transitory increase in the price of a given product or service, assuming that the prices of all other products or services remain constant ('relative price increase'). While the significance of a relative price increase will depend on each individual case, NRAs should consider customer (consumer or undertaking) reactions to a small but non-transitory price increase of between 5 to 10 %. <u>Customer responses will help determine whether substitutable products exist and, if so, where the boundaries of the relevant product market should be delineated.</u>*

[503] Copenhagen Economics Non-confidential Submission, paragraph 3.29, partially quoting paragraphs 29 and 30 of the SMP Guidelines.

> *30. As a starting point, the NRA should first identify an electronic communications service or product that is offered in a given geographical area and may be subject to the imposition of regulatory obligations. Subsequently, the NRA may add additional products or areas depending on whether competition from these constrains the price of the main product or service in question. Since a relative price increase of a set of products is likely to lead some customers to switch to alternative services or products resulting in sales being lost, the key issue is to determine whether the sales lost by the operators would be sufficient to offset their increased profits, which would otherwise be made following the price increase. Assessing demand- and supply-side substitution provides a way of measuring the 'critical loss' of sales (rendering a relative price increase unprofitable) and consequently of determining the scope of the relevant market. The NRA should therefore apply this test up to the point where it can be established that a relative price increase within the geographic and product markets defined will be profitable, i.e., will no longer cause a critical loss of sales to readily available substitutes or to suppliers located in other areas."*

5.208 Copenhagen Economics also partially quotes footnote 24 of the SMP Guidelines in support of its proposition that ComReg has underestimated the full demand-side response to a SSNIP by focussing on switching to particular technologies and excluding the categories of non-switching demand response set out in its Figure 7:

> *"It is not necessary that all consumers switch to a competing product; it suffices that enough or sufficient switching takes place so that a relative price increase is not profitable."*

5.209 The footnote on which Copenhagen Economics relies is clear that the profitability of a price increase is to be construed in the context of switching, and that the test for demand side substitutability is, very specifically, a sufficient level of switching to a particular competing product, and not, as Copenhagen Economics argues, a sufficient level of ***any*** demand side response.

5.210 ComReg nevertheless considers below, by way of a sensitivity analysis, the impact – if any – of including such demand-side responses in its assessment of indirect retail constraints, in particular from CATV based broadband.

Retail services provided over CATV

5.211 In paragraphs 4.82 to 4.96, ComReg identified that retail broadband provided over CATV would likely be an effective substitute for retail broadband delivered using WLA inputs. QKDR data indicate that, since the publication of the 2018 Decision, retail subscriptions on VMI's CATV network have declined somewhat, recording a 3.5% decrease from Q4 2018 to Q2 2023 to a total of 359,669 subscriptions. ComReg notes that, while VMI CATV subscription levels have declined, this is also in the context of overall growth in fixed retail broadband subscriptions. Accordingly, ComReg QKDR data show that CATV retail subscriptions as a proportion of total fixed retail broadband subscriptions have declined from 26% in Q4 2018 to 22.2% in Q2 2023. As noted in paragraph 5.191 above, Eircom and some other SPs have been increasing retail prices for broadband and other services) on the basis of automatic price increase clauses set out in consumer contracts. In the presence of these increases, CATV subscribers have nonetheless declined to the levels above. Noting that VMI is also overlaying its CATV network with FTTP, ComReg would expect that over time, CATV subscriptions will fall further (although the rate at which this occurs is dependent on the rate at which VMI progresses this network upgrade and the extent to which consumers use products on this upgraded network). This suggests that the strength of any indirect constraints exerted by VMI's CATV network will also diminish over time.

5.212 ComReg now considers whether retail broadband provided over a CATV network should be included in the WLA markets on the basis of the indirect retail constraint it is capable of generating. That is, in response to a 5% to 10% SSNIP of LLU or VUA being passed by Access Seekers on to higher retail prices, would a sufficient number of those Access Seeker customers switch to CATV-based retail services, such that it would render the SSNIP unprofitable?

5.213 The EC has indicated in its 2020 Explanatory Note that:

> *"Access to current generation of cable networks (DOCSIS 3.1) can only be provided at central level. Therefore, the WLA market does not include access to cable networks. However, a relatively widespread presence of cable at retail level can constrain the ability of fixed incumbents to act independently at wholesale level. Under such circumstances, the WLA market could be left, at least partly, unregulated based on indirect retail constraints stemming from cable. Such deregulation is not unprecedented."*[504]

[504] At p.42.

5.214 As of Q2 2023, VMI's CATV network coverage extended to **[✂** [redacted] **✂]** premises in the State, largely in urban areas.[505] VMI predominantly provides retail services to the residential segment, with limited provision of retail services to businesses.[506] This suggests that a significant proportion of retail customers (end users located outside the VMI network footprint, or business customers located within it) that would be impacted by a SSNIP of WLA could not switch to a CATV-based retail product. Any constraint is likely to be sub-national in nature and limited to those areas where the VMI CATV network has rolled out.

5.215 Figure 28 presents market share figures for the WLA markets in the hypothetical scenario where VMI's CATV retail subscriber base is included in those markets on the basis of indirect retail constraints. This describes a 'worst case' scenario where, absent WLA regulation, all retail broadband delivered using Eircom merchant market NG WLA reverts back to Eircom retail. In reality, there would likely also be migration to SIRO or NBI. Accordingly, Figure 28 suggests a hypothetical upper bound for Eircom NG WLA market share, taking into account VMI CATV (and NBI, which although it has some overlap with Eircom FTTx, SIRO FTTP and VMI CATV, would be expected to decline over time, as demand for Eircom FTTC in the IA falls). This shows that Eircom's hypothetical market share fell **[✂** [redacted] **✂]**[507] since Q1 2019.

5.216 Even including VMI's 359,669 **<u>retail</u>** CATV subscribers as of Q2 2023, it does not materially alter the conclusion that Eircom is the primary supplier and consumer (i.e. self-supply) of WLA products.

[505] VMI QKDR submission to ComReg. In the range of 800,000-850,000 premises.

[506] ComReg QKDR data suggest that, as of Q2 2023, 5.2% of VMI CATV subscriptions were business customers, a slight increase from 4.1% at the time of the 2018 Decision.

[507] In the range 50-60%.

Figure 28: Hypothetical Market Shares – NG WLA market including Retail CATV [✂REDACTED✂][508]

[redacted]

Figure 29: Hypothetical Market Shares – CG WLA Market[509]

508 In accordance with the MGA ComReg assumes no regulation in the WLA markets or related downstream markets. In this scenario, Eircom SMP regulated NG WCA merchant market supply would become effective VUA supply to its retail arm.

509 In accordance with the MGA, ComReg assumes that Eircom's CG WCA merchant market supply would become LLU supply to its retail arm.

5.217 According to the 2022 Market Research, 25%[510] of residential end users who purchase broadband in a bundle would consider changing their behaviour in response to a €4 increase in the price of their broadband service. Of the 3.2% of residential respondents who positively affirmed that they were likely to switch their SP in response to a SSNIP of €4 in the price of their broadband service, 22% of these indicated they would switch to a CATV-based network – that is, less than 1% of respondents who purchase broadband as part of a bundle.[511] In other words, if there were 10,000 respondents, 2,500 would consider changing their behaviour in response to a SSNIP. 320 would switch SP, of whom 75, or 0.7% of all respondents, would switch to CATV, specifically. 18% of respondents indicated that they did not know what action they would take in response to a €4 retail price increase. If these respondents were assigned on a pro rata basis across other responses,[512] the outcome for the notional sample of 10,000 would be substantially unchanged. 3,048 would consider changing their behaviour in response to a SSNIP. 487 would switch SP, of whom 107, or 0.95% of all respondents, would switch to CATV. Thus, even reassigning 'don't knows' proportionately, it continues to be the case that less than 1% of respondents who purchase broadband as part of a bundle would switch to CATV in response to a SSNIP.

5.218 VMI's network coverage is mainly focussed on urban and suburban areas. Accordingly, only those end users located in this network footprint could switch to a CATV-based retail service in response to the pass-through at retail level of a SSNIP of WLA. Of the respondents who indicated their intention to switch to another type of broadband, 81% were sure that the broadband in question was, in fact, available in their area.[513] As the 22% figure referred to in the previous paragraph is based on a nationally representative sample of respondents, it is likely that not all those respondents could actually switch to CATV.[514] Thus, this figure may overstate the CATV switching response.

[510] At slide 55, counting respondents who said they would downgrade, cancel, or shop around.

[511] At slide 59.

[512] Which ComReg considers is an incorrect approach, for the reasons set out at paragraph 5.262 below.

[513] At slide 60.

[514] CATV-based broadband is available to approximately 41% of premises in the State.

5.219 ComReg accordingly considers it unlikely that there would be sufficient demand substitution to CATV-based services at the retail level in response to the pass-through of a SSNIP in WLA into retail prices such as to render that wholesale price increase unprofitable, on either the CG WLA market or the NG WLA market. Subscriptions on VMI’s CATV network have been in low level decline in recent quarters, even where other SPs such as Eircom have increased their retail prices. ComReg therefore considers that VMI CATV retail broadband is unlikely to act as a sufficiently effective indirect retail constraint on the provision of CG WLA or NG WLA.

5.220 NBI stated in its Submission that the assessment of the capacity of CATV to act as an indirect retail constraint is flawed because ComReg used national-level data to show that VMI retail broadband coverage is less extensive than Eircom. NBI argued that ComReg did not clearly demonstrate whether a lack of overlap between NBI, SIRO and VMI meant that many or most premises had a choice of at least one other wholesale or retail provider.[515]

5.221 ComReg has noted above that end user substitution to VMI CATV in response to the pass through of a SSNIP of WLA into retail prices is only possible where VMI CATV passes that end user’s premises. On a national basis, there are fewer VMI CATV retail subscribers than there are subscribers reliant on self-supply or merchant market Eircom WLA. ComReg’s assessment of switching possibilities in response to a SSNIP must therefore have regard to the extent of VMI's CATV network and the willingness of end users to switch to that network in response to a SSNIP of WLA by a HM (and the associated passthrough into retail prices). The 2022 Market Research found that less than 1% of overall respondents would switch to a CATV network in this scenario and ComReg has noted that not all such switching would be likely to occur given the market research is based on a national sample with VMI only being present in certain areas. The presence (or absence) of overlapping networks aside from VMI CATV is not material to whether VMI CATV is likely to pose a sufficiently effective indirect retail constraint on WLA. Overlapping networks are considered below in the WLA geographic market definition assessment.

5.222 ComReg revisits the capacity of VMI CATV to exert a competitive constraint from outside the relevant market at Section 6.4.2 below - thereby taking into account the smaller, non-national markets defined in Section 5.3 below.

[515] NBI Non-confidential Submission, pp.6-7.

Other NRAs include CATV as an indirect retail constraint

5.223 Copenhagen Economics suggests that the inclusion of CATV would be consistent with the approaches taken by other NRAs, which have held that wholesale fibre is constrained by CATV on the basis of indirect retail constraints. Copenhagen Economics infers that, where CATV and FTTx-based wholesale products are substitutable and serve the same retail broadband market, they should also form part of the same wholesale market.[516]

5.224 ComReg considers that none of the five examples relied upon by Copenhagen Economics provide useful precedent for the Irish market, due to material differences in market definition and market dynamics.

UK

5.225 Ofcom included retail CATV in the WLA relevant product market in its 2018 WLA Market Review[517] arising from the indirect retail constraint which it found was generated in that market. Ofcom and ComReg both include CATV in the retail broadband market, but the analyses diverge as to whether CATV acts as an indirect retail constraint on the respective WLA markets.

5.226 Ofcom's assessment differs from that of ComReg, as it did not survey end user willingness to switch, and instead relies on other indicators and estimates of critical losses in order to conclude that CATV should be included in the WLA product market as an indirect retail constraint. Similarly, Ofcom did not survey willingness to switch so it could not carry out a full CLA.

Finland and Spain

5.227 Copenhagen Economics notes that both the Finnish NRA (FICORA) and the Spanish NRA (CNMC) included CATV in the **WCA** product market, but fails to recognise that, in their most recent WLA market reviews, FICORA[518] and CNMC[519] both excluded CATV from their **WLA** product market definition. The CNMC and FICORA decisions are therefore consistent with ComReg's exclusion of CATV from the NG WLA product market.

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[516] Copenhagen Economics Non-confidential Submission, paragraph 3.20.

[517] https://www.ofcom.org.uk/__data/assets/pdf_file/0020/112475/wla-statement-vol-1.pdf at paragraphs 3.70 to 3.87.

[518] Commission Decision concerning Case FI/2017/1991: Wholesale local access provided at a fixed location in Finland, 3 July 2017.

[519] Commission Decision concerning Case ES/2021/2330: Wholesale local access provided at a fixed location in Spain, 19 July 2021.

Denmark

5.228 Copenhagen Economics noted that the Danish NRA (DBA) concluded that CATV formed part of the relevant wholesale markets for high-capacity networks. The DBA cited similar functionalities from the end user perspective to justify including CATV in the retail broadband market. The DBA then cited the retail market definition as the reason for also including CATV in the wholesale market.

5.229 Danish market circumstances differ substantially from Irish market circumstances. DBA defines a high capacity wholesale infrastructure market which includes both FTTx and CATV, instead of separate WLA and WCA markets. In Denmark WCA is offered over CATV. ComReg understands from the DBA decision that CATV is therefore included in the high capacity infrastructure market on the basis that WCA is offered over CATV in Denmark, and not because CATV generates a sufficiently effective indirect retail constraint on WLA. The Danish example therefore provides no authority for the correct interpretation of the SSNIP test on the Irish WLA market.

The Netherlands

5.230 Copenhagen Economics argues that the Dutch NRA (ACM) noted that the competitive constraint exerted by retail CATV on both wholesale and retail fibre warranted including CATV in the same relevant market on the basis that:

(a) the available capacity of CATV will increase over time;

(b) comparable retail services can be offered based on access to CATV networks; and

(c) indirect price pressure is exerted by retail services over CATV on retail services over copper and fibre networks.

5.231 However, ACM's product market definition, in light of market dynamics in that jurisdiction, includes both WLA and WCA. Copenhagen Economics argues that this means that the indirect constraint from the retail market constrains the pricing of both WLA and WCA.[520]

5.232 ComReg notes that ACM's assessment established that CATV generates a **direct constraint** on WCA (but not WLA). This is because there is some very limited provision of WCA-based access to CATV networks and Vodafone Ziggo is capable of providing such wholesale access on its CATV network.

[520] Commission Decision concerning Cases NL/2018/2099 and NL/2018/2100: Wholesale fixed access market in the Netherlands, 30 August 2018.

5.233 ACM also concluded that CATV is an indirect retail constraint on Wholesale Fixed Access on the basis of market research which it commissioned. In response to a 10% SSNIP of fibre access, enough end users would switch to CATV to render that price increase unprofitable.

5.234 ACM calculates a copper / fibre critical loss of 9.43%. In respect of fibre, the actual loss exceeds the critical loss (10.63% > 9.43%).[521] ComReg is satisfied that its use of a lower dilution ratio based on an assumption of partial SSNIP pass-through and consumer survey responses to a willingness to switch question remains valid in the context of the Irish market.

Retail services provided over localised alternative FTTP networks

5.235 ComReg considers whether retail services provided over localised alternative FTTP networks (e.g. Magnet, Digiweb) should be included in the WLA markets on the basis of indirect retail constraints. Thus, in response to the pass-through of a 5% to 10% SSNIP in WLA by Access Seekers on to retail prices, would a sufficient number of end users switch to retail services delivered over localised alternative FTTP such that it would make the SSNIP unprofitable?

5.236 Given the indirect link between the retail market and WLA market, any competitive constraint posed by localised alternative FTTP products in the retail market is likely to be muted in terms of its constraint on the WLA markets, given the dilution effects discussed at paragraphs 5.165 and 5.166 above. Accordingly, end users are likely to have a lower response to a diluted retail price increase arising from the 5% to 10% SSNIP of a wholesale input, compared with a direct SSNIP of 5% to 10% in retail prices.

5.237 The coverage of localised alternative FTTP networks in the State is limited, and as of Q1 2023, is capable of providing retail services to circa 30,000 premises, largely in urban areas. This suggests that a significant proportion of retail customers affected by a SSNIP of WLA would not be in a position to switch to retail services delivered over localised alternative FTTP.

5.238 The 2022 Market Research indicates that some residential broadband customers would consider switching to FTTP products in response to a SSNIP of their current retail broadband product. 25% of residential customers on a copper network who are likely to switch would switch to fibre in response to this SSNIP.[522] As noted above, the diluted retail price increase is likely to dampen incentives for effective retail substitution compared to a direct SSNIP.

[521] ACM, 2018. 'Marktanalyse Wholesale Fixed Access, Ons kenmerk ACM/UIT/499799', at Table C.6, Berekening actual loss vaste internettoegang via het glasvezelnetwerk. https://www.acm.nl/nl/publicaties/marktanalysebesluit-wholesale-fixed-access

[522] Slide 56 in 2022 Residential Market Research. These customers purchase broadband on a standalone basis.

5.239 The 2022 Market Research data indicate that 22% of residential customers on a copper network would switch to a FTTP product in response to a SSNIP of their retail broadband product.[523]

5.240 Given the likely response from retail customers to a diluted increase in retail prices arising from a 5% to 10% SSNIP of LLU or VUA, it is unlikely that the proportion of customers switching to retail products delivered over localised alternative FTTP in response to a SSNIP of WLA would exceed the CLVs identified in Table 25 above.

5.241 Accordingly, ComReg is of the view that retail services provided over localised alternative FTTP are unlikely to exert a sufficiently effective indirect retail constraint on LLU or VUA. While the product characteristics, pricing and intended use of retail broadband offered over localised alternative FTTP would, in principle, allow it to act as an effective demand-side substitute for retail broadband delivered over FTTx, this is limited by the geographic coverage of alternative localised FTTP networks.

Retail services provided over FWA, satellite, and mobile networks

5.242 In paragraphs 4.126 to 4.142, ComReg found that retail broadband services provided over FWA, satellite and mobile networks do not fall within the retail broadband market. In view of this, ComReg considers that such services are unlikely to exert a sufficiently effective indirect retail constraint on Eircom WLA, given the likely lack of effective demand-side substitution in response to the pass-through of a SSNIP of WLA.

Interpretation of 2022 Market Research

5.243 Copenhagen Economics argues that ComReg misapplies its own survey results by ignoring several categories of survey respondents,[524] and therefore fails to appropriately estimate the full demand-side response to a retail broadband price increase.

5.244 Copenhagen Economics asserts that the use of the SSNIP test for market definition purposes requires taking into account all end user responses, rather than solely those end users who would switch to an alternative, as set out at Figure 9 of its Submission.

[523] Slide 59 in 2022 Residential Market Research.

[524] Copenhagen Economics Non-confidential Submission on behalf of Eircom, paragraph 3.35.

5.245 Copenhagen Economics asserts that the SSNIP test should assess the full demand-side response to a SSNIP, including end users who respond that they will cancel, switch to technologies other than CATV, shop around, or 'don't know'. It allocates 'shop around' and 'don't know' responses to other response categories according to the relative likelihoods among other respondents (i.e., assuming these consumers would behave in the same way as the other respondents, on average), to derive a SSNIP.

5.246 ComReg disagrees with this reasoning. ComReg first draws attention to the correct interpretation of the 2022 Market Research which provides the basis of the SSNIP assessment in the 2023 Consultation. The 2022 Market Research asked how respondents would react to a €4 increase in the price of their retail bundle. This €4 figure – which was selected to aid in survey respondent comprehension - likely overstates the pass-through of a wholesale SSNIP into retail prices, and therefore overstates end user response to that pass-through. This is because, as set out at Table 16 above, Eircom VUA prices range up to €33.50, implying a 10% wholesale price increase would result in a maximum retail price increase pass-through of €3.35. A €4 retail price increase therefore overstates, by a minimum of 19%, the retail price increase stemming from a 10% SSNIP of wholesale prices.

5.247 As set out above, ComReg considers that the Notice on Market Definition, the SMP Guidelines, and the 2020 Explanatory Note make clear that the SSNIP test should take into account switching behaviour. It is therefore appropriate to exclude respondents who cancel completely or downgrade their packages, since these consumers do not switch to another product. ComReg nevertheless considers the potential impact of including these responses in its assessment of indirect retail constraints.

5.248 Before considering each category individually, ComReg notes as set out at Table 25 above, that a 5% or 10% SSNIP would be unprofitable if **[✂** [redacted] **✂]** of residential end users, or **[✂** [redacted] **✂]** of SME end users switched in response (or, in Copenhagen Economics' formulation, made any type of demand-side response).

Respondents who cancel completely

5.249 Copenhagen Economics asserts that ComReg has erred in ignoring respondents who indicate that, in response to a SSNIP, they would cancel their broadband subscription entirely, resulting in a net loss of profitability to the HM. The 2022 Market Research indicates that, across all SME and residential respondent categories, no more than 2% of respondents indicate that they would cancel completely in response to a SSNIP. Compared with the CLVs set out at paragraph 5.248 above, this suggests that a SSNIP of 5% or 10% would not be rendered unprofitable by end users cancelling their contracts entirely at the levels reported in the 2022 Market Research.

Respondents who remain but downgrade

5.250 Copenhagen Economics argues that a full demand-side response assessment should account for respondents who stay with their provider but, in response to a price increase, downgrade (amounting to 6-8% of residential survey respondents and 4-6% of SME survey respondents). However, on the assumption that sales are made above cost, ComReg notes that such end user behaviour would not affect the hypothetical monopolist's profitability – although it may, depending on the profit margins for individual products, result in a lower profit margin.[525]

5.251 Accordingly, where end users choose to remain but downgrade in response to a SSNIP, this will not cause the HM to incur a loss and will, at worst, lead to continued profits, but at a lower level. Even if these end users were included in the indirect retail constraints assessment, it is unlikely that it would lead to a different outcome, as these retained end users would continue to contribute to the HM's profitability following implementation of a SSNIP.

5.252 This leaves 'shop around' and 'don't know' respondents, for whom the correct interpretation is ambiguous, as Copenhagen Economics recognises. ComReg excludes these respondents and focuses on responses which positively affirm an intention to engage in a specific course of action. Copenhagen Economics argues that these respondents should be allocated to other response categories as prescribed at Appendix A of its Submission.

5.253 Copenhagen Economics argues that, on average, 'don't know' respondents will react to a price increase in the same way as the remaining survey respondents and should be reallocated in this proportion – an approach which Copenhagen Economics indicated had also been used by the UK CMA.

[525] Copenhagen Economics Non-confidential Submission on behalf of Eircom, paragraph 3.41.

5.254 ComReg identifies two issues with Copenhagen Economics' approach. These are, firstly, the validity of the underlying assumptions, and, secondly, the categories to which respondents are assigned.

<u>Validity of the underlying assumptions</u>

5.255 Copenhagen Economics focusses on 'don't know' and 'shop around' responses in the 2022 Market Research. Red C, which carried out the 2022 Market Research on behalf of ComReg, cautioned where appropriate that its survey results were based on small sample sizes. The switching and cancellation responses to a SSNIP in the 2022 Residential Market Research are, in general, accompanied by a small sample size caution. Copenhagen Economics extrapolates outcomes based on small sample sizes, which raises concerns about the representativeness of its inferences.

Redesignation of 'Don't know' responses

5.256 The 2022 Market Research indicated that 17-18% of residential respondents and 0-3% of SME respondents indicated that they did not know how they would respond to a SSNIP. Based on calculated CLVs, a SSNIP would not, therefore, be rendered unprofitable by 'Don't know' SME end users even if, hypothetically, all of those respondents were assumed to actually switch to an alternative. A SSNIP could, however, be rendered unprofitable if a sufficient amount of residential 'Don't know' respondents switched (**[✂** [redacted] **✂]** in response to a 5% SSNIP, and **[✂** [redacted] **✂]** in response to a 10% SSNIP). ComReg considers, however, that is an extreme assumption, given that only 4-6% of residential respondents affirm an intention to switch. Accordingly, scaling expected switching responses across to 'Don't know' responses, ComReg considers that, even if these respondents were included, they would not lead to a SSNIP being rendered unprofitable.

5.257 Copenhagen Economics proposes to allocate 'don't know' respondents to other responses in proportion with the overall response rate and states that this is compatible with usage in other countries. This is not fully the case.

5.258 Copenhagen Economics relies in support of its reasoning on the CMA's 2018 *Good practice in the design and presentation of customer survey evidence in merger cases*.[526] This guidance is equivocal on the allocation of 'don't know' survey responses:

> *"'Don't know' responses need to be considered very carefully. A response of don't know to the main (first) diversion question usually means that the respondent is not asked any further questions relating*

[526] https://www.gov.uk/government/publications/mergers-consumer-survey-evidence-design-and-presentation/good-practice-in-the-design-and-presentation-of-customer-survey-evidence-in-merger-cases

to that hypothetical scenario and the response is not informative for the purpose of the diversion ratio calculation. Therefore, it can be ignored for this purpose and should not be included in the denominator of the calculation.

However, if the customer answers that they would divert to another supplier but in a subsequent question says they do not know which supplier, then this answer is partially informative because they have stated that they would have diverted their expenditure rather than staying with the merger Party or exiting the market. In these circumstances, usual practice is to allocate 'don't know' responses in the same proportions as those who have explicitly named the retailer to which they would divert."

5.259 The CMA guidance requires only that 'don't knows' in response to a follow-on question be allocated proportionately, and that 'don't knows' in response to a main question be ignored.

5.260 Additionally, ComReg notes that ACM's Wholesale Fixed Access Market Review includes CATV as an indirect retail constraint on the basis of market survey evidence.[527] ACM deemed survey respondents who gave 'don't know' responses when asked if they would switch in response to a 10% price increase to be 'stayers' which were not reassigned to other response categories. This is the approach which the market research firm engaged by ACM (Blauw Research) indicated in its survey report.[528] Since this was the response given to a main question, Blauw Research's approach is consistent with the CMA approach relied on (but, in ComReg's estimation, misinterpreted) by Copenhagen Economics.

5.261 The ComReg survey data which Copenhagen Economics queries indicate that 18% of respondents gave a 'don't know' response when asked what they would do if the cost of their bundle increased by €4 per month. The sample for this question was based on responses to an earlier question which asked respondents to indicate the form of broadband access they used. Thus, in accordance with CMA guidance, the €4 price increase question is the main (first) diversion question and, accordingly, the response should be ignored.

[527] ACM, 'Marktanalyse Wholesale Fixed Access', at paragraph 1045. https://www.acm.nl/sites/default/files/documents/marktanalyse-wholesale-fixed-access-20180928.pdf

[528] Blauw Research, 2017. 'Overstap-gedrag bundels - Consumentenonderzoek voor Autoriteit Consument & Markt', at pp.29 and 31. https://www.acm.nl/sites/default/files/old_publication/bijlagen/17462_overstapgedrag-bundels-2017.pdf

5.262 Taking the CMA and ACM approaches into account, ComReg considers that the correct approach to 'Don't knows' in response to a main question is to ignore them (as the CMA counsels, and as ComReg did in the 2023 Consultation) or to assign them to the 'Do nothing' pile (as the ACM counsels), but not to assign them across responses proportionately.

Redesignation of 'Shop around' responses

5.263 Copenhagen Economics suggests that ComReg should reassign 'shop around' respondents to other responses in accordance with lower-bound and upper-bound scenarios set out in Annex A of its Submission.

5.264 Before taking other adjustments into account, this approach adds up to 28% to subset of all respondents assumed to switch, depending on the scenario applied by Copenhagen Economics in Annex A of its Submission. ComReg's 2022 Residential Market Research reported, however, that only between 11% and 16% of respondents would consider shopping around. Reported precedent also suggests that a much lower level of assumed switching is appropriate, with only 14% of residential bundle respondents having switched in the previous three years.[529] Accordingly, any assumptions in respect of the behaviour of 'Shop around' respondents should be interpreted in light of actual switching responses reported in the 2022 Residential Market Research.

<u>Categories to which respondents are assigned</u>

5.265 ComReg considers that 'Don't know' respondents should be ignored or assigned to the 'Do nothing' category as there is no way of knowing which course of action they may take, and any attempt to do otherwise would be speculative. Therefore, (in respect of the bundled residential survey respondents) those 18% of respondents[530] should not be redesignated on a proportionate basis as Copenhagen Economics suggests.

5.266 In respect of the 'Shop arounds' respondents, there is little guidance from other NRAs. ComReg notes that a decision to 'Shop around' does not automatically lead to a decision to switch. A respondent may, for example, having shopped around, decide to remain with their existing SP, despite the price increase.

[529] Slide 72 of the 2022 Residential Market Research.

[530] Slide 57 of the 2022 Residential Market Research. The 18% of respondents to the question *"You mentioned earlier that your primary broadband service is provided over…If all broadband suppliers of…increase the broadband cost of your bundle by €4 per month what action would you take?"* who responded 'don't know'.

5.267 Copenhagen Economics sets out a range of assumptions and scenarios to inform its switching analysis. Its approach to the reallocation of 'don't know' and 'shop around' respondents leads to total cancel and switch responses increasing under all assumptions, compared to the 2023 Consultation. At the extreme, 28% of all residential bundle end users would, under Copenhagen Economics' upper-bound assumption,[531] switch, compared to a figure of 4% of all respondents in the 2022 Residential Market Research. This provides the upper range for switching in response to a price increase. ComReg considers that this is an unreasonably high scenario, as it assumes no 'shop around' respondent will do nothing or downgrade, and therefore assumes no search or switching costs. A more realistic scenario accounts for search and switching costs, which would likely result in a proportion of 'shop around' respondents doing nothing, rather than switching.

5.268 ComReg considers that Copenhagen Economics' approach is likely to overstate the impact of a SSNIP by incorrectly counting non-switching behaviour, by incorrectly reassigning 'don't knows' to other categories, and by, in the upper scenario, assuming no switching or search costs in respect of 'shop arounds', such that all such respondents are deemed to switch or cancel.

5.269 In ComReg's judgement, including having regard to approaches taken by other NRAs and NCAs, interpreting the results of the 2022 Market Research and given actual market dynamics where the share of CATV broadband is declining (despite price increases), it is appropriate to exclude from consideration of indirect retail constraints survey responses which indicate an intention, in response to a SSNIP, to shop around, to cancel completely, or to downgrade, together with 'don't know' responses.

Criterion 3: Whether the strength of indirect retail constraints would be weakened by retail customers switching to Eircom's own retail arm

5.270 ComReg now considers the European Commission's *third factor* set out at paragraph 5.149(c), whether the retail customers of Access Seekers purchasing LLU or VUA would switch to the retail arm of the vertically-integrated HM if it did not raise its own retail prices following a SSNIP of WLA.

5.271 If Access Seeker retail customers switched to Eircom in response to a SSNIP of WLA, Eircom could benefit from increased retail revenue which may offset wholesale revenue losses from reduced Access Seeker demand for WLA.

[531] Table 5 of Copenhagen Economics Non-confidential Submission.

5.272 Having regard to the MGA, absent regulation, a vertically-integrated HM supplier of WLA over a widespread or ubiquitous network would likely have incentives to hold its own retail prices constant[532] in order to induce Access Seeker retail customers (who are facing retail price increases arising from the pass-through of the SSNIP) to switch away from Access Seekers to its own downstream arm.

5.273 Access Seekers compete at the retail and (downstream) wholesale level predominantly through the purchase of VUA products, which are available on an almost, but not fully, national basis, and also, at a significantly lower level, through the purchase of LLU products. ComReg notes that, in accordance with the Modified Greenfield Approach, absent existing regulation of the WLA market, Eircom VUA and LLU products are either:

(a) unlikely to be made available by the HM at all to Access Seekers, or

(b) made available to Access Seekers, but on less favourable terms than equivalent supply arrangements to the HM's own retail arm.

5.274 Access Seekers would therefore not be able to offer retail and other downstream services using these wholesale inputs, or would only be able to do so under disadvantageous terms, compared to the HM. Retail end users affected by a SSNIP of WLA are likely to consider the HM's retail service to be a suitable substitute, due to similarities in product characteristics and relatively low switching costs (since the retail service would be provided over the same network using similar CPE and limited service downtime). Furthermore, the widespread coverage of the HM's network implies that its downstream arm would not be constrained by coverage in the same way as alternative platforms, such as CATV or localised alternative FTTP, which pass fewer premises nationwide.

5.275 For these reasons, ComReg considers it likely that, in response to a SSNIP of VUA or LLU, end users of Access Seekers who offer retail services based on Eircom VUA or LLU inputs would be likely to switch to retail products offered by Eircom's retail arm, in circumstances where Eircom did not raise its retail prices, but Access Seekers did. This would have the effect of mitigating any reduction in Eircom wholesale revenue. This effect further diminishes the potential for alternative platforms to act as effective indirect retail constraints on a vertically-integrated HM supplier of WLA.

[532] Although it is possible that it could increase retail prices for less price sensitive customers and decrease them for more price sensitive customers.

5.276 ComReg acknowledges that this switching of Access Seekers customers could also involve switching to platforms other than back to Eircom. However, for example, as noted at paragraph 5.211 above, since the 2018 Decision CATV subscribers have declined by 3.5% and also constitute a lower proportion of overall fixed broadband subscribers in the State, with this expected to diminish further over time as VMI overlays its CATV network with FTTP. This suggests that customer switching to CATV in the context of any indirect constraints exerted by CATV would also diminish in line with this.

Overall conclusions on Indirect Retail Constraint Assessment

5.277 In paragraphs 5.146 to 5.276 above, ComReg assessed the indirect retail constraint posed by retail services provided over CATV, localised alternative FTTP, FWA, mobile and satellite platforms. ComReg notes that the coverage and use of retail services provided over these networks is exceeded by the coverage and use of retail services provided over Eircom's FTTx network. ComReg considers that indirect retail constraints from satellite, localised alternative FTTP, mobile and FWA platforms are unlikely to be sufficient to warrant inclusion in the WLA product market.

5.278 ComReg does not consider that indirect retail constraints from VMI's CATV network would likely be sufficiently effective to constrain the price setting behaviour of a HM supplier of CG WLA or NG WLA, bearing in mind the limited coverage of VMI's CATV network, together with its proposal to overlay CATV with FTTP, resulting in the eventual decommissioning of the CATV network over the lifetime of this market review period. In this regard, ComReg notes that VMI has already rolled out FTTP passing **[✂ [redacted] ✂]** (much of which is RFoG which had been completed prior to VMI's FTTP overlay announcement) premises as of Q2 2023, but that this has been assessed as part of the direct constraints assessment on a forward-looking basis above. The degree of indirect retail constraint posed by CATV-based retail services will be considered further in the context of the assessment of competition in the WLA market in Section 6, in particular, the effectiveness of this constraint over a longer time horizon.

5.279 Copenhagen Economics asserts that, when the full demand-side response to a retail price increase is taken into account, the SSNIP test shows that it would be unprofitable for a HM to levy a SSNIP, as the actual loss exceeds the critical loss, as set out in Figure 10 of its Submission on behalf of Eircom.

5.280 To generate these findings, Copenhagen Economics applies[533] a number of changes to ComReg's SSNIP assessment:

[533] At paragraph 3.41 of its Submission.

(a) Only counts the responses of end users who purchase FTTx-based broadband;

(b) Excludes respondents who report switching to another fibre provider;

(c) Allocates ‘don't know’ respondents according to the average respondent;

(d) Adjusts the share of users that would ‘cancel’ or ‘switch’ downwards proportionally to the price difference between the price increase used in the survey questions for bundle customers and the expected retail price increase due to a 10% SSNIP at wholesale level;

(e) Assumes unchanged profitability for end users who would ‘stay but downgrade’; and

(f) Uses the full national survey sample.

5.281 Having applied these altered assumptions to the SSNIP test, Copenhagen Economics asserts that, even under what it deems its more conservative set of assumptions, the HM’s actual loss exceeds the critical loss, such that the additional profits from higher margins on non-reactive customers would not cover the loss of consumers who cancel/switch, rendering the price increase unprofitable.

5.282 ComReg disagrees with this reasoning and considers that a number of the changes/assumptions Copenhagen Economics are not appropriate, or would not materially alter ComReg’s findings.

(a) Copenhagen Economics indicates at point 5.280(b) above that it would exclude respondents who switch to another fibre provider, since despite switching, these consumers would still be served by a supplier that relies on the HM’s network. ComReg considers that this would not materially alter the outcome of the SSNIP assessment. Excluding these respondents reduces the denominator in respect of residential respondents by 1%, and by 3% in the case of SME respondents. Even if ComReg were to include non-switching demand-side responses in its indirect retail constraints assessment, ComReg considers that the exclusion of this category of respondents would not materially alter ComReg’s conclusions;

(b) ComReg has already indicated its disagreement with point 5.280(c), where Copenhagen Economics proposes to reassign ‘don’t know’ respondents;

(c) ComReg has already indicated its disagreement with point 5.280(d), where Copenhagen Economics proposes to take into account respondents who would cancel completely or downgrade their existing package;

(d) ComReg has already indicated its disagreement with point 5.280(e), where Copenhagen Economics proposes to take into account respondents who would downgrade their existing package. ComReg considers that assumptions about the profitability of these packages are therefore moot; and

(e) Copenhagen Economics indicates at point 5.280(f) that it uses the full national survey sample. As ComReg does so as well, this does not amount to a 'correcting' of the SSNIP analysis.

5.283 The net effect of the assumptions made by Copenhagen Economics is to shift the percentage of respondents reacting to a SSNIP such that the actual loss exceeds the critical loss. Copenhagen Economics does so by, *inter alia*, increasing the numerator (counting cancel completely and downgrade responses, and reassigning shop around and don't know responses) and reducing the denominator (only counting responses from purchasers of FTTx-based broadband and excluding respondents who switch to another fibre provider), compared with the approach taken by ComReg. For the reasons set out above, ComReg does not agree with this approach.

5.2.4 Overall conclusions on Relevant WLA Product Markets

5.284 On the basis of the analysis at paragraphs 5.11 to 5.283 above ComReg defines two WLA product markets (collectively, the '**WLA Product Markets**'), as follows.

5.285 The first market – the **NG WLA Product Market -** consists of Next Generation WLA, being VUA offered over:

(a) Eircom's FTTC network;

(b) Eircom's FTTP network;

(c) SIRO's FTTP network;

(d) NBI's FTTP network; and

(e) On a forward-looking basis, over VMI's FTTP network, as that network is rolled out and VUA provision commences.

5.286 The self-supply of FTTx VUA by Eircom and, on a forward-looking basis, FTTP VUA by VMI, to their own downstream retail arms is also included in the NG WLA Product Market on the basis that this is convertible to wholesale VUA supply. FTTx VUA inputs used in the supply of downstream merchant market WCA services are also included in the market.

5.287 The second market – the **CG WLA Product Market -** consists of Current Generation WLA, being the following products offered over Eircom's copper-only CG network:

(a) Local Loop Unbundling,

(b) Sub-Loop Unbundling, and

(c) Line Share.

5.288 The self-supply of LLU by Eircom to its own downstream retail arm is also included in the CG WLA Product Market.

5.289 Providers of WLA are therefore included in the WLA Product Markets where (i) the products which they offer meet the LLU and VUA product definition set out in the 2020 Explanatory Note, (ii) any planned delivery of WLA is based on sufficiently reliable deployment plans and (iii) the products are likely to be effective substitutes. Where these conditions are not met, ComReg does not include such products in the WLA product market.

5.290 Having defined the parameters of the WLA Product Markets, ComReg now considers the scope of the WLA geographic market(s).

5.3 Geographic Assessment of WLA Markets

5.291 In this section, ComReg considers the geographic scope of the WLA Product Markets described in Section 5.2 above. In doing so, ComReg follows the approach adopted by the EC in the 2020 Recommendation.

5.292 The Notice on Market Definition states that the relevant geographic market is:

> *"… an area in which the Undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different."*[534]

5.293 The EC further notes in its SMP Guidelines that:

> *"According to established case-law, the relevant geographic market comprises an area in which the Undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. The definition of the geographic market does not require the conditions of competition between traders or providers of services to be perfectly homogeneous. It is sufficient that they are similar or sufficiently homogeneous, and accordingly, only those areas in which the conditions of competition are 'heterogeneous' may not be*

[534] Notice on Market Definition, paragraph 8.

considered to constitute a uniform market. In general, the process of defining the geographic boundaries of markets involves identifying any geographic areas where a distinct break in competitive conditions can be observed. This approach places weight on the underlying structural and behavioural factors that are relevant in determining the competitiveness of a market."[535]

5.294 In the 2018 Decision, ComReg concluded that the WLA market was national in geographic scope.

5.295 ComReg assesses below the homogeneity (or heterogeneity) of competitive conditions between geographic areas, taking account of both structural and behavioural criteria in respect of each of the WLA product markets. This is a two-phase process, with Phase 1 consisting of criteria of general application to determine whether there are grounds to define national or sub-national markets. If Phase 1 suggests that there are sufficient grounds to warrant defining sub-national markets, then Phase 2 applies criteria to distinguish the boundaries of those sub-national markets.

5.3.1 Phase 1: Application of criteria of general application

5.296 In assessing potential geographic variances in competitive conditions, ComReg takes utmost account of the Notice on Market Definition and the BEREC Common Position on Geographic Aspects of Market Analysis.[536] Having regard to the above, ComReg assesses the geographic scope of the WLA markets according to the following factors:

(a) Geographic differences in entry conditions over time (paragraphs 5.300 to 5.311);

(b) Variation in the number and size of potential competitors (paragraphs 5.312 to 5.317);

(c) Distribution of market shares (paragraphs 5.318 to 5.353);

(d) Evidence of differentiated pricing strategies or marketing (paragraphs 5.354 to 5.362); and

(e) Geographic differences in product functionality and demand characteristics (paragraphs 5.363 to 5.366).

[535] SMP Guidelines, paragraph 56.

[536] BEREC Common Position on Geographic Aspects of Market Analysis, BoR (14) 73, 05.06.2014 (the '**BEREC Common Position**').

5.297 ComReg applies the MGA in assessing the geographic scope of the WLA Product Markets. This assumes a hypothetical scenario in which there is no *ex ante* SMP regulation in the candidate Relevant WLA Markets but that regulation is present in markets upstream of WLA such as, for instance, PIA.

5.298 In carrying out its geographic assessment of the WLA markets, ComReg has regard, *inter alia*, to existing FTTx rollout, but also future rollout plans, where these plans are based on available and sufficiently reliable deployment data. Eircom, SIRO and NBI are all already engaged in FTTP network rollout. Of these, NBI appears to be capable of providing ComReg with available rollout forecasts with some level of reliability. As of October 2023, VMI has not yet commenced provision of merchant market VUA over its FTTP network, nor is it yet in a position to furnish ComReg with detailed and reliable deployment data at a specific local level. Accordingly, ComReg takes Eircom, NBI and SIRO rollout into account as appropriate in its geographic assessment below. Although VMI FTTP is included in the NG WLA focal product on a forward-looking basis – and therefore falls into the NG WLA product market – ComReg can only take VMI FTTP into account in its WLA geographic assessment below on the basis of existing rollout, or sufficiently reliable and detailed deployment data. ComReg has therefore taken account of VMI's existing deployment of FTTP, although as noted earlier, **[✂** [redacted] **✂]**. VMI has been unable to provide ComReg with reliable deployment plans in respect of both the specific locations and timing of its scheduled FTTP network rollout. However, for analytical purposes and despite this uncertainty, ComReg also considers the impact on its geographic assessment of VMI's existing (predominantly CATV) network rollout, assuming hypothetically that VMI fully overlaid its CATV network with FTTP capable of delivering VUA. This assessment is set out below.

5.299 In their Submissions, both BT[537] and ALTO[538] expressed concern that the quantitative data used by ComReg in the 2023 Consultation was based on the Q2 2022 time period and suggested that such data may not reflect wider economic issues such as the rise in fuel costs, costs of living and interest rates which have occurred since this date and have thus not been reflected in ComReg's analysis, leading to a more optimistic analysis than appropriate. ComReg uses Q1 2023 and Q2 2023 where possible, to inform its analysis in this Decision, and therefore considers that the concerns expressed by both BT and ALTO are addressed. ComReg also notes that the trends identified in this Decision are in line with those identified in the 2023 Consultation.

Criterion 1: Geographic differences in entry conditions

5.300 In this section, ComReg assesses geographic differences in entry conditions in the WLA Product Markets over time.

5.301 Eircom offers similar VUA products across its almost-national FTTx network (noting only some degree of overlap in the NBP IA), and also offers similar LLU products across its ubiquitous copper network, pursuant to regulation under the 2018 Decision. However, the presence of commercial NOs (SIRO and, on a forward-looking basis, VMI) on a sub-national basis, together with NBI in the IA, which is deemed to be commercially unattractive for the rollout of high-speed broadband, suggests that the NG WLA market exhibits some level of geographic variation in entry conditions. In particular, parts of the State are deemed to be more commercially attractive, while other parts of the State would not be served by FTTP capable of delivering VUA in the absence of the State-aided NBI rollout, arising from diseconomies of scope, scale and density due to low premises density and dispersed rural development.

5.302 Taking account of total FTTx rollout by all operators, in general, approximately 98% of premises in the State are passed by FTTx as of Q1 2023, while Eircom CGA copper-only (those premises where it does not have FTTx) rollout passes approximately 8% of premises.[539]

[537] BT Non-confidential Submission, at p.5.

[538] ALTO Non-confidential Submission, at p.5.

[539] The FTTx and copper-only numbers exceed 100%. This is because a measurement inconsistency arises from the fact that a non-trivial minority of FTTC premises do not have Eircode associated with them by Eircom. This means that calculating network overlaps at a premises level is difficult. In some instances, it is not possible to say with certainty whether a specific premises is passed by both FTTC and FTTP. This means that FTTx coverage numbers may be inflated as overlapping coverage is not fully reportable where Eircode (or other geographic level identifier) data are absent. It should also be noted that some FTTC may only support lower download speeds given the VDSL technology dependent on copper loop lengths.

5.303 ComReg also takes into account envisaged Network Operator rollout, where that rollout is available and based on sufficiently reliable deployment data. Based on interactions with NOs, ComReg considers that NBI is capable of providing reliable deployment data up to two years in advance. However, neither SIRO, Eircom nor VMI were able to provide ComReg with sufficiently reliable deployment data in advance of rollout. Accordingly, ComReg takes into account envisaged NBI rollout, but cannot, absent data, take into detailed account envisaged Eircom, SIRO, or VMI FTTP rollout.

5.304 The fact that NBI is targeting the provision of wholesale services only – including VUA – to areas of the State otherwise unserved on a commercial basis by NG broadband (that is, the IA) suggests that the prospects for commercial rollout to significantly overlap NBI coverage are low, and ComReg is not, as of Q1 2023, aware of detailed deployment plans to this effect. There is, however, some marginal overlap. As of Q1 2023 Eircom's FTTx network overlaps approximately **[✂** [redacted] **✂]**[540] of those premises in the NBI IA, and SIRO's FTTx network overlaps approximately **[✂** [redacted] **✂]**[541] of those premises in the NBI IA.

5.305 ComReg includes VUA delivered over Eircom FTTx, and SIRO and NBI FTTP and, on a forward-looking basis, VMI FTTP, in the NG WLA Product Market.

5.306 SIRO has commenced Phase 2 of its rollout, and it has announced its intention to pass an additional 320,000 premises on top of the 450,000 which it passed in Phase 1, which would bring its total rollout to 770,000 premises in 154 towns nationwide by 2025,[542] passing approximately one third of premises in the State. As of Q1 2023 SIRO passed some **[✂** [redacted] **✂]** premises.[543]

[540] Between 10% and 20%. Some of this is FTTC which would not be of a sufficient quality to deliver broadband speeds of at least 30 Mbps, with this being the minimum speed set as a threshold for mapping the presence of commercial service availability in deciding upon the IA. ComReg would expect over time that demand for such FTTC would reduce.

[541] Between 1% and 10%.

[542] https://www.eib.org/en/projects/pipelines/all/20210132. Given SIRO's pace of rollout over the last number of years (see Table 2), ComReg does not expect this target to be achieved within this timeline.

[543] As of Q2 2023 SIRO has passed **[✂** [redacted] **✂]** lines, in line with trends in previous quarters.

5.307 SIRO has provided ComReg with data on the general geographic scope of its intended Phase 2 rollout but has not been in a position to provide ComReg with detailed forecast deployment data. Additionally, as set out in greater detail at paragraph 6.175 below, SIRO Phase 1 rollout was characterised by regular revisions to its scheduled target rollout such that its actual rollout significantly lagged its anticipated rollout. Accordingly, ComReg takes specific premises level SIRO Phase 2 rollout into account in its WLA geographic market assessment to the extent that data are available to do so, bearing in mind that SIRO has been unable to provide premises level forecast data to ComReg more than approximately six weeks in advance.

5.308 By way of a sensitivity check, ComReg has assessed SIRO's overlap with VMI, despite the absence of sufficiently reliable and detailed VMI FTTP deployment data. Data relying on existing VMI CATV rollout suggest that, if VMI were included in the WLA market, it would overlap with SIRO at a total of 116 EAs (at any level of overlap greater than a single premises) and a total of 281,513 premises. However, the number of EAs where SIRO and VMI overlap falls significantly, where both SIRO and VMI coverage is considered in the context of the Phase 2 overlap criterion 3 (that at least 50% of premises in a Modified EA must be passed by at least three Network Operators) as set out in Annex 12 below. **[✂** [redacted] **✂]**

5.309 In accordance with the NBP Contract, NBI's FTTP network will pass 569,000 premises in the IA, amounting to coverage of c.24% of premises in the State, using NBI's own premises identifier.[544] According to the NBI website,[545] NBI passed 186,897 premises as of October 2023.

[544] 560,000 NBI premises as a percentage of 2.34 million postal addresses in the State. NBI uses the expression 'premises', defined in the NBP Contract as *"all buildings (whether a business premises, residence or other building) in the Intervention Area that have a corresponding Eircode in the Premises Database (as amended or should have been amended from time to time in accordance with this Agreement)"*. As explained at footnote 1593, ComReg uses a separate identifier ('Postal Address Star') for its geographic assessment. As a result, there may be small differences in reporting of coverage, depending on which premises identifier is used.

[545] www.nbi.ie, reporting data as of 25 October 2023. As at Q2 2023 NBI had passed 154,439 premises.

5.310 Apart from the likelihood there will be no material commercial rollout of FTTP in the IA, ComReg assumes that there will be no new rollout of copper networks capable of delivering LLU more generally, given FTTP is now the chosen network medium, and shifting consumer preferences away from copper towards FTTx. In this regard, the existence of the IA (which identified non-commercial areas through a mapping exercise and consultation with SPs) signals that the commercial attractiveness of areas of the State varies.

5.311 Overall, and having regard to the above, evidence indicates that there are some differences in geographic entry conditions in the NG WLA market, arising from the presence or absence of commercial SPs, as characterised by the presence in areas of higher premises density of NG networks rolled out on a commercial basis, while in areas of lower premises density, NBI is rolling out a state-aided NG broadband network, due to the absence of incentives to provide NG broadband to these areas on a commercial basis. Such entry incentives are absent in the IA due to the presence of barriers to entry arising from diseconomies of density, in particular, whereby the average cost of passing or connecting a single premises is much higher than equivalent costs in urban areas.[546] In contrast, ComReg considers that there are no geographic differences in CG WLA entry conditions, given the lack of incentives for Network Operators to enter.

[546] ComReg notes that this is a generalisation, in that the IA also includes premises located in urban areas. However, these premises may similarly be commercially unattractive to serve due, for example, to localised access difficulties leading to increased costs of connection for Network Operators.

Criterion 2: Variation in the number and size of potential competitors

5.312 In this section, ComReg assesses the number of competitors in the WLA Product Markets and their relative sizes. Eircom is the only provider of LLU, while, as of Q2 2023, VUA is provided over Eircom FTTx, SIRO FTTP and NBI FTTP. VMI is expected to commence supply of FTTP VUA (where it has a network presence) over the lifetime of the market review, however, **[✂** [redacted] **✂]** Absent regulation and in the context of the MGA, Eircom's merchant market supply of NG WLA (and, therefore, NG WCA provided on the basis of upstream NG WLA inputs) may no longer be available. NBI is obliged under the terms of the NBP Contract to offer VUA to Access Seekers in the IA, while SIRO offers VUA on a commercial basis. NBI is scheduled to pass 569,000 premises in the State which are located in the IA by 2026/7. As of September 2023,[547] NBI has passed 186,897 premises, or 33% of its total scheduled rollout. VMI has announced its intention to provide VUA over its FTTP network, as that network is rolled out, but, as of October 2023, it has not yet commenced offering VUA. As noted paragraph 5.87 VMI **[✂** [redacted] **✂]** As noted previously, VMI has not been in a position to provide ComReg with reliable data on the timing and location of its FTTP overlay, other than a general intention to overlay its existing CATV footprint with FTTP by **[✂** [redacted] **✂]** although ComReg notes that its timelines have moved out from what it originally intended. ComReg notes that in its initial announcement of its FTTP upgrade in November 2021,[548] VMI indicated that it expected to complete its network upgrade within three years. i.e., by the end of 2024. Having regard to the information and data provided by VMI, including its FTTP rollout to date, ComReg's view is that its network upgrade to full NG WLA service provision is not likely to be completed until towards the end of this market review period.

547 www.nbi.ie, 25 October 2023.

548 https://www.virginmedia.ie/about-us/press/2021/virgin-media-ireland-announces-national-fibre-network-upgrade/.

5.313 According to its website, SIRO passes over 515,000 premises, as of October 2023.[549] SIRO is engaged in its announced Phase 2 rollout plan, where it plans to pass an additional 320,000 premises (beyond the 450,000 premises that were part of Phase 1) across 154 towns, supported by €620 million of funding, including €170 million of funding from the European Investment Bank ('**EIB**').[550] According to the EIB, SIRO intended to complete Phase 2 rollout by 2025, with a focus on areas with no, or limited, very high capacity broadband coverage.[551] If SIRO meets its Phase 1 and Phase 2 coverage targets, it will pass a total of 770,000 premises. Based on its existing rollout from 2019 to Q2 2023, SIRO has passed an approximate average of 60,000 premises per year. In view of this and, noting that SIRO has consistently missed it published rollout targets, ComReg considers that its intention to pass 770,000 premises with FTTP will not likely be achieved until towards the end of 2026.

5.314 Eircom's public quarterly earning reporting figures suggest that, as of Q2 2023, its FTTx rollout passes over 2 million premises, split between 986,000 FTTC only premises (42%) and 1,083,000 FTTP premises (52%).[552] ComReg data indicate that, as of Q2 2023, approximately **[✂** [redacted] **✂]** premises were overlapped by both Eircom FTTC and Eircom FTTP. Eircom's FTTP premises passed grew by 219,000 in the year to June 2023 (up by 27% year on year) and Eircom has also indicated that its partnership with InfraVia will increase the pace of its expansion of its FTTP network rollout, with the target ultimately to upgrade 1.9 million premises passed to FTTP.[553] ComReg calculates based on publicly available data that Eircom's annual FTTP rollout for the last three and a half years (up to Q2 2023) passed an average of 213,000 premises with FTTP per year.

[549] www.siro.ie, accessed on 25 October 2023.

[550] https://www.irishtimes.com/business/technology/siro-announces-620m-investment-to-upgrade-broadband-network-1.4712850

[551] https://www.eib.org/en/projects/pipelines/all/20210132 This press statement also suggest that the project cost is €342m.

[552] https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf

[553] https://www.eir.ie/pressroom/eir-announces-completion-of-significant-infrastructure-deal-with-Infravia/

5.315 Excluding NBI's FTTP rollout (given it is rolling out FTTP in the non-commercial IA), ComReg estimates that, in 2022, Eircom accounted for approximately 78%[554] of all additional premises passed with FTTP, with the remainder accounted for by SIRO and VMI. During this period Eircom, SIRO and VMI respectively rolled out FTTP to approximately **[✂ [redacted] ✂]**, **[✂ [redacted] ✂]** and **[✂ [redacted] ✂]**, premises respectively.

5.316 ComReg accordingly considers that, absent regulation, the NG WLA market is likely to be characterised by some variation in the number and size of potential competitors from a geographic perspective. ComReg has formed this view on the basis that the number of existing and potential competitors in the provision of NG WLA across the State is likely to vary, based on current and expected network rollout. In particular, NBI is unlikely to face material competition (in the sense of other competitors, although ComReg expects there will be some overlap) in the IA, while in some areas outside the IA premises may be passed by at least two networks capable of delivering VUA. This may particularly be the case, for instance, in areas where Eircom FTTC is already present, but likely to upgrade to FTTP over the lifetime of this market review.[555]

5.317 Eircom is the only provider active on the CG WLA Market. Even absent regulation, ComReg considers that, due to shifts in end user demand patterns, there is no incentive for other Network Operators to enter the market – given FTTP will be the future transmission medium of choice. ComReg considers that this is unlikely to change during the market review period.

Criterion 3: Distribution and evolution of market shares

5.318 The EC Notice on Market Definition confirms that NRAs should take a preliminary view of the scope of the geographic market on the basis of the distribution of market shares between undertakings. Moreover, the BEREC Common Position notes at paragraph 111 that:

> *"One way to account more explicitly for the relative size of operators would be to look at the variation in local "market" shares across different geographical areas. Ideally this should include not only market shares at a particular point in time but also the development of market shares, particularly where the competitive conditions in the market are going through a period of change. Since the collection of the necessary data is associated with a high administrative burden for operators as well as NRAs, it will usually suffice to consider two points in time to draw inferences about trends in market shares. To the extent that there is evidence of variation in market shares, this could be indicative of geographical variations in competitive conditions."*

[554] If NBI rollout is accounted for Eircom's share is approximately 62%.

[555] See paragraph 5.382 onwards for data on differences in number of competitors in different EAs.

5.319 Accordingly, where an NRA measures variations in SP market shares over time in different geographic locations, this may potentially be indicative of a level of geographic variation in competitive conditions sufficient to warrant some level of geographic market differentiation.

5.320 At the time of the publication of the 2018 Decision, Eircom faced very limited competition in the supply of VUA from SIRO and held a market share in excess of 95% in the provision of WLA nationwide, based on the market definition set out therein. Taking into account changes to the WLA product market definition, as well as SIRO and NBI rollout and service provision, ComReg now measures Eircom market shares on the separate NG WLA Product Market and the CG WLA Product Market. VMI has not yet commenced the provision of VUA and as such it has no market share to measure. Eircom's (national) share of the provision of NG WLA-based VUA in the presence of regulation has, as of Q2 2023, declined to **[✂ [redacted] ✂]**,[556] although, on a forward-looking basis, this national share masks non-trivial geographic differences at local level arising from the presence or absence of SIRO or NBI. Eircom's share of the provision of LLU, SLU and LS remain high, again, in the presence of regulation, at 100%, although overall volumes of these service are low at 7,164 lines at Q2 2023.

5.321 ComReg considers that the NG WLA product market includes the merchant market supply of VUA by Eircom, SIRO, NBI and, on a forward-looking basis, VMI (once active at the wholesale level), together with the self-supply of VUA by Eircom and, on a forward-looking basis, VMI. The implicit use of NG WLA in the supply of downstream WCA also falls within these shares.

5.322 The CG WLA product market includes Eircom's self-supply and merchant market supply of LLU, SLU, and LS. The implicit use of CG WLA in the supply of downstream WCA also falls within these shares.

5.323 In respect of NG WLA, at the level of the EA, market shares can only be assigned to VUA delivered over NG FTTx broadband networks where those networks are present. ComReg considers the distribution of WLA market shares in the presence of WLA regulation, and then considers how the distribution of these market shares would be likely to change in an MGA scenario, absent WLA regulation.

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[556] Between 80% and 90%. Market Shares include merchant market and self-supply of NG WLA, as well as the use of implicit use of NG WLA in the supply of downstream WCA. At the time of the 2018 Decision, Eircom's market share was close to 100%.

Market share distribution in the presence of regulation

Market share data on a national basis

5.324 The data set out at Table 26 below indicates that Eircom and VMI are the two largest <u>retail</u> broadband SPs in the State, with the figures below including all fixed retail broadband subscriber lines across all fixed technologies included in the retail broadband product market definition. Given that both Eircom (28%) and VMI (23%) rely on own-network self-supply for retail broadband purposes (VMI's mostly being CATV), this suggests that, based on current market shares and Access Seeker use of wholesale inputs from Eircom and other NOs, a maximum of 49%[557] of fixed retail broadband subscriber lines are delivered by Access Seekers reliant on merchant market inputs (WLA and/or WCA), allowing for small-scale provision of retail broadband self-supply over FWA or localised alternative FTTx.

Table 26: Retail broadband market share by subscriber lines, Q4 2018 – Q2 2023

	2018 Q4	2019 Q4	2020 Q4	2021 Q4	2022 Q2[558]	2022 Q4	2023 Q2
Eircom	33%	31%	30%	28%	**27%**	27%	28%
VMI	26%	26%	25%	25%	**24%**	24%	23%
Vodafone	18%	20%	19%	20%	**20%**	20%	20%
Imagine	-	-	3%	3%	**3%**	3%	3%
Sky	13%	14%	14%	14%	**14%**	14%	15%
Pure Telecom	-	-	2%	2%	**2%**	2%	2%
Digiweb	-	-	-	2%	**2%**	2%	-
OAOs	9%	10%	7%	6%	**7%**	7%	9%

5.325 As set out in Table 27 below, when retail broadband market shares are assigned based on FTTx subscriptions only (**<u>in the presence of regulation</u>**), the most notable change is the decline in Eircom's retail market share (from 48% in Q1 2019 to 38% in Q2 2023), with a range of other SPs making small market share gains. Eircom remains the single largest provider of FTTx retail broadband subscriptions, however.

Table 27 FTTx broadband market share by subscriber lines, Q4 2018 – Q2 2023

	Q1 2019	Q1 2020	Q1 2021	Q1 2022	Q2 2022	Q1 2023	Q2 2023
Eircom	48%	44%	41%	38%	38%	38%	38%

[557] Calculated by subtracting Eircom's 28% and VMI's 24% market shares, both of which are on a self-supply basis, from 100%.

[558] Data for Q2 2022 was that which presented in the 2023 Consultation.

Vodafone	26%	30%	30%	30%	30%	30%	30%
Sky	18%	19%	20%	20%	20%	21%	21%
Pure Telecom	-	-	3%	3%	3%	3%	3%
Digiweb	-	-	-	3%	2%	-	-
VMI	1%	1%	1%	2%	2%	2%	2%
OAOs	7%	6%	5%	4%	4%	6%	6%

5.326 As set out in Table 28 below, when retail broadband market shares are assigned based on FTTP subscriber lines only (which ComReg started recording at a granular level in Q1 2019), the most notable change is the decline in Eircom's retail market share (from 47% in Q1 2019 to a low of 30.9% in Q4 2021 and recovering to 32.6% in Q2 2023 – although noting the FTTP base at the start was small). Also of note is the initial increase but then consistent decrease in Vodafone's market share, which, as of Q2 2023, is the joint largest provider of FTTP retail broadband subscriptions with Eircom (both with a 32.6% share). These figures must also be interpreted in the context of the pace at which Access Seekers commenced purchasing FTTP VUA from Eircom initially and the growth of FTTP provision from an initially low base.[559] The figures are also in the presence of WLA regulation and partial WCA regulation.

Table 28: FTTP retail broadband subscriber lines, Q1 2019 – Q2 2023[560]

	2019 Q1	2020 Q1	2021 Q1	2022 Q1	2022 Q2	2023 Q1	2023 Q2
Eircom	47%	39%	33%	31%	31%	32.5%	32.6%
Vodafone	37%	40%	39%	37%	36%	33.6%	32.6%
VMI	6%	5%	4%	4%	4%	3.4%	3.3%
Digiweb	3%	3%	3%	3%	3%	2.3%	2.1%
Sky	-	7%	13%	18%	18%	20.3%	21.6%
Pure Telecom	-	-	3%	4%	4%	3.6%	3.5%
OAOs	7%	6%	4%	4%	4%	4.3%	4.4%

[559] In Q1 2019 there were approximately 110,000 subscriber lines, rising to 576,856 in Q2 2023 (+425%).

[560] Individual market shares are only reported above 2%. Where an SP's market share is below 2%, it is counted as part of the aggregate OAO market share.

Total FTTP subscriber lines	**109,949**	**180,543**	**282,035**	**400,394**	**431,388**	**537,243**	**576,856**

5.327 ComReg data indicates that total fixed retail broadband subscriptions have increased by 13% (suggesting overall market growth), and FTTx retail broadband subscriptions have increased by 51% between Q4 2018 and Q2 2023 (with the mix now predominantly being FTTP rather than FTTC). Over the same time period, the proportion of retail broadband subscriptions relying on merchant market (Eircom, SIRO, or NBI) VUA inputs has risen from 41% to 51% (bearing in mind that, as of October 2023, VMI is not active in the provision of VUA, and Eircom relies on own-network self-supply for retail broadband purposes except in the IA where Eircom will be expected to largely purchase wholesale inputs from NBI).[561]

<u>Distribution of merchant market VUA purchases</u>

5.328 Retail broadband market shares provide useful but somewhat limited insight into the impact of upstream wholesale broadband markets on the retail broadband market. NBI's network rollout will be predominantly (but not entirely) located in different parts of the State than SIRO and Eircom (and VMI once active), thus weakening the inferences which can be drawn from national retail market share data on the upstream WLA markets. A more relevant measure in this case is wholesale market share data, split by those areas within the IA, and outside of the IA – that is, where NBI is (or will be) present, and NBI is absent, as set out at paragraphs 5.333 to 5.347.

Table 29: NG VUA merchant market purchases, Q1 2019 and Q2 2023 [✂REDACTED✂]

Network	FTTC	FTTP
[redacted]		

[561] https://www.eir.ie/nbi/.

[redacted]

Table 30: % NG VUA merchant market purchases, Q1 2019 and Q2 2023 [✂REDACTED✂]

Network	FTTC	FTTP
[redacted]		

Table 31: NG WLA self-supply and merchant market purchases, Q1 2019 and Q2 2023 [✂REDACTED✂][562]

Network	FTTC	FTTP
[redacted]		

[562] Q2 2023 QKDR Data

[redacted]

Table 32: % NG WLA self-supply and merchant market purchases, Q1 2019 and Q2 2023 [✂REDACTED✂]

Network	FTTC	FTTP

[redacted]

5.329 Table 29 indicates that, in respect of VUA provided by Eircom, SIRO, and NBI at Q2 2023, Vodafone accounts for [✂ [redacted] ✂][563] of purchases, BT accounts for [✂ [redacted] ✂][564] of purchases, Digiweb accounts for [✂ [redacted] ✂][565] of purchases and 43 other SPs collectively account for the remaining [✂ [redacted] ✂][566] of purchases. It is worth noting at this point that Eircom self-supply accounts for the majority of wholesale broadband provision – it effectively uses WLA in supplying itself.

563 Between 40% and 50%.

564 Between 30% and 40%. This includes Sky's purchases from SIRO. Sky contracts directly with SIRO but this is managed by BT, thus their purchases are presented collectively in Table 32.

565 Between 1% and 10%.

566 Between 1% and 10%.

5.330 In respect of <u>VUA merchant market provision only</u> (that is, excluding self-supply and the implicit use of NG WLA as an input to NG WCA), Eircom's share has declined, from **[✂ [redacted] ✂]**[567] to **[✂ [redacted] ✂]**,[568] with SIRO's market share increasing from **[✂ [redacted] ✂]**[569] to **[✂ [redacted] ✂]**[570] between Q1 2019 and Q2 2023.

Table 33: NG VUA merchant market supply, Q1 2019 – Q2 2023 [✂REDACTED✂]

VUA lines	Q1 2019		Q2 2023	
VUA merchant market supply	**n**	**%**	**N**	**%**
[redacted]				

5.331 However, as set out in Table 34 below, when including Eircom's self-supply and the implicit use of NG WLA as an input to NG WCA, Eircom's share has declined, from **[✂ [redacted] ✂]**[571] to **[✂ [redacted] ✂]**,[572] with SIRO's market share increasing from **[✂ [redacted] ✂]**[573] to **[✂ [redacted] ✂]**[574] and NBI accruing a **[✂ [redacted] ✂]**[575] share between Q1 2019 and Q2 2023.

Table 34: NG WLA self-supply and merchant market supply, Q1 2019 – Q2 2023 [✂REDACTED✂]

NG WLA lines	Q1 2019	Q1 2023
[redacted]		

567 Between 80% and 90%

568 Between 60% and 70%

569 Between 10% and 20%

570 Between 30% and 40%

571 Between 90% and 100%

572 Between 80% and 90%

573 Between 0% and 10%

574 Between 10% and 20%

575 Between 0% and 10%

[redacted]

Distribution of merchant market LLU purchases

5.332 Table 35 below indicates that, in the presence of regulation, BT accounts for **[✂ [redacted] ✂]**[576] of LLU purchases, Magnet accounts for **[✂ [redacted] ✂]**[577] of LLU purchases, and two SPs account for less than **[✂ [redacted] ✂]**[578] of LLU purchases. As set out at paragraph 5.329 above, Eircom reports its CG self-supply as WCA bitstream, rather than as WLA.

Table 35: Merchant market LLU purchases (volumes and %), Q1 2019 and Q2 2023 [✂REDACTED✂]

Network	LLU
[redacted]	

[576] Between 80% and 90%.

[577] Between 10% and 20%.

[578] Between 0% and 10%.

Market share data in the presence of regulation, split by IA and Non-IA

5.333 The data set out in Table 36 below are presented on a geographically disaggregated basis. The IA, by design, is an area which exhibits different competitive characteristics from the rest of the State, arising from the assumption that NG broadband would not be provided on a commercial basis in those areas now comprising the IA. In respect of NG WLA, Table 36 indicates that there is a notable difference in the Eircom, SIRO and NBI shares of VUA lines in the IA on the one hand, and outside the IA on the other hand. As wholesale-only operators, neither NBI nor SIRO are active in self-supply (although Vodafone has a 50% ownership stake in SIRO).

Table 36: Merchant Market VUA Sales %, Q1 2023 [✂REDACTED✂][579]

NO	Non-IA VUA	IA VUA[580]
Eircom	[redacted]	[redacted]
SIRO	[redacted]	[redacted]
NBI	[redacted]	[redacted]
Total	[redacted]	[redacted]

Table 37: Total NG WLA Sales %, Q1 2023 [✂REDACTED✂][581]

NO	Non-IA VUA	IA VUA[582]
Eircom	[redacted]	[redacted]
SIRO	[redacted]	[redacted]
NBI	[redacted]	[redacted]
Total	[redacted]	[redacted]

Table 38: LLU purchase %, Q1 2023 [✂REDACTED✂]

	LLU		
	Eircom	SIRO	NBI

[579] Supply-side information was used for this table as accurate demand side information was not available to ComReg on a sub-geographic basis.

[580] These figures include the provision of VUA over FTTC. ComReg notes that in many cases FTTC services provided in the IA is not likely to meet the 30 Mbps threshold set out in the NBP and, therefore, NBI's share of merchant market VUA is expected to increase in the IA once it has rolled out.

[581] These figures are calculated using Eircode information to map WLA relevant lines either into the IA or outside of the IA. As previously discussed, only 76% of Eircom FTTC lines have an Eircode meaning that there are circa 41,000 Eircodes unaccounted for in this table when compared with Table 31 which uses national level information. However, if it is assumed that all of these 41,000 lines are in the Non-IA area, Eircom's share would **[✂** [redacted] **✂]**, and SIRO's would decrease to **[✂** [redacted] **✂]**, meaning the impact overall is minimal.

[582] These figures include the provision of VUA over FTTC. ComReg notes that in most cases FTTC services provided in in the IA is not likely to meet the 30 Mbps threshold set out in the NBP and, therefore, NBI's share of merchant market VUA is expected to increase in the IA once it has rolled out.

[redacted][583] [redacted]

5.334 Taking into account merchant market LLU supply only, thus excluding Eircom retail self-supply (the equivalent of which would be CG Bitstream to itself) as well as its merchant market sales of CG Bitstream (which implicitly uses LLU), there appears to be little variation in selling behaviour across the CG WLA Market. However, from a supply-side perspective, there are clear and significant differences in patterns of NG WLA supply within the IA, and outside the IA, as reflected in the NBI, Eircom and SIRO sales patterns set out at Table 36 above and Table 39 below:

Table 39: Merchant market VUA sales, Q1 2023 [✂REDACTED✂]

SP	Non-IA VUA	IA VUA
Eircom	[redacted]	
SIRO		
NBI		
TOTAL		

Table 40: NG WLA sales including self-supply, Q1 2023 [✂REDACTED✂]

SP	Non-IA VUA	IA VUA
Eircom	[redacted]	
SIRO		
NBI		
TOTAL		

[583] Eircom implicitly uses LLU for provision of CG broadband services, although it is not included here.

5.335 This shows that over 93% of VUA merchant market sales occur outside the IA, and that Eircom, SIRO, and NBI shares of merchant market VUA sales all vary substantially between the IA and outside the IA, with Eircom's share being **[✂ [redacted] ✂]**,[584] SIRO's share also being **[✂ [redacted] ✂]**,[585] and NBI's share being **[✂ [redacted] ✂]**.[586] The volumes of sales outside the IA and within the IA also differ substantially. Accordingly, in the presence of regulation, there is evidence from supply-side market shares that there are differences in patterns of NG WLA supply within the IA, and outside the IA, bearing in mind that FTTP coverage is increasing outside the IA, arising from Eircom and SIRO rollout (and, on a forward-looking basis, VMI FTTP rollout) and inside the IA arising from NBI rollout.

5.336 When looking at total VUA sales, including self-supply, Eircom, SIRO, and NBI shares of merchant market VUA sales all vary substantially between the IA and outside the IA, with Eircom's share being **[✂ [redacted] ✂]**,[587] SIRO's share also being **[✂ [redacted] ✂]**,[588] and NBI's share being **[✂ [redacted] ✂]**.[589] The volumes of total sales outside the IA and within the IA also differ substantially. Accordingly, in the presence of regulation, there is evidence from supply-side market shares that there are differences in patterns of NG WLA supply within the IA, and outside the IA, bearing in mind that FTTP coverage is increasing outside the IA, arising from Eircom and SIRO rollout (and, on a forward-looking basis, VMI FTTP rollout) and inside the IA arising from NBI rollout.

5.337 In respect of CG WLA and taking into account merchant market LLU supply only, thus excluding Eircom retail self-supply, there is little variation across the CG WLA Product Market. In the presence of regulation, Eircom accounts for 100% of merchant market LLU sales. Accordingly, there appear to be no pronounced differences across the CG WLA Product Market.

[584] From 40-50% to 50-60%.

[585] From 10-20% to 30-40%.

[586] From 30-40% to 0-10%.

[587] From 60-70% to 80-90%.

[588] From 0-10% to 10-20%.

[589] From 20-30% to 0-10%.

Market share distribution under the MGA, absent regulation

5.338 In an MGA scenario, WLA regulation is no longer present, leading to the assumption that Eircom no longer provides merchant market VUA or LLU, or does so under different commercial terms. Therefore, Access Seekers which were reliant on Eircom VUA or LLU may need to migrate to delivery of retail broadband over other networks (where available/possible), in order to retain or grow their customer base.[590] Failure to do so suggests that these end users will migrate to Eircom or to Access Seekers which rely on VUA provided by SIRO or NBI (or, on a forward-looking basis, VMI), where those networks have rolled out. Accordingly, under the MGA, Eircom merchant market supply of CG WLA and NG WLA falls to zero and moves to Eircom retail. The resultant increase in Eircom self-supply will depend on the ability of Access Seekers to migrate wholesale or retail customers previously served by Eircom WLA to alternative network provision.

5.339 It is important to note that market dynamics in the presence of WLA regulation are unlikely to accurately mirror market dynamics in an MGA scenario where WLA regulation is removed. This is because, in the presence of regulation, Access Seekers which have the capability to purchase VUA from SIRO or NBI may instead choose to purchase regulated VUA or LLU from Eircom.

5.340 Where an Access Seeker intends to migrate its retail broadband end users (or its wholesale customers in the case of, for example, BT NG Bitstream) from VUA delivered by Eircom to VUA delivered by another Network Operator, it may need to build new backhaul out to the Network Operator's Point(s) of Interconnection ('**PoI(s)**'). Given that a number of Access Seekers already purchase VUA from two or more vendors, Access Seekers may, to some extent, have already incurred this cost. Accordingly, in respect of the NG WLA market, the main impediments to an Access Seeker doing so are whether the end user premises is passed by an alternative Network Operator capable of delivering VUA and, if so, the potential cost of building backhaul to the associated PoIs.

[590] For example, absent VUA regulation, BT would potentially be unable to continue to supply NG Bitstream to Access Seekers, as its supply of NG Bitstream is partially reliant on access to Eircom VUA.

5.341 In respect of the CG WLA market, an Access Seeker must overcome additional technical barriers when migrating its retail broadband end users from LLU to products outside the CG WLA Market (e.g., VUA), arising from differences in the underlying fibre and copper technologies – since Eircom is the only provider of LLU. An Access Seeker must first determine whether its end users' premises are passed by Eircom, SIRO or NBI FTTx capable of delivering VUA and, having done so, carry out any administrative (e.g. development of order management systems) or technical alterations to facilitate the switch from delivery of retail broadband over LLU to VUA. There may also be a temporal consideration in circumstances where NBI (or SIRO or, on a forward-looking basis, VMI) rollout to an area is scheduled but has not yet occurred. In those circumstances, an Access Seeker will additionally need to wait until rollout has occurred before migrating its end users to the alternative network.

5.342 In an MGA scenario where Eircom ceased merchant market supply of CG WLA to Access Seekers, no other LLU provision would be available to Access Seekers. If Access Seekers failed to migrate away from LLU (or from CG Bitstream which was itself reliant on LLU), their end users would:

(a) cease purchasing CG retail broadband,

(b) migrate to Eircom, or

(c) migrate to an alternative retail broadband SP which did not rely on LLU inputs, where the premises is also passed by NG broadband.

5.343 On the NG WLA market, where an Access Seeker's end user premises is not passed by SIRO or NBI (or by VMI in the future), that Access Seeker will be unable to migrate to alternative VUA in an MGA scenario.

5.344 As set out at Table 41 below, ComReg estimates how many premises are, as of Q1 2023, capable of being served by Eircom, SIRO or NBI VUA.[591] VMI does not yet supply wholesale services. In an MGA scenario, Access Seekers supplying end users at these premises with retail broadband on the basis of Eircom merchant market VUA or LLU would be capable of retaining these end users, as they could migrate their end users to VUA delivered over other NG broadband networks, or do so within the lifetime of this market review.

[591] While Eircom is present in some parts of the IA, it is not always capable of providing speeds above 30 Mbps as premises with download speeds lower than this generally fall within the NBP IA.

Table 41: Premises passed by FTTx networks, Q1 2023 [✂REDACTED✂]

	Total premises	Eircom[592]		SIRO		NBI[593]	
		n	%	n	%	N	%
IA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Non-IA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total FTTx premises	[redacted]	[redacted]	[redacted]	[redacted][594]	[redacted]	[redacted]	[redacted]

5.345 These data suggest that, outside the IA, all measured premises are passed by Eircom FTTx, SIRO FTTP, or both. In an MGA, NG WLA Access Seekers are therefore only capable – in principle – of retaining their retail broadband end users if they can switch to SIRO VUA at the approximate [✂ [redacted] ✂][595] of premises outside the IA where SIRO has rolled out. Access Seekers serving the remaining premises outside the IA using Eircom VUA would, based on SIRO Q1 2023 rollout, be unable to migrate their end users to SIRO VUA. Additionally, while VMI has not yet commenced provision of wholesale services over its FTTP network, as noted at paragraph 5.278 above, as of Q1 2023, it has passed [✂ [redacted] ✂] premises with FTTP.[596]

[592] Eircom's network coverage is measured in terms of lines, rather than address points, leading to an inflated figure of >100% when measuring its network rollout. However, ComReg notes that the high figure presented in Table 41 is indicative of an almost ubiquitous level of coverage, thus ComReg deflates this figure from [✂ [redacted] ✂] for the purposes of further analysis. Additionally, Eircode data are not available in respect of c.24% of Eircom FTTC lines. This means that ComReg cannot calculate whether premises are overlapped by Eircom FTTC and FTTP in certain instances leading to the possibility of double-counting.

[593] NBI's network passes [✂ [redacted] ✂] premises as of Q1 2023. The premises included in Table 36 show NBI's current and planned rollout figures.

[594] Elsewhere in the text, SIRO is noted to have passed [✂ [redacted] ✂] premises as of Q1 2023. The difference of [✂ [redacted] ✂] lines is due to the mapping exercise carried out by ComReg to map SIRO rollout into Modified EAs for the purpose of its geographic assessment.

[595] 20% to 30%

[596] VMI's FTTP rollout increased to [✂ [redacted] ✂] in Q2 2023, consisting of both existing RFoG premises and newly rolled out GPON capable premises.

5.346 In comparison, in the IA, all premises, including those passed by Eircom VUA and/or LLU are also passed (or scheduled to be passed by 2026/7) by NBI. Therefore, Access Seekers serving premises in the IA by means of Eircom VUA or LLU would, on a forward-looking basis, be capable of migrating their end users to VUA delivered over NBI (or, in a small number of cases, SIRO), subject to the potential temporal consideration set out at paragraph 5.341.

5.347 Although the IA is an area in which commercial rollout of NG broadband is not contemplated, data available to ComReg suggest that **[✄** [redacted] **✄]**[597] of premises in the IA are, in fact, passed by Eircom FTTx.[598] Thus, a withdrawal of Eircom VUA would only impact these premises in the IA, all of which would be – or are due to be – passed by NBI. Accordingly, Access Seekers delivering retail broadband to end users at these premises on the basis of Eircom VUA or LLU inputs would, in all cases, be able to migrate their end users to NBI VUA, on a forward-looking basis – and in this respect ComReg would expect Eircom's market share here to fall.

Access Seeker multi-homing

5.348 **[✄** [redacted] **✄]** of Eircom's merchant market VUA sales are accounted for by four Access Seekers **[✄** [redacted] **✄]**, and **[✄** [redacted] **✄]** of Eircom's merchant market LLU sales are accounted for by one Access Seeker **[✄** [redacted] **✄]**, as of Q2 2023. Data available to ComReg indicate that each of these Access Seekers also purchases NG WLA from vendors other than Eircom:

(a) BT purchases VUA from Eircom, SIRO and NBI;

(b) Vodafone purchases VUA from Eircom, SIRO and NBI;

(c) Digiweb purchases VUA from Eircom and SIRO; and

(d) Enet purchases VUA from Eircom and SIRO.

[597] 10% to 20%.

[598] This may consist of Eircom FTTC delivering speeds less than 30 Mbps – which was the threshold speed for inclusion in the IA - suggesting a much lower degree of overlap by Eircom in the IA.

5.349 ComReg also notes that Vodafone and Sky have both entered into wholesale agreements with VMI to supply wholesale broadband service, [✂ [redacted] ✂] As of October 2023, VMI has made no merchant market sales of any broadband services. Accordingly, the four SPs which account for the large majority of Eircom's merchant market LLU and VUA sales have all already invested in VUA purchasing capacity with SIRO and NBI and, allowing for Eircom bulk migration capability,[599] would presumptively be able to migrate a portion their wholesale or retail customers to SIRO or NBI VUA in an MGA in a timely manner and without incurring significant sunk costs, where their customers are passed by those networks. There would, however, be potential disruption at the consumer level, due to the need to arrange appointments for installation etc. Access Seekers may also need to increase backhaul capacity to accommodate a larger customer base on these networks.

5.350 In a MGA where Eircom withdraws merchant market CG WLA and NG WLA or continues to offer it, but under comparatively disadvantageous conditions compared to regulated supply, market share distributions are likely to shift. Unless they are passed by SIRO or NBI, retail broadband end users reliant on upstream Eircom WLA directly or, in the case of BT Bitstream, indirectly, must migrate to Eircom if they wish to retain retail broadband. This shift in market shares in an MGA scenario suggests the presence of differences in competitive conditions between EAs where Eircom has a high retail broadband market share due to the absence (or presence, but at a low level) of SIRO or NBI on the one hand and, on the other hand, EAs where end users can purchase retail broadband from Access Seekers making use of SIRO or NBI VUA either directly or, in the case of BT NG Bitstream, indirectly.

5.351 Due to data limitations, ComReg cannot isolate Access Seeker purchases from each of SIRO, NBI and Eircom inside the IA, and outside the IA. However, the data set out at Table 41 above indicate the share of premises passed by SIRO and NBI, both within the IA, and outside the IA, and accordingly provide a proxy for the capacity of Access Seekers to retain their end users by migrating to alternative CG WLA or NG WLA provision in an absent regulation scenario, if Eircom withdrew provision of merchant market CG WLA or NG WLA or continued to offer it, but under comparatively disadvantageous conditions compared to regulated supply. These data therefore isolate those wholesale purchases which are especially vulnerable to a MGA scenario where WLA regulation is not present.

[599] Bulk Migration allows an Access Seeker to have multiple migrations facilitated via a single request.

5.352 ComReg therefore estimates that, in an absent regulation scenario, the following outcomes are plausible, based on the data set out above:

(a) On the **CG WLA Market**, all retail end users reliant on Eircom merchant market CG WLA inputs would revert back to Eircom retail, if no asymmetric substitution to NG WLA were permitted, thus increasing Eircom retail market share to 100%. If asymmetric substitution is taken into account, the scenarios set out below in respect of NG WLA in the IA and outside the IA respectively apply;

(b) **Within the IA**, on a forward-looking basis, 100% of premises will be passed by NBI FTTP. However, only **[✂ [redacted] ✂]** of IA premises are passed by Eircom FTTx. Accordingly, in a MGA scenario, Access Seekers relying on Eircom VUA at those **[✂ [redacted] ✂]** of premises would be capable of switching to NBI VUA. At the large majority of premises in the IA not passed by Eircom FTTx, the MGA scenario is moot, as Eircom VUA is not available at these premises in any case. This suggests that, in an MGA, retail broadband market shares would change minimally, and Access Seekers served by Eircom VUA would likely be well positioned to retain their retail end users by switching to NBI VUA; and

(c) **Outside the IA**, SIRO is currently the only alternative VUA SP present, pending commencement of VMI wholesale service, and Eircom has full or close to full FTTx coverage. In an MGA, and given SIRO coverage levels as of Q1 2023, Access Seekers serving three in every four premises would be unable to procure SIRO VUA. This suggests that Eircom's retail broadband share would likely increase significantly, as Access Seekers would be unable to continue to provide retail broadband to their end users in the absence of alternative wholesale services.

5.353 This suggests that the distribution and evolution of market shares on the NG WLA Market is indicative of geographic differences in competitive conditions, arising from the presence or absence of alternative FTTx networks capable of providing VUA, in an absent regulation scenario. For example, an Access Seeker's share of NG retail broadband in the IA does not necessarily change in an absent regulation scenario, because, on a forward-looking basis, it is capable of migrating its customers to NBI VUA. In contrast, outside the IA, that Access Seeker's market share is likely to decline substantially (while Eircom's market share would likely rise), as it can only migrate its customers to SIRO if those end users form part of the minority of premises outside the IA passed by both Eircom FTTx and SIRO FTTP.

Criterion 4: Evidence of differentiated pricing or marketing strategies

5.354 ComReg has assessed whether there is evidence of differentiated pricing or marketing that might indicate the presence of regional and/or local variations in competitive conditions, in particular, geographically de-averaged or differentiated WLA (or retail broadband) pricing. Furthermore, variation in product quality between geographic areas (which may infer effective price differences), or variation in the marketing of WLA products may also be suggestive of localised competitive pressures within a market.

5.355 At the wholesale level, none of Eircom, SIRO, or NBI vary their prices for VUA by geographic location. VUA is provided by Eircom on an almost-national basis (outside of the IA), albeit in the presence of regulation, and is priced on a uniform basis nationwide, in accordance with its regulatory obligations, by NBI in accordance with its state aid obligations and its contract with DECC, and, on a commercial basis, by SIRO. Similarly, Eircom does not vary its prices for LLU geographically. LLU is priced on a uniform basis nationwide, albeit in the presence of regulation.

5.356 Eircom's pricing of WLA products is uniform across the country, although this is in the presence of regulation (noting that existing SMP price control obligations place certain restrictions on Eircom VUA and LLU pricing. Absent regulation, these would not be in place, so Eircom's pricing behaviour to date is not necessarily indicative of its conduct absent regulation).[600] The only geographic differences in Eircom WLA pricing arise from the availability of various access products, which is driven by the availability of technologies within an EA and Eircom network rollout. For example, in areas where Eircom's FTTP network has not yet been rolled out, Access Seekers can only purchase Eircom VUA over its FTTC network. This differentiated pricing, therefore, does not appear to be driven by competitive conditions, but rather by the presence of specific access networks capable of delivering VUA.

5.357 SIRO indicated that it prices its products on a uniform basis, where its network is available, although as an unregulated commercial entity, it would be free to vary its prices geographically, if it wished. Similarly, NBI appears to price VUA on a uniform basis throughout the IA and is constrained to do so by the terms of the NBP Contract. On a forward-looking basis, and on the basis of its non-discrimination obligations, NBI is obliged to offer wholesale products for sale at a uniform price across the IA.

[600] Under ComReg Decision D11/18, FTTC VUA is a national cost oriented price. FTTP VUA has price flexibility but must be priced above the floor set.

5.358 ComReg has already addressed differentiated pricing for retail broadband at section 4.3.4 above, and concluded, taking account of all the evidence available to it, that there are insufficient grounds to conclude that SPs active in the provision of retail broadband differentiate their pricing or marketing strategies on a geographic basis.

5.359 ComReg notes, however, that SPs may vary retail broadband prices, bundling and marketing schemes depending on the network technology available in an area. In addition, retail broadband is marketed nationally by the four SPs which, collectively, account for 86% of retail broadband subscriptions, as of Q2 2023 (Eircom, VMI, Vodafone, and Sky), with local marketing campaigns following the rollout of new broadband services (e.g., FTTP network rollout).

5.360 Insofar as potential differences in prices across different geographic areas are concerned, there is little behavioural evidence to suggest that Eircom is facing significantly different competitive conditions specifically in the provision of WLA between different geographic areas. Accordingly, ComReg has insufficient evidence to conclude that the provision of WLA is characterised by differentiated pricing or marketing strategies across different sub-national geographic areas.

5.361 As noted above, Eircom's pricing of WLA products is uniform across the country, although this is in the presence of regulation. The only geographic difference in pricing arises based on the availability of the various access products. This is driven by the availability of technologies within an EA and the rollout of FTTC and FTTP by Eircom. For example, in areas where no FTTC or FTTP network has been rolled out, VUA is unavailable and Access Seekers seeking to use WLA products must purchase LLU or Line Share. This differentiated pricing is not driven by competitive conditions but rather by network availability.

5.362 Insofar as potential differences in prices across different geographic areas are concerned, there is no evidence to suggest that operators vary WLA pricing across different areas of their networks for equivalent WLA products.

Criterion 5: Geographic differences in product functionalities and demand characteristics

5.363 Demand for WLA arises from Access Seekers who do not own or operate an access network with sufficient coverage to compete in downstream markets, but who wish to provide downstream wholesale and/or retail services.[601] Widespread WLA coverage ensures that these Access Seekers are able to offer downstream retail and/or wholesale services. Demand for WLA products is generally likely to only vary geographically based on premises density and investment decisions, e.g. in areas of lower premises density, Access Seekers are unlikely to demand WLA products if downstream demand is insufficient to recover investments made. That said, while the IA consists of those areas of the State where it is not commercially viable to rollout NG broadband network infrastructure due to low population or premises density, NBI's reported list of retail partners indicates that it is commercially viable to offer broadband services in those areas, albeit without having to incur the sunk costs associated with an infrastructure build.[602] As such, ComReg considers that demand for WLA is likely to be national in nature.

5.364 Access Seekers purchasing VUA or LLU from Eircom can benefit from coverage which permits them, if they wish, to offer retail broadband on an almost-national basis in the case of VUA and a ubiquitous basis in the case of LLU, using Eircom wholesale inputs. In respect of Access Seeker VUA purchases from SIRO or NBI, larger Access Seekers appear to purchase VUA to service retail end users where these networks are present. For example, Vodafone and Sky currently purchase both SIRO and NBI inputs (as well as from Eircom) in order to deliver retail broadband on a national basis. ComReg has identified some smaller Access Seekers which offer retail broadband on a regional basis. For example, Carnsore Broadband provides retail broadband services in Wexford on the basis of SIRO and NBI VUA inputs.

Table 42: Retail Broadband Subscriptions by Service Provider, Q2 2023 [✂REDACTED✂]

Retail Operator	NG Subscriptions[603]	CG Subscriptions	% Share of Total (NG)
[redacted]	[redacted]	[redacted]	[redacted]

[601] As of Q2 2023, Eircom's largest WLA customers are [✂ [redacted] ✂]

[602] If an Access Seeker considers that there is insufficient scale to warrant incurring the sunk costs of infrastructure investment required to procure NBI VUA, it may instead purchase NBI Bitstream, avoiding the service delivery disincentives arising from diseconomies of scale, scope or density.

[603] Including FTTx and Cable subscriptions.

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

5.365 ComReg considers that Access Seeker demand for retail broadband displays limited geographic variance. In particular, three SPs (Eircom, Vodafone, and Sky) which, together, account for 86% of retail broadband subscriptions nationally as of Q2 2023, purchase LLU and VUA from one or more Network Operators on a merchant market basis or, in the case of Eircom, self-supply, to offer services on a national basis, while, throughout the State, smaller Access Seekers purchase VUA or LLU to deliver retail broadband on a local or regional basis. In this regard, ComReg considers that EAs across the State are characterised by similar competitive conditions whereby a number of SPs with national reach are present alongside local SPs. The identity of the larger SPs (Vodafone, Eircom, Sky) tends not to vary across EAs, while the identity of local SPs purchasing VUA or LLU does tend to vary such that, for example, Net1 is active in Louth and Westnet is active in Mayo on the basis of merchant market VUA inputs.

5.366 Accordingly, ComReg has insufficient evidence to conclude that the provision of WLA is characterised by geographic differences in demand characteristics across sub-national geographic areas, noting *inter alia* that Access Seekers may purchase inputs, or self-supply, from more than one Network Operator.

5.3.2 Are there sufficient grounds for geographic differentiation?

5.367 ComReg has assessed the five criteria considered above. In respect of CG WLA, all five criteria indicate the likely absence of sufficiently different, yet stable, competitive conditions between geographic areas on a forward-looking basis. On balance, the evidence available to ComReg suggests that there are insufficient grounds to conclude that competitive conditions on the CG WLA Product Market are moving from a situation of relative uniformity to a situation of differentiation across the State. This conclusion is supported by the ongoing decline in service provision over copper-only networks, as evidenced by low and declining LLU numbers. These market dynamics suggest that the CG WLA market is unlikely to be characterised by different competitive conditions across the State and the market is therefore likely to be national in scope.

5.368 In its Submission,[604] SFG argues that sub-national CG WLA geographic markets should be defined, as materially different competitive conditions arise depending on whether premises are also passed by FTTx networks capable of delivering NG WLA:

(a) A 'CG without NG WLA' market where no NG WLA is available, on which Eircom should be designated with SMP. In practice, SFG appears to equate this area with that part of the IA where NBI has not yet rolled out;

(b) A 'CG with NG WLA' market where both CG WLA and NG WLA are available, on which no finding of SMP should be made. Although not explicit, SFG appears to equate this area with that part of the IA where NBI has rolled out, together with premises falling outside the IA.

5.369 SFG argues that Eircom CG WL market power in the IA will only be undermined by NBI, but that the prospect of NBI's arrival will not constrain Eircom's behaviour in the manner contemplated by the *"prospectively competitive"* condition at paragraphs 16-18 of the SMP Guidelines.

[604] SFG Non-confidential Submission, at p.13.

5.370 ComReg first notes that the *'prospectively competitive'* condition set out in the SMP Guidelines is not directly applicable in this instance, as it refers to the possibility of retail markets being prospectively competitive, absent wholesale regulation. Second, data available to ComReg indicate that no premises in the footprint of the Commercial NG WLA Market are passed by networks capable of delivering CG WLA only. In the footprint of the IA NG WLA Market, c.30% of premises have been passed by NBI, leaving a maximum of 369,000 premises, or approximately 17% of premises nationwide, passed by CG WLA only. All of these premises are due to be passed by NBI FTTP by 2026/7.

5.371 ComReg also notes that, in determining whether there are grounds to define sub-national markets for the provision of CG WLA, it has applied the five Phase 1 assessment criteria set out at paragraph 5.296 above, based on BEREC and EC guidance. All five of these criteria indicate that there are no grounds to define sub-national markets for the provision of CG WLA on the basis of there being insufficient appreciable differences in competitive conditions.

5.372 In carrying out its assessment, ComReg is required to do so on a forward-looking basis over the lifetime of the market review period.[605] Accordingly, while NBI's rollout is ongoing, ComReg takes a forward-looking approach based on reasonably reliable deployment forecasts which NBI can provide, coupled with the evidence that it is deploying and its contractual requirement to do so. QKDR data shows a persistent decline in CG WLA lines, which is likely to continue over the lifetime of this market review period. Where sufficiently reliable deployment forecasts exist, ComReg must take them into account in its market definition exercise, in order to, as far as possible, account for the dynamic nature of telecoms markets, in compliance with the guidance provided, *inter alia*, in the 2018 Explanatory Note.

[605] As set out at p.5 of the 2018 Explanatory Note.

5.373 In respect of NG WLA, three criteria (geographic differences in entry conditions over time, variation in the number and size of potential competitors, and distribution of market shares) indicate the likely presence of sufficiently different, yet stable, competitive conditions between geographic areas on a forward-looking basis, while two (evidence of differentiated pricing or marketing strategies, and geographic differences in demand characteristics) do not. Accordingly, on balance, the evidence available to ComReg suggests that there are sufficient grounds to conclude that competitive conditions on the NG WLA Product Market are moving from a situation of relative uniformity, based on ongoing demand for VUA (as defined in the 2018 Decision) delivered over Eircom's NG network, to a situation of differentiation across the State, driven by the rollout of NG broadband by NOs, particularly the implications for geographic market definition of NBI's non-commercial rollout in the IA.

5.374 Over the lifetime of this market review, ComReg expects Eircom, SIRO and NBI FTTP rollout to continue.[606] ComReg also notes VMI's announcement of its intention to commence the provision of wholesale broadband services over FTTP. On the basis of information provided by VMI, its very early stages of rollout and the as yet unmaterialised actual supply, it is unlikely that this will have a material impact for a number of years. This suggests that it may not, on a forward-looking basis, be appropriate to define a single national geographic NG WLA market, given that competitive conditions may not be sufficiently homogenous nationally, owing to increased rollout of NG broadband and stable geographic differences in the availability of those networks. It follows that there may be grounds for distinguishing competitive conditions on the NG WLA market on a geographic basis. In particular, it may be appropriate on the basis of sufficient differences in competitive conditions to characterise sub-national geographic markets.

5.375 In Phase 2 below, ComReg sets out the criteria which it applies to measure any sufficient differences in competitive conditions between EAs which would justify defining two or more sub-national geographic markets, rather than a single geographic market, in the provision of NG WLA.

[606] Eircom's FTTP rollout is likely to upgrade or replace existing FTTC and copper networks.

5.3.3 Phase 2: Application of geographic assessment criteria to EAs

Relevant geographic unit for the geographic market assessment

5.376 As set out in Annex 12, ComReg considers that the relevant geographic unit for the Phase 2 NG WLA geographic market assessment is the Modified Eircom Exchange Area (the '**Modified EA**'). This is because using the EA as the unit of assessment would fail to account for the geographic split between NBI coverage within the IA, and Eircom or SIRO coverage outside the IA. The Modified EA is divided internally between the IA EA – that is, the part of the EA falling within the IA, and the Commercial EA – that is, the part of the EA falling outside the IA. In most cases, the Modified EA will consist of both a Commercial EA and an IA EA component. However, in a small number of cases, the Modified EA will lack a Commercial EA or an IA EA component, as appropriate, where the Modified EA falls fully within, or outside, the IA.

5.377 The 2020 Explanatory Note[607] indicates that, when NRAs are examining the geographic scope of a market, they should ensure that geographic units:

(a) Are of an appropriate size;

(b) Reflect the network structure of relevant Service Providers; and

(c) Have clear and stable boundaries over time.

5.378 In this regard, Eircom's EA boundaries are of an appropriate size to allow detailed analysis yet avoids a burdensome micro-analysis which may not add analytical value. Both Eircom and BT use the EA in their supply of retail and wholesale services. Furthermore, EA boundaries are relatively stable over time (although dynamics within them may vary at the premises level) and are well understood by SPs who purchase services over Eircom's FTTx network.

5.379 Given that NBI's and SIRO's networks are not ubiquitous, ComReg overlays those network footprints onto the Eircom EA boundaries. This allows consideration of market shares, network presence and coverage of the various SPs within an EA, regardless of whether they use Eircom inputs in their network. While alternative geographic units may suit individual networks, in circumstances where ComReg has to take account of multiple networks there is no unique unit of assessment that can accommodate all networks perfectly. ComReg considers that, for the reasons set out above and in Annex 12, the Modified EA is a reasonable and proportionate way of proceeding.

[607] At page 19.

5.380 ComReg limits its assessment of competitive conditions[608] in Modified EAs to those operators whose networks it includes in the NG WLA Product Market or CG WLA Product Market (‘**Network Operators**’), namely:

(a) Eircom’s FTTC and FTTP networks;

(b) SIRO’s FTTP network; and

(c) NBI’s FTTP network.

5.381 ComReg notes announced FTTP rollout by VMI but, at the time of this Decision, is not in possession of sufficiently reliable and detailed forecast FTTP rollout data from any Network Operator other than NBI. ComReg can only therefore take account of other SPs’ projected network rollout more generally. In the absence of such data for VMI, ComReg has carried out a sensitivity analysis to determine the hypothetical impact on the geographic market definition exercise of VMI, assuming that its existing FTTP (RFoG or otherwise) and CATV network footprints were all converted to FTTP capable of delivering merchant market and self-supply NG WLA over the lifetime of the market review period – despite the fact that, as of October 2023, it has not yet commenced the supply of NG WLA services.

Criteria for assessing the WLA geographic markets

5.382 Annex 12[609] outlines the criteria for assessing the NG WLA geographic markets and ascertaining how to objectively identify differences in conditions of competition between Modified EAs. Having regard to the above, ComReg sets out a range of cumulative criteria (each of which is explained below), based around the following conditions:

(a) A minimum number of Network Operators;

(b) Absolute network coverage; and

(c) Overlapping network coverage.

5.383 The analysis of these conditions leads to a set of cumulative criteria to assess whether or not there are differences in competitive conditions between geographic areas. The criteria are:

(a) **Criterion 1:** At least three Network Operators capable of delivering VUA (SIRO, NBI, Eircom and, on a forward-looking basis VMI) must be present, or reasonably forecast to be present within the lifetime of the market review period, at the Modified EA;

[608] Note that this is not intended as an SMP assessment, but rather an examination as to whether competitive conditions may differ across different geographic areas.

[609] Discussed in paragraphs A 12.38 to A 12.63.

(b) **Criterion 2:** Individual Network Operator coverage at a Modified EA must be (or be reasonably forecast to be) at least 60%; and

(c) **Criterion 3:** At least 50% of premises in a Modified EA must be passed by at least three Network Operators.

5.384 The fine detail of these criteria is set out at Annex 12. On the basis of the application of these cumulative criteria, ComReg has concluded that it is appropriate to define two broad NG WLA Geographic Markets:

(d) The **Commercial NG WLA Market**, consisting of those parts of the Modified EAs falling outside the EA which fail one or more of the Criteria set out above; and

(e) The **IA NG WLA Market**, consisting of those parts of the Modified EAs falling within the EA which fail one or more of the Criteria set out above.

5.385 As set out in further detail in Annex 12, three IA EAs passed all three criteria, but are deemed to be too small in premises number terms, based on Q1 2023 data, to warrant defining a separate geographic market.[610]

5.386 ComReg has also considered in Annex 12 the hypothetical impact of VMI on the geographic modelling exercise. To do so, ComReg assumed that all premises served by VMI RFoG and CATV as of Q1 2023 were instead served by VMI FTTP capable of delivering both self-supply and merchant market VUA. This hypothetical assumption allows VMI to be included in the Phase 2 assessment. The inclusion of VMI, notwithstanding the uncertainties regarding the timing and location of its rollout, has a low level impact on the model outcomes. In this respect, when VMI CATV coverage is taken as a proxy for its potential FTTP coverage:

(a) On the IA NG WLA Market, no further IA EAs pass all criteria beyond the three specified at paragraph 5.385 above;

(b) On the Commercial NG WLA Market, the number of Commercial EAs passing all three criteria increases from 0 to 18, amounting to 1.5% of Commercial EAs and 5% of premises in the market.

[610] These IA EAs are those parts of Bettystown (BSZ, 880 premises), Donaghmede (DOM, 1 premises) and Togher (TOG, 89 premises), amounting to <1% of all IA EAs and 0.2% of all premises in the IA NG WLA Market.

5.387 ComReg is of the view that it is not appropriate at this stage to define a separate geographic market consisting of the 18 Commercial EAs which would pass the Phase 2 geographic assessment criteria on the basis of hypothetical VMI VUA provision. In the first instance, ComReg lacks certainty on when VMI VUA will be specifically made available at these Commercial EAs. Beyond VMI's general assurance that FTTP rollout will be completed and VUA made available on that network, ComReg cannot assert with a sufficiently high degree of probability that, over the lifetime of this market review period, that VMI VUA will, in fact, be available. ComReg also has no evidence as of yet as to when the competitive impact might be in these areas. It follows that ComReg cannot form a clear view on the likely competitive impact of the presence of VMI VUA, and whether it will, in practice, generate sufficient differences in competitive conditions to warrant defining a separate geographic market.

Commercial NG WLA Market

5.388 In their Submissions SFG, Copenhagen Economics, Vodafone and Sky argue that the Commercial NG WLA Market should be further sub-divided into a Rural Commercial NG WLA Market and an Urban Commercial NG WLA Market, or, failing that, that differentiated remedies should be applied in these areas.

5.389 SFG and Vodafone both argue that ComReg's geographic market definition exercise is inconsistent with EC guidance including, *inter alia*, the 2018 SMP Guidelines and the 2020 Explanatory Note. SFG argues that ComReg's starting point is too wide, while Vodafone argues that EC guidance requires ComReg to account for the presence of significant differences in current and expected future competitive conditions in the provision of NG WLA.

5.390 SFG suggests that the approach set out in ComReg's 2021 ANM Decision[611] which defined Urban Commercial, Rural Commercial, and IA geographic markets, would have been more appropriate.

5.391 SFG[612] argues that the Commercial NG WLA Market should be split into two or more geographic markets, including premises assigned in the 2023 Consultation to the IA NG WLA Market:

[611] Regulated Wholesale Fixed Access Charges – Review of the Access Network Model, Response to Consultation and Final Decision (D11/21), 17 December 2021 (the '**2021 ANM Decision**'). This Decision is currently under appeal by Eircom.

[612] SFG Non-confidential Submission, at pp.7-14.

(a) A Rural Commercial NG WLA Market on which Eircom has SMP. This market consists of premises in the IA passed by Eircom FTTP but not yet passed by NBI, together with those premises outside the IA passed by Eircom FTTP which are unlikely to be passed by another FTTP network in the near future. SFG suggests that this area corresponds to the Rural 340k - that is, those premises originally assigned to the IA, but which Eircom agreed with DECC to serve on a commercial basis (then resulting in them being removed from the IA). SFG also suggests that this market corresponds with that part of Eircom's network served on the basis of GPON technology (which, as of Q2 2023, amounts to a total of **[✂** [redacted] **✂]**; and

(b) An 'Urban Commercial NG WLA Market' consisting of premises outside the IA passed by at least two FTTx networks capable of delivering NG WLA, or (by inference) likely to be passed by two such networks in the near future. SFG also suggests that this market corresponds with that part of Eircom's network served on the basis of XGS-PON technology. SFG suggests that this market should be further sub-divided:

i. A SIRO present Urban Commercial NG WLA Market where Eircom should be permitted to compete more robustly; and

ii. A SIRO not present Urban Commercial NG WLA Market where Eircom should be more tightly constrained.

5.392 Vodafone argues[613] that the Commercial NG WLA Market should be split:

(a) A 'prospectively monopoly' Rural Commercial NG WLA Market corresponding to the Rural 340k, and

(b) A 'prospectively competitive' Urban Commercial NG WLA Market corresponding to all other premises.

5.393 Copenhagen Economics[614] argues that there are grounds to consider defining separate geographic markets within the Commercial NG WLA Market, while Sky[615] considers that a separate Rural Commercial NG WLA Market coterminous with the Rural 340k should be defined.[616]

[613] Vodafone Non-confidential Submission, at p.8.

[614] Copenhagen Economics Non-confidential Submission on behalf of Eircom, paragraphs 3.70 to 3.79.

[615] Sky Non-confidential Submission, at p.4.

[616] ComReg notes that the exact definition of the Rural Commercial NG WLA Market varies by Respondent – CE merely alludes to the absence of SIRO or VMI, Sky and Vodafone rely on the Rural 340k, while SFG includes Eircom's GPON footprint, together with parts of the IA not yet served by NBI. Respondents' reasoning – and ComReg's response – applies with equal validity across each definition.

5.394 SFG and Copenhagen Economics argue that differences in competitive conditions arise from the presence (in the Urban Commercial NG WLA Market) or absence (in the Rural Commercial NG WLA Market) of alternative or overlapping network rollout by SIRO or VMI actually or prospectively capable of providing WLA. Sky[617] suggests that these significant differences are likely to become starker over time, and SFG argues that competitive conditions are likely to deteriorate in the Rural Commercial NG WLA Market, while they are likely to improve in the Urban Commercial NG WLA Market.

5.395 SFG asserts that, in the Rural Commercial NG WLA Market, Eircom operates its FTTP network on the basis of GPON technology, while it uses XGS-PON technology in the Urban Commercial NG WLA Market. SFG suggests that Eircom FTTP in the Urban Commercial NG WLA Market can therefore reach speeds faster speeds than in the Rural Commercial NG WLA Market. SFG adds that Eircom's service connection model availability differs by market and that, according to Eircom's *Bitstream Plus and VUA Industry Process Manual*[618] the NTU Connection Variant is available only to Access Seekers *"on XGS-PON in IFN areas only"*.[619] This service allows providers to maintain their own ONT in the end user's premises. SFG suggests that Eircom does not provide the NTU Connection Variant in the Rural Commercial NG WLA Market where it is assured 100% market share. ComReg notes that while this is the case, it is open to Access Seekers to make a request for such services.

5.396 In respect of pricing differences, SFG asserts that Eircom levies different connection charges, and that the €270 connection charge was only applied to Rural Commercial areas. SFG states that it is confident that Access Seekers purchasing Eircom FTTP VUA will, on average, have paid significantly less in the Urban Commercial NG WLA Market than the Rural Commercial NG WLA Market. SFG therefore argues that, in the one area in which Eircom has pricing flexibility under regulation (connection/migration charges), its pricing strategy offers more competitive terms in the Urban Commercial NG WLA Market, indicating geographic differences in competitive conditions.

5.397 ComReg does not agree with SFG's assertion. ComReg understands that Eircom levied a €270 connection charge on a national basis.

[617] Sky Non-confidential Submission, at p.4.

[618] V.36 of the Manual, dated 19 August 2023, is available online at https://www.openeir.ie/wp-content/uploads/2023/08/NGA-IPM-V36_0-Unmarked-19082023.pdf

[619] *Ibid*., p.89.

5.398 Copenhagen Economics argues that barriers to entry are not uniform throughout the Commercial NG WLA Market. The presence of SIRO and VMI in parts of the Commercial NG WLA Market, and their network upgrade plans, suggests that it is possible to overcome barriers to entry in at least some parts of the Commercial NG WLA Market.

5.399 Copenhagen Economics also suggests that data regarding Eircom FTTx wholesale volumes demonstrate that it faces varying levels of competition within the Commercial NG WLA Market. CE claims that these data indicate that [✂ [redacted]

5.400 [redacted] ✂]

5.401 Vodafone cautions that Eircom is currently the only FTTP network in the 'Rural Commercial NG WLA Market' and that this is unlikely to change over the lifetime of the market review period, as the lower premises density in this area (which was originally assigned to the IA) means that there is limited incentive for additional commercial roll out by other operators.

5.402 In contrast, Vodafone suggests that, in areas of higher premises density, there are likely to be at least two providers of NG WLA over the market review period, given Eircom, SIRO, and VMI FTTP presence on a forward-looking basis, leading to a greater likelihood of network overlap.

5.403 A number of Respondents provided various justifications in their Submissions for defining separate Rural and Urban Commercial NG WLA Markets.

5.404 SFG and Vodafone argue that, in defining a single Commercial NG WLA Market, ComReg is inconsistent with EC guidance. SFG suggests that ComReg's geographic market definition starting point (the Commercial NG WLA Market) is too wide, and therefore inconsistent with guidance set out in the SMP Guidelines.[620] ComReg disagrees with SFG's argument for two reasons. First, ComReg has carried out its geographic market definition exercise in conformity with EC and BEREC guidance, and its application of the Phase 1 and Phase 2 criteria, based on the evidence, suggest that it is appropriate to define a Commercial NG WLA Market. Second, the authorities on which SFG relies are not of relevance. Paragraphs 43 and 47 concern the risks of unduly widening the scope of a relevant geographic market arising from the failure to adequately substantiate the inclusion of additional areas due to a chain of substitution effect. ComReg does not rely on a chain of substitution argument to ground its geographic market analysis.

5.405 Vodafone suggests that ComReg's approach is not consistent with EC guidance which requires that the geographic market definition exercise accounts for differences in competitive conditions, and that markets be defined on the basis of geographic units which are aggregated on the basis of the same competitive conditions, typically resulting in the definition of competitive and non-competitive areas. ComReg disagrees with Vodafone's suggestion and notes that it has, in fact, applied a range of objective factors to aggregate geographic units (Modified EAs) into markets which share sufficiently similar competitive conditions and are different from other areas. ComReg is therefore satisfied that its approach to geographic market definition is consistent with the relevant EC guidance cited by Vodafone.

5.406 SFG also argues that ComReg should have applied the geographic market definitions set out in the ANM. As set out at paragraphs 5.292 and 5.293 above, in defining a relevant geographic market, ComReg must have regard to the specific characteristics of the market under assessment. Accordingly, ComReg cannot simply recycle a geographic market definition for one market and apply it to a different market. ComReg also notes that the ANM did not define geographic markets for competition assessment purposes, but rather identified distinct footprints to facilitate the calibration of fixed access charges based on underlying **cost** differences across areas. The ANM exercise was in a different context and was not a geographic market definition exercise.

[620] Specifically, paragraphs 43 and 47 thereof.

5.407 The Respondents identified above argue that separate Urban and Rural Commercial NG WLA Markets arising from the presence or absence of FTTP networks other than Eircom capable of delivering NG WLA should be defined on the basis of the presence of sufficiently different competitive conditions.

5.408 In this respect, Vodafone suggests that premises density impacts NG network rollout incentives, while CE suggests that differences in network rollout levels are indicative of higher or lower barriers to entry across the Commercial NG WLA Market, and that Eircom wholesale volumes varied depending on whether it was overlapped by SIRO or VMI. ComReg excludes VMI CATV from the NG WLA product market, and it is therefore not appropriate to include VMI CATV overlap with Eircom FTTx in the geographic market definition exercise, as CE has done. The appropriate overlap assessment is therefore with SIRO only. Moreover, CE data exclude Eircom self-supply (whether for own retail use, or the supply used in providing, for example WCA), which ComReg has included in the NG WLA product market. ComReg data suggest that between Q2 2020 and Q2 2022, Eircom grew its sales of WLA by **[✂** [redacted] **✂]** in Commercial EAs where it did not face direct competition from SIRO, and **[✂** [redacted] **✂]** in Commercial EAs where it overlapped with SIRO.[621]

5.409 More broadly, ComReg notes that Respondents argue that the Rural Commercial NG WLA Market is characterised by the presence of Eircom FTTP only, while the Urban Commercial NG WLA Market is characterised by the presence of other NOs actually or prospectively capable of delivering NG WLA. This is not fully the case. ComReg data suggest that, as of Q1 2023, **[✂** [redacted] **✂]** of Eircom GPON premises are also passed by SIRO, while **[✂** [redacted] **✂]** of Eircom XGS-PON premises are also passed by SIRO. Accordingly, the argument that there are significant differences in competitive conditions arising from SIRO rollout does not appear to hold – in both parts (GPON and XGS-PON) of the Commercial NG WLA Market, more than 75% of premises are not passed by SIRO.

[621] These figures were calculated using ComReg Q2 2023 QKDR data. The annual growth in Eircom's active FTTx lines was calculated separately for those areas in the Commercial NG WLA Market where Eircom faces direct competition from SIRO, and those areas where it does not. Eircode information was used in the mapping process therefore these figures exclude those premises which do not have an Eircode.

5.410 Network overlap data do not support the contention that these are appreciable differences in competitive conditions between the two areas. As set out at paragraph A 12.49 below, ComReg considers that Modified EAs characterised by the presence of one or two NOs are more similar to each other than Modified EAs characterised by the presence of three NOs. ComReg therefore considers that Commercial EAs characterised by the presence of Eircom FTTP only, or both Eircom and SIRO FTTx, are, sufficiently similar in their conditions of competition to warrant inclusion in the same geographic market.

5.411 ComReg also notes that SFG, Vodafone and Sky all argue that the so-called Rural Commercial NG WLA Market and the Urban Commercial NG WLA Market are characterised by differences in competitive conditions, and in doing so argue that Eircom should be designated with SMP on both markets, with a higher burden of remedies (cost orientation) applying on the Rural Commercial NG WLA Market. This line of reasoning – whereby the end point is the application of differentiated pricing remedies – does not require separate geographic markets to be defined. The apparent objective of these Submissions is more appropriately addressed at Section 9.3.4 below.

5.412 In respect of SFG's technology argument set out at paragraph 5.395 above, ComReg notes that FTTP which is included in the NG WLA focal product, can facilitate both GPON and XGS-PON networking standards. SFG's query is, accordingly, a product market issue rather than a geographic market issue in the first instance. Eircom's network topography, meaning whether an Access Seeker may access GPON or XGS-PON technology, determines broadband product availability at a premises. In its product market definition exercise, ComReg did not consider that GPON and XGS-PON warrant separate product market definitions. In respect of the NTU Connection Variant, this feature allows OAOs to deploy their own ONT rather than using an Eircom ONT. The most obvious advantage of this is allowing an Access Seeker to develop a combined device which contains both the ONT and modem functionality. Eircom has made this feature available on its XGS-PON network only to date.

5.413 In respect of SFG's pricing argument set out at paragraph 5.396 above, ComReg notes that, while Eircom connection charges have decreased since the introduction of FTTP to the market (under regulation), there is no evidence to suggest that connection fees differ depending on whether end users are passed by GPON or XGS-PON. At any given point in time, connection charges applied to access Eircom's FTTP network are uniform across the State. The only known instance where an Access Seeker may have paid more than its counterparts is if they sought access to Eircom's FTTP network before a State-wide price drop.

5.414 Vodafone, Sky and SFG all argue that Eircom should be designated with SMP on their named Urban Commercial NG WLA Market and the Rural Commercial NG WLA Market. This is an issue which is more appropriately addressed at competition assessment in Section 6, rather than geographic market definition stage. However, ComReg considers this issue to be moot, given that, for the reasons given above, it defines a single Commercial NG WLA Market.

IA NG WLA Market

5.415 SFG[622] argues that the IA NG WLA Market proposed in the 2023 Consultation should be split in three:

(a) An IA NG WLA Market proper, on which no finding of SMP should be made, which should consist not of the entire IA, but only those premises actually passed by NBI FTTP. This would result in a substantial reduction in the size of the IA NG WLA Market compared to the 2023 Consultation;

(b) Premises in the IA not yet passed by NBI but passed by Eircom FTTx capable of delivering NG WLA should be reassigned to its so-called Rural Commercial Market on which Eircom should be designated with SMP;

(c) Premises in the IA not yet passed by NBI or Eircom FTTx capable of delivering NG WLA should be reassigned to an IA CG WLA Market or CG without NG WLA Market, on which Eircom has SMP.

5.416 Where Eircom has deployed FTTP in the IA but NBI is not yet available, SFG argues that Eircom's incentive and ability to exploit its market power is no different than in the Commercial NG WLA Market where ComReg suggests that Eircom has SMP.

5.417 SFG additionally argues that there is a risk associated with NBI no longer having rollout obligations to premises where encroachment from commercial NOs has occurred. It suggests that, in those circumstances, Eircom would face no competition (since the premises were formerly in the IA), but would not be constrained by SMP obligations, since the premises in question would be assigned by ComReg to the IA NG WLA Market.

5.418 These arguments relate in the first instance to the presence of absence of Eircom market power in the IA and are accordingly more appropriately addressed at Section 6 below. In any event, for the reasons set out above, ComReg considers that its assessment and approach to identifying an IA NG WLA Market is the appropriate one.

[622] SFG Non-confidential Submission, at pp.13-14.

5.419 SFG also argues that premises not already passed by NBI should not be included in the IA NG WLA Market on the grounds that it is illogical to assign premises to an NG WLA market where NG services are unavailable. This is a static view and implies that ComReg should not take account of forecast NBI rollout where it is contractually committed to serve and supported by the evidence that NBI is rolling out its network (with this being used by Access Seekers). As set out at paragraph 5.372 above, ComReg is, in fact, obliged to take account in its market definition exercise *"existing market conditions as well as expected or foreseeable market developments over the course of the next review period"*, as a failure to do so would require ComReg to assume that conditions of competition will not change over the lifetime of the market review period, even in circumstances where there is a very strong likelihood that such changes will occur, arising, for instance, from reliable network rollout forecast data. ComReg accordingly considers that it is appropriate – and consistent with EC guidance - to take forecast NBI rollout into account in its geographic market definition exercise.

5.4 Overall Conclusion on WLA Market Definition

5.420 In paragraphs 5.11 to 5.290, ComReg analysed the WLA market from a product perspective and set out its view that it is comprised of two markets:

(a) The CG WLA Product Market, consisting of

i. LLU, SLU, and Line Share products provided over its copper-only network by Eircom to Access Seekers, and

ii. the self-supply of LLU, SLU, and Line Share by Eircom to its own retail business.

(b) The NG WLA Product Market, consisting of

i. VUA products provided over FTTx networks by Eircom, SIRO, NBI and, on a forward-looking basis, VMI, to Access Seekers; and

ii. the self-supply of VUA by Eircom and, on a forward-looking basis, VMI, to their own retail businesses.

5.421 In paragraphs 5.291 to 5.419 (and Annex 12), ComReg analysed the WLA markets from a geographic perspective and set out its view that there are three distinct WLA product and geographic markets (collectively, the '**Relevant WLA Markets**), based on the analysis of the criteria laid out in paragraph 5.383:

(a) National CG WLA Geographic Market (1,203 EAs);

(b) Commercial NG WLA Geographic Market (1,183 Commercial EAs); and

(c) IA NG WLA Geographic Market (1,155 IA EAs).

5.422 The identities of the Modified EAs constituting the Commercial NG WLA Market and the IA NG WLA Market are set out at Annex 13 below.

6 WLA Competition Analysis

6.1 Framework for Assessing SMP

6.1 Having defined the Relevant WLA Markets at Section 5 above, ComReg now determines whether those markets are effectively competitive, having regard to whether or not any of the SPs operating within them have SMP.

6.2 Since the WLA market is identified in the 2020 Recommendation as a market susceptible to *ex ante* regulation, it is therefore not necessary to carry out a 3CT before advancing to the SMP assessment, as the presumption in favour of regulation is already met at EU level by means of the 2020 Recommendation and Article 67(1) of the EECC (transposed by Regulation 49(4) of the ECC Regulations). ComReg is entitled to form a presumption that regulation of the WLA markets is – in principle – warranted, and can therefore proceed to assess whether, based on the evidence available to it, there are grounds to conclude that any SP has SMP in each of the CG WLA Market, IA NG WLA Market or the Commercial NG WLA Market.

6.3 The European regulatory framework for electronic communications networks and services has aligned the concept of SMP with the competition law definition of dominance advanced by the Court of Justice of the European Union in *United Brands v. Commission*:[623]

> *"The dominant position referred to [by Article 102 of the Treaty on the Functioning of the European Union] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its end users."*

6.4 Article 63(2) of the EECC (transposed by Regulation 45(2) of the ECC Regulations) effectively mirrors this definition of dominance and states that:

> *"An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."*

[623] Case 27/76 United Brands v European Commission [1978] ECR 207, Paragraph 65. See also paragraph 52 of the SMP Guidelines.

6.5 The European Commission's SMP Guidelines, of which ComReg is required to take utmost account, describe a range of criteria that may be considered by NRAs when seeking to establish whether an undertaking(s) has SMP in a relevant market.

6.6 The SMP Guidelines state that:

> *"According to established case-law, very large market share held by an undertaking for some time — in excess of 50 % — is in itself, save in exceptional circumstances, evidence of the existence of a dominant position. Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP."*[624]

6.7 Market shares in excess of 50% therefore give rise to a strong presumption of SMP. However, the SMP Guidelines also state that the existence of a high market share alone is not sufficient to establish the existence of SMP; rather it means that the undertaking concerned *may* be in a dominant position and this needs to be considered alongside other potentially relevant criteria for assessing the existence of SMP, such as:

(a) Overall size of the undertaking;

(b) Control of infrastructure not easily duplicated;

(c) Technological advantages or superiority;

(d) Absence of, or low, countervailing buyer power;

(e) Easy or privileged access to capital markets or financial resources;

(f) Product/services diversification (e.g. bundled products or services);

(g) Economies of scale;

(h) Economies of scope;

(i) Vertical integration;

(j) A highly developed distribution and sales network;

(k) Absence of potential competition; and

(l) Barriers to entry and expansion.

[624] Paragraph 55 of the SMP Guidelines.

6.8 The relative importance of each factor may vary from one analysis to another as the characteristics or dynamics of the market under assessment change. Consequently, flexibility is needed in applying the above criteria. In addition, many of the above factors, while presented separately, may, in fact, be interrelated and all available evidence is considered by ComReg collectively before a determination on SMP is made. The SMP Guidelines note that:[625]

> *"A dominant position can derive from a combination of the above criteria, which taken separately may not necessarily be determinative."*

6.2 Approach to Assessing SMP in the Relevant WLA Markets

6.9 In assessing whether an undertaking has SMP in the Relevant WLA Markets, ComReg carries out a forward-looking analysis on the basis of existing and likely future market conditions[626] to consider the range of factors identified above that are of most relevance to the market being examined.

6.2.1 Relevant SMP Criteria

6.10 For the purposes of analysing the Relevant WLA Markets, ComReg considers that the following criteria are of most relevance to the assessment of SMP:

(a) Overall size of the undertaking;

(b) Control of infrastructure not easily duplicated;

(c) Absence of or low countervailing buyer power;

(d) Economies of scale and scope;

(e) Vertical integration;

(f) Absence of potential competition; and

(g) Barriers to entry and expansion.

6.11 ComReg also views factors such as historical and likely future pricing behaviour as relevant considerations.

[625] Paragraph 79 of the 2020 Explanatory Note.

[626] P.5 of the 2018 Explanatory Note *"As set out in the Revised SMP Guidelines, in carrying out a market analysis in accordance with Article 16 of the Framework Directive, NRAs have to conduct a forward-looking, structural evaluation of the relevant wholesale market over the relevant period. (…..)*

NRAs should take into account existing market conditions as well as expected or foreseeable market developments over the course of the next review period in the absence of regulation based on significant market power; this is known as a Modified Greenfield Approach."

6.12 Other factors in addition to those set out at paragraph 6.10 above, which could be used to assess the presence of SMP have been considered but, for the reasons set out in Annex 11, are considered of less (or no) relevance for the purposes of the SMP assessment in the Relevant WLA Markets.

6.2.2 Approach to Existing Regulation

6.13 In markets subject to *ex ante* SMP regulation, an undertaking's behaviour may be restricted by way of existing SMP obligations. It is necessary, however, to consider the potential ability of the undertaking to exert market power in the absence of *ex ante* SMP regulation[627] in the markets concerned. To do otherwise could lead to a circular finding of no SMP on the basis of SMP regulatory remedies that would cease to exist following the completion of a market analysis and, in the absence of which, the undertaking may be able to exert market power. In the context of an SMP assessment, in the Relevant WLA Markets, the key hypothetical questions to be assessed are:

(a) How the undertaking in question would be likely to behave in the markets under assessment, if it were free from current or potential SMP regulatory constraints; and

(b) How the undertaking in question would be likely to behave in the markets under assessment, having regard to any SMP and other obligations in related markets that could impact the Relevant WLA Markets.

6.14 ComReg has also reviewed the PIA market in a separate decision (the '**PIA Decision**')[628] issued in parallel with this Decision, and which consists of, *inter alia*, the poles and ducts necessary to support wired electronic communications networks, which in turn can be used to offer downstream, WLA, WCA and retail broadband (and other) services. PIA is, therefore, an upstream input into the provision of these services. Under the 2018 Decision, Eircom had obligations imposed on it requiring it to provide access to its physical infrastructure ('**PI**').[629] In the PIA Decision, ComReg defines PIA as a standalone market located upstream of the WLA and WCA markets and designates Eircom with SMP in that national PIA market. Accordingly, ComReg must consider the implications - if any – for competition in the Relevant WLA Markets, having regard to the presence of regulation on the upstream PIA market.

[627] However, while discounting SMP regulation in the market concerned, other obligations (such as, for example, relevant SMP remedies existing in other markets, or obligations relating to general end user protection) are assumed to be in place.

[628] Physical Infrastructure Access ('**PIA**') Market Review, Decision, ComReg Document XX/XX.

[629] Civil Engineering Infrastructure ('**CEI**') is synonymous with the term PI.

6.15 Based on the evidence available, ComReg is of the view that, within the lifetime of this five-year market review period, other than for NBI, regulation of the PIA market and its use by other SPs is unlikely to have a significant impact on competition within the WLA and WCA (and related) markets. The only SP which currently makes use of (and is expected to make use of) Eircom PIA at any level of scale is NBI. Accordingly, the provision of WLA by SIRO on the Commercial NG WLA Market would likely remain largely unaffected by the presence of PIA regulation, since SIRO does not rely on wholesale access to Eircom's PI at any meaningful level. Eircom's self-supply of PI is manifested to date in its ongoing rollout of FTTP, where it had passed just over 1.1 million premises as at Q2 2023, along with its future plans where it intends to ultimately pass 1.9 million premises with FTTP by 2026. In the IA NG WLA Market, NBI relies heavily on access to Eircom's PI, and the presence of upstream PIA regulation enables ComReg to take account of the competitive impact of NBI in the downstream WLA and WCA markets.[630]

6.3 Assessment of SMP

6.16 Each of the relevant factors identified in paragraph 6.10 above are considered in detail below. Given an inherent degree of overlap, ComReg combines its assessment of these factors under the following three broad headings:

(a) **Existing competition in the Relevant WLA Markets:** factors such as market shares, indirect retail constraints, vertical integration, relative strength of existing competitors, barriers to expansion, and pricing behaviour (discussed in paragraphs 6.17 to 6.222);

(b) **Potential competition in the Relevant WLA Markets:** factors such as the overall size of the undertaking and control of infrastructure not easily duplicated, barriers to entry in the WLA markets, economies of scale/scope, and the overall strength of potential competitors (discussed in paragraphs 6.223 to 6.293); and

(c) **Strength of any countervailing buyer power (CBP):** an assessment of the impact posed by any strong buyers of WLA on the competitive behaviour of WLA providers (discussed in paragraphs 6.294 to 6.359).

[630] If such access were to be mandated as an obligation imposed in the WLA market, in accordance with the MGA, its competitive impact in the WLA and WCA markets would need to be discounted.

6.4 Existing Competition in the Relevant WLA Markets

6.17 As of October 2023, merchant market WLA is provided by Eircom, SIRO, and NBI. VMI has signalled its intent to be capable of commencing the provision of WLA over FTTP by **[✂** [redacted] **✂]** VMI has not been in a position to provide sufficiently detailed and reliable forecast data on scheduled WLA service provision, including at a local level. Accordingly, ComReg assesses intended VMI WLA provision under the potential competition, rather than existing competition, sub-heading.

6.18 However, ComReg notes that, <u>at geographic market definition stage</u>, ComReg carries out a sensitivity analysis to determine what, if any, impact VMI would have if it were present and capable of delivering NG WLA on the Relevant NG WLA Markets. Similarly, ComReg assesses by way of a sensitivity analysis, the impact, if any, <u>on existing competition</u> if, hypothetically, VMI NG WLA were made available to Access Seekers.

6.19 Eircom is – in the presence of regulation – the largest supplier of merchant market VUA (FTTC and FTTP), and the sole supplier of CG WLA in the State. Eircom provides VUA over its widely available FTTx network (ultimately to pass 1.9 million premises with FTTP) and CG WLA over its ubiquitous copper network. SIRO and NBI also supply VUA in areas where they have rolled out their FTTP networks. ComReg expects that Eircom (predominantly upgrading from FTTC to FTTP), SIRO and NBI (the latter within the IA) will continue to rollout their respective networks over the lifetime of this five-year market review period, with the expectation that this is likely occur at the same pace as rollout to date (See Table 2). Further information on Eircom, SIRO, and NBI rollout plans is set out at sub-section 3.2.2 above, which shows that, taking the three and a half years to Q2 2023, Eircom, SIRO and NBI,[631] on average, each rolled out FTTP to an additional 214,000, 58,000 and 44,000 premises per year.

[631] NBI data are calculated from Q1 2020 which is the period after the NBP Contract was signed.

6.20 Eircom and NBI FTTP rollout locations largely differ (noting the possibility of some overlap), and SIRO has commenced Phase 2 of its rollout, and has announced its intention to pass an additional 320,000 premises on top of the 450,000 which it passed in Phase 1, which would bring its total rollout to 770,000 premises in 154 towns nationwide, passing approximately one third of premises in the State. As of Q1 2023 SIRO had passed some **[✂ [redacted] ✂]** premises.[632] Over the five-year lifetime of this market review, the overlaps between the Eircom and SIRO FTTP networks will likely increase (and potentially VMI), although in the absence of specific location-based forecasted rollout data ComReg cannot determine the exact location of these overlaps at the time of this Decision. In an absent regulation scenario, ComReg is of the view that, for the reasons set out in this Section, over the scheduled lifetime of this market review period, absent regulation no WLA provider is likely to face a sufficiently strong competitive constraint in the Relevant WLA Markets from existing competitors, arising *inter alia* from insufficient levels of alternative and overlapping operator rollout.

(a) On the **CG WLA Market**, Eircom holds a 100% market share measured by LLU lines, as no other operator provides CG WLA in the State;

(b) On the **Commercial NG WLA Market**, as of Q1 2023, Eircom holds a market share of **[✂ [redacted] ✂]**,[633] measured by existing self-supply and merchant market VUA lines and implicit VUA inputs to NG Bitstream lines, while SIRO has the remaining market share of **[✂ [redacted] ✂]**.[634] It is ComReg's position that Eircom is not, and will not be, sufficiently indirectly constrained by downstream retail competition; and

(c) On the **IA NG WLA Market**, NBI holds a market share of **[✂ [redacted] ✂]**,[635] measured by merchant market VUA (since it has no retail arm to which it can self-supply) and implicit VUA inputs to NG Bitstream lines, as of Q1 2023 (forecast NBI rollout would likely suggest it is likely to will have a much higher market share over time on the basis it will be the main supplier). NBI is unlikely to be indirectly constrained by downstream retail competition (but it is likely constrained by the NBP Contract).

[632] In Q2 2023 this increased to **[✂ [redacted] ✂]** premises

[633] Between 80% and 90%.

[634] Between 10% and 20%.

[635] Between 20% and 30%. This level of market share reflect the existence of other NG WLA services, predominantly FTTC-based, currently being provided in the IA. ComReg considers it likely that many of if these FTTC services will not be capable of providing broadband speeds over 30 Mbps (the then threshold for premises falling within the IA ComReg would expect NBI's market share to increase.

6.21 ComReg noted in Section 5 that the CG WLA focal product (LLU) and the NG WLA focal product (VUA) are characterised by asymmetric substitution and fall within separate WLA markets. ComReg also indicated that, consistent with BEREC guidance, and bearing in mind the specific circumstances of the provision of WLA in the State, it would assess the implications of CG WLA/NG WLA asymmetric substitution as part of the competition assessment exercise.

6.22 In paragraphs 5.146 to 5.283, ComReg also considered the likely impact of any indirect retail constraints on the Relevant WLA Markets generated by retail SPs offering services over CATV, alternative FTTP, FWA, satellite and mobile networks. The strength of any such constraints was not considered sufficient to warrant their inclusion in any of the Relevant WLA Markets. However, these constraints are further examined below for the purpose of identifying the effectiveness of any competitive constraints arising from existing competition, albeit over a longer time horizon. ComReg's view is that such indirect constraints would not be effective.

6.4.1 Market Shares

6.23 ComReg considers below the likely market shares of SPs providing WLA, absent regulation in each of the Relevant WLA Markets.

6.24 ComReg considers market share figures as of Q1 2023 on the Relevant CG WLA Market on an absent regulation basis for:

(a) Eircom merchant supply of LLU, SLU, and LS;

(b) Eircom self-supply of retail broadband based on its own CG WLA and WCA inputs; and

(c) Eircom merchant market supply of CG WCA (which would, absent regulation, likely become part of Eircom's own supply unless alternative SIRO or NBI NG WLA was present at the premises in question to which Access Seekers switched).

6.25 Eircom, SIRO and NBI all supply NG WLA, while Eircom also supplies CG WLA. VMI does not yet, as of October 2023, supply active merchant market WLA and ComReg's expectation is that Access Seekers will not purchase WLA from VMI before **[✂ [redacted] ✂]**. At the time of the 2018 Decision, SIRO rollout was limited (circa 230,000 premises passed), and Eircom had a market share of in excess of 90% on the then-defined national WLA market (noting that only one product market definition was identified, which included both CG and NG WLA). As set out in Section 5 above, some market entry/expansion has occurred in the intervening time period, and VMI is likely to enter in the future (although noting uncertainty in respect of the timing and specific location of its FTTP network overlay, and therefore provision and impact of wholesale broadband services (although the expectation is that this will ultimately occur at locations currently served by VMI's CATV network and FTTP-based RFoG network). In assessing existing competition, ComReg now considers market share figures on an absent WLA regulation basis as of Q1 2023 on each of the Relevant NG WLA Markets for:

(a) Eircom merchant market supply of VUA;

(b) Eircom self-supply of retail broadband based on its own effective NG WLA inputs (which would include its self-supply of WCA);

(c) Eircom merchant supply of NG WCA (a portion of which would, absent regulation, likely become part of Eircom's own supply unless alternative wholesale services were available at the premises in question);

(d) SIRO supply of NG WLA;

(e) NBI supply of NG WLA; and

(f) Prospectively, VMI supply of wholesale broadband services.

CG WLA Market

6.26 As of Q1 2023, Eircom has a 100% market share on the CG WLA Market taking into account only those products falling into the CG WLA product market (LLU, SLU, and Line Share, all of which are provided exclusively by Eircom, including its self-supply). Moreover, bearing in mind the CG WLA product market definition, Eircom has retained a 100% market share in the provision of CG WLA since the 2018 Decision, but on a declining market, as set out at paragraph 6.35 below. As set out at Section 5 above,[636] the provision of VUA and LLU is characterised by asymmetric substitution, which is further considered at this competition assessment stage. ComReg therefore also considers at this stage whether CG WLA is constrained by NG WLA, even though they form separate product markets. This approach is consistent with the SMP Guidelines which state that:

> *"Where competitive constraints stem from outside the market, they should, nevertheless, be taken into account at the stage of the SMP assessment."*[637]

6.27 ComReg concludes at paragraphs 5.38 to 5.45 that NG WLA and CG WLA are characterised by asymmetric substitution. Accordingly, VUA is likely to exert a competitive constraint on LLU, having regard to the retail dynamics discussed in Section 3 whereby retail end users have been migrating to NG broadband, where available. In its Submission, SFG disagreed with this approach. It argued that the CG WLA Market should be split into two separate 'NG available' and 'NG not available' markets, and that Eircom should be designated with SMP on the 'NG not available' CG WLA Market, given the absence of a constraint from any other network.[638] This is a market definition issue in the first instance, which has been addressed at Section 5.3 above.[639] In any event, ComReg's SMP assessment takes a forward-looking view of market dynamics, including planned network rollout, where sufficiently reliable data are available. ComReg accordingly does not agree with SFG's proposal. ComReg also notes that CG WLA service volumes are miniscule, with total LLU figures being 7,164 lines as at Q2 2023, a 12% decline on the Q1 2023 figure of 8,118. It is evident, based on declining LLU usage, that it is no longer a driver of competition. Given its scale, ComReg considers that the CG WLA Market is not worthy of monopolisation.

[636] At paragraphs 5.103 to 5.107.

[637] Explanatory Note to the SMP Guidelines, at p.9.

[638] SFG Non-confidential Submission, at p.15.

[639] At paragraphs 5.368 to 5.372.

6.28 Given the network upgrade plans of various SPs, including NBI rollout in the IA, Eircom's CG network is likely to be surpassed by FTTP networks over the period of this review. ComReg considers whether that NG WLA constraint from outside the CG WLA Market is likely sufficient to prevent Eircom from behaving to an appreciable extent independently of its competitors, customers and, ultimately, of end users.

6.29 Since NG WLA falls outside the CG WLA Market, Eircom's CG WLA market share remains at 100%. In an absent regulation scenario, Eircom's market share remains at 100%, as, following the assumed withdrawal of merchant market CG WLA or continued commercial sale of it, but potentially under different conditions compared to regulated supply, Access Seekers would be unable to procure CG WLA from alternative sources, with the result that most end users wishing to retain CG broadband would be obliged to switch to Eircom retail. Eircom may decide not to withdraw merchant market CG WLA, although it may not retain it at existing terms and conditions.

6.30 However, Eircom may nevertheless be restricted in its CG WLA behaviour by NG WLA in certain circumstances, bearing in mind that volumes of CG WLA are low. While NG WLA is, in principle, capable of acting as a constraint on the supply by Eircom of CG WLA, in practice, the extent to which it is capable of doing so is likely to vary for a number of reasons.

6.31 NG WLA is only provided by Eircom, SIRO, and NBI (and, on a forward-looking basis, VMI). Eircom provision of CG WLA is unlikely to be effectively constrained by Eircom's own provision of NG WLA in an MGA scenario. That said, given ComReg's finding below that Eircom has SMP in the Commercial NG WLA Market, and the resultant SMP obligations, its regulated supply of NG WLA could constrain its CG WLA, where available in the footprint of the Commercial NG WLA Market. A degree of competitive constraint on Eircom's provision of CG WLA is also likely to arise from the provision of VUA by NBI[640] or SIRO (and, on a forward-looking basis, by VMI).

[640] Noting that NBI coverage is likely to be where there is no NG WLA (though some overlap is possible). There may be FTTC-based WLA provision in the IA that is not capable of providing services with minimum download speeds of 30 Mbps – with this being the threshold for inclusion in the IA.

6.32 The majority of CG WLA subscriber lines are likely to be located in the footprint of the IA where NBI has rolled out, or is scheduled to rollout, its FTTP network to premises not already served, or planned to be served, by NG broadband on a commercial basis.[641] Accordingly, within the footprint of the IA, Eircom CG WLA is likely, on a forward-looking basis, to be effectively constrained by NBI NG WLA (or indeed by any overlap from commercially supplied NG WLA in the IA). For any CG WLA provided outside the footprint of the IA, SIRO VUA is likely to be capable of acting as an effective asymmetric constraint (where it has or is expected to have coverage), but there are likely to be fewer such cases, relative to the IA scenario.

6.33 In this regard, BT and ALTO both noted in their Submissions that NBI rollout may be slower than anticipated in the IA, and that any such delays in rollout could potentially extend Eircom SMP on the CG WLA market.[642] ComReg bases its assessment on the most recent data available to it, including up to date NBI rollout data. Pending NG rollout and bearing in mind the overall decline in CG WLA, the interests of competition and consumers upon CG WLA deregulation will be somewhat protected by the transitional 12-month sunset period for the withdrawal of obligations (see Section 10), and also by ongoing consumer protection obligations at retail level. As also noted above, the number of LLU lines is trivial and ComReg does not consider this to be a market worth monopolising.

6.34 As of September, NBI reports[643] that it has passed 31% of premises in the IA (182,250 of 569,000), rising to 192,679 premises ready for order/pre-order within the next month. As NBI rollout progresses, the competitive impact of NGA on CGA will increase, further strengthening substitution possibilities and reducing the ability for Eircom to act independently with respect to CG WLA. .

[641] ComReg is unable to calculate the precise number of CG WLA lines in the IA, as most CG WLA lines do not have an Eircode assigned to them. Accordingly, ComReg cannot determine with certainty individual CG WLA lines lie within or outside the IA.

[642] BT Non-confidential Submission at pp.5-6 and ALTO Submission at p.6.

[643] As of 22 September 2023, www.nbi.ie.

6.35 Additionally, given the ongoing decline of CG WLA, the asymmetric constraint posed by NG WLA is likely to be time-bound in nature. Since the 2018 Decision, there has been a pronounced shift away from CG WLA towards NG WLA, arising from changed derived demand at end user level. Since the 2018 Decision, full and shared LLU subscriber lines have declined by 73%, from 30,517 in Q4 2018, to 8,118 in Q1 2023.[644] Similarly, retail broadband subscriptions delivered over CG DSL technology have declined by 73% since Q4 2018 and, as of Q1 2023, now amount to approximately 7% of total fixed subscriptions, according to QKDR data (and are continuing to decline). In the expectation that CG WLA numbers continue to decline (potentially to an end point at some stage in the future when the provision of copper-based broadband services ceases), NG WLA will continue to act as an asymmetric substitute, but in respect of a shrinking CG WLA market.

6.36 The decline of CG WLA and the increase in the supply and demand for NG WLA is likely also driven by a general technological step change from an older CG legacy technology to a new, more modern NG technology. In that regard, the shift from CG WLA to NG WLA is part of a broader step change across the delivery of various services to Access Seekers and end users which would be likely to occur regardless of whether NG WLA was capable of sufficiently constraining CG WLA.

6.37 ComReg is, accordingly, of the view that in the short term, and viewed in isolation, Eircom is unlikely to be sufficiently constrained by effective or immediate direct constraints on Eircom in the CG WLA Market. Over the five-year time horizon for this market review, however, the increased availability of NG WLA (particularly as NBI rolls out) along with end user switching patterns suggest that it is likely to effectively constrain CG WLA. Also, the CG WLA market is, itself, likely to shrink in size, and Eircom's high CG WLA market share needs to be viewed in this context. In particular, on a forward-looking basis, high market shares may not be a reliable indicator of the capacity of an operator to exercise market power where that market is in decline, as measured by subscriptions. In respect of CG WLA, the presence of asymmetric substitution from outside the market in the form of NG WLA is likely to limit Eircom's ability to behave, to an appreciable extent, independently of competitors, customers and consumers over the lifetime of this market review period. However, this constraint is predicated on NBI rollout.

[644] ComReg QKDR data. 7,164 LLU lines as at Q2 2023

6.38 Therefore, ComReg considers that Eircom's current 100% market share in the CG WLA Market is not a sufficiently reliable indicator of its ability to behave, to an appreciable extent, independently of competitors, customers and consumers, particularly in the context of the expected decline in this market, driven by end user switching to NG retail broadband, where available.

Commercial NG WLA Market

6.39 Eircom has a high market share on the Commercial NG WLA Market. NBI is not present on the Commercial NG WLA Market, while SIRO has a more limited market share, measured by subscriber lines. VMI is not yet present on the Commercial NG WLA Market, but, as set out below, ComReg considers what, if any impact, VMI NG WLA would hypothetically have on existing competition in that market (were its existing CATV footprint be taken to be its FTTP footprint). Table 43 below presents the likely market shares for Network Operators providing VUA in the Commercial NG WLA Market, absent WLA regulation. **[✂** [redacted] **✂]**[645] As of Q2 2023, Eircom reports that its FTTC-only network covers 986,000 premises, and its FTTP network has rolled out to 1.083 million premises nationwide.[646] It has signalled its intention to upgrade its FTTC network to FTTP, ultimately to pass 1.9 million premises by 2026.[647] It has also signalled that its joint venture with InfraVia will enable it to roll out FTTP more quickly than previously envisaged:

> *"Investment provided by this joint venture will allow eir to increase the pace of expansion of its fibre-to-the-home broadband network, and it is estimated that 200,000 homes will be passed in 2022, increasing to 250,000 homes in 2023. This acceleration of the network roll-out will enable access to ultrafast fibre broadband for around 50,000 more than initially anticipated premises per year."*[648]

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[645] Eircom Investor Information Memorandum. This document was provided to ComReg as part of its engagement with Eircom in relation to its transaction with InfraVia leading to the establishment of FNI.

[646] Eir Group Results, Q2 2023, at p.7. https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf

[647] https://infraviacapital.com/eir-infravia-partnership/

[648] https://www.eir.ie/pressroom/eir-and-InfraVia-Form-Partnership-to-Accelerate-eirs-Fibre-Broadband-Roll-Out/

6.40 ComReg considers that existing competition (measured by market shares) will not exert sufficiently effective or immediate direct constraints on Eircom in the Commercial NG WLA Market. In principle, there may be scope for the strength of these constraints to change over the lifetime of this market review period, but based on the data at its disposal, ComReg considers that any such additional constraint would likely remain ineffective. This is particularly in the context of Eircom planning to upgrade to FTTP at 1.9 million premises by 2026, which would strengthen its position relative to its competitors (as noted in Section 5.3, Network Operator rollout is slower than Eircom's and does not have the same breadth of coverage), such that ComReg does not expect Eircom's market share to significantly decline over the review period (noting that its footprint will be significantly larger than SIRO's planned FTTP footprint of 770,000 premises and that the competitive impact of VMI's entry remains to be seen) and it would continue to be capable of behaving, to an appreciable extent, independently of its competitors, customers or consumers. Since 2019, Eircom's share (including wholesale provision) of active FTTP subscribers in the Commercial NG WLA Market (excl. FTTC) has grown by 5% from **[✂ [redacted] ✂]**.[649]

Table 43: Market Shares in the Commercial NG WLA Market in the presence of regulation – Q1 2023[650] [✂REDACTED✂]

Operator	Lines	Share
Eircom self-supply, and merchant market supply of VUA & NG Bitstream[651]	[redacted]	[redacted]
SIRO merchant market supply of VUA[652]	[redacted]	[redacted]
Total	[redacted]	[redacted]

649 Figures in the range 60%-70%. If VMI's retail FTTP sales are included Eircom's share grew from **[✂ [redacted] ✂]**

650 Based on Q1 2023 QKDR data and ComReg's analysis.

651 Supply of NG Bitstream is included here, as VUA inputs are required to supply WCA services. Data available to ComReg on NG Bitstream lines do not currently enable a division between the Commercial NG WLA Market and the IA NG WLA Market. To estimate this split, the ratio of Network Operator FTTP coverage between the Commercial NG WLA Market and the IA NG WLA Market was used as a proxy and applied to the national market share figures to offer indicative figures in this case.

652 SIRO supply of VUA in the Commercial NG WLA Market increased from **[✂ [redacted] ✂]**

6.41 In its Submission on behalf of Eircom, Copenhagen Economics[653] argues that Eircom's network is overlapped by SIRO FTTP or VMI CATV in 64% of the Commercial NG WLA market, rising to 84% by 2026, assuming that rival networks continue to expand as planned and that, accordingly, Eircom is significantly constrained by other networks.

6.42 However, firstly, the 64% network overlap figure includes VMI CATV, which ComReg has excluded from the NG WLA product market on the basis that any indirect constraint it may impose is ineffective. CATV network overlap with Eircom's FTTx network does not, therefore, provide evidence that potential Eircom SMP is constrained by actual or potential competition on the Commercial NG WLA Market. Network presence at some level of materiality may suggest the presence of geographic differences in competitive conditions, but a finding of no SMP requires a full competition analysis taking into account existing competition, potential competition, and countervailing buyer power. Network presence is, on its own, a high-level preliminary indicator at best. QKDR data also indicate that CATV retail subscriptions have, as of Q1 2023, declined for eight of the previous 11 quarters, which does not appear to be consistent with CATV acting as a sufficiently effective indirect constraint on Eircom NG WLA.

6.43 The appropriate overlap measurement is therefore with other networks capable of providing NG WLA in the Commercial NG WLA Market. As of October 2023, the sole such network is SIRO. ComReg data indicate that Eircom is overlapped by SIRO at approximately 22% of premises in the Commercial NG WLA Market, as of Q1 2023.[654] ComReg also notes that VMI plans to overlay its CATV network with FTTP, although exact timing and location specific data in respect of this deployment have not been made available to ComReg. Were VMI's existing CATV network to be fully overlaid with FTTP, this would overlap Eircom FTTx at approximately 40% of premises in the Commercial NG WLA Market, and 13% of premises would be overlapped by Eircom FTTx, SIRO, and VMI.

[653] Copenhagen Economics Non-confidential Submission, at Figure 12 and Figure 13.

[654] Based on ComReg's own calculation methodology. NBI's public statements suggest coverage of 24% over the same time period, using a different definition of 'premises'.

6.44 Second, ComReg also notes that Eircom pursues a clear commercial strategy of rolling out FTTP at pace, which, Eircom states, has the objective of **[✂ [redacted] ✂]**,[655] as evidenced by Eircom rollout capability of c.214,000 premises per annum (over the last three and a half years), compared to c.58,000 premises per annum for SIRO. Figure 30 below outlines FTTP rollout by each NO, highlighting the pace of Eircom's FTTP rollout in comparison to all other NOs (SIRO, NBI and VMI). ComReg addresses comparative Network Operator rollout capability in greater detail at paragraph 6.58 below.

Figure 30: FTTP rollout by each Network Operator [✂REDACTED✂]

[redacted]

6.45 Copenhagen Economics also notes that precedent from a recent market review by the Danish NRA suggests that SMP is unlikely to be present at network overlap levels of 40-60%.[656] ComReg notes that Danish market circumstances differ materially from Irish market circumstances, such that Copenhagen Economics' comparison is not valid. The Danish NRA (DBA) defined, in light of particular national circumstances, a high capacity infrastructure market consisting of both WLA and WCA offered over both fibre and CATV (in Denmark WCA is offered over CATV). ComReg excludes WCA from its WLA product market definition, and, in its review of other NRA decisions, Copenhagen Economics omits to mention that no NRA includes CATV in a WLA-only product market definition.

[655] 'Wholesale Workshop', Open Eir PowerPoint presentation (undated), slides 4, 6 and 11.

[656] Copenhagen Economics Non-confidential Submission, at paragraphs 3.68-3.69.

6.46 Additionally, the 40-60% Danish overlap figures cited by Copenhagen Economics rely almost entirely on FTTP/CATV overlap - only 1.1% of network overlap nationally in Denmark is fibre/fibre.[657]

6.47 In the presence of regulation, Eircom **[✂** [redacted] **✂]**[658] is, as of Q1 2023, the largest <u>merchant market</u> WLA supplier in the Commercial NG WLA Market. Including self-supply, Eircom accounts for a total of **[✂** [redacted] **✂]**[659] of all WLA supply. At the time of the 2018 Decision, Eircom held a 98% market share in the then defined national market, which included both CG WLA and NG WLA. Accordingly, noting the measurement differences, Eircom's overall market share has declined by an average of just under 4% per annum since the 2018 Decision.

6.48 In its Submission,[660] Eircom argues that it faces greater difficulty growing its wholesale business in the Commercial NG WLA Market where it overlaps with **[✂** [redacted] **✂]** Eircom suggested that this provided evidence that ComReg had failed to properly account for direct constraints on Eircom in the Commercial NG WLA Market.

6.49 ComReg does not consider this to be the case. Retail CATV does not indirectly constrain Eircom VUA from within or outside the relevant market for the reasons set out at paragraphs 5.211 to 5.234 above and 6.93 to 6.163 below. Accordingly, only SIRO overlap is relevant to the competition assessment.[661] According to Figure 15 in Copenhagen Economics' submission, the constraint provided by SIRO would only amount to an approximate loss of 1.5% in market share per annum. This, in itself, is not sufficient to ground a finding of no SMP

6.50 ComReg also notes that, even taking VMI CATV and SIRO networks into account, Eircom itself states that it still successfully increased its wholesale volumes, even where it was overlapped by two other networks.

[657] European Commission letter to DBA of 1 December 2021, at footnote 16.

[658] Between 40% and 50%.

[659] Between 80% and 90%.

[660] Eircom Confidential Submission, at paragraph 40.

[661] ComReg considers VMI entry into the provision of wholesale services (WLA and WCA) in its assessment of potential competition at paragraphs 6.256 to 6.266 below.

6.51 Even if Eircom's lower volume growth amounted to a decline in market share, what matters from an SMP perspective is Eircom's absolute market share. Even if a firm is losing market share, this may be consistent with a finding of SMP if the loss is small and still results in a high absolute market share. Eircom's market share must be interpreted in the light of the fact that it had a market share of almost 100% at the time of the 2018 Decision, and any decline in market share from that point may still result in market shares which are consistent with a finding of SMP. Additionally, as set out at paragraph 6.44 above, Eircom **[✂** [redacted] **✂]**

6.52 Absent regulation, ComReg assumes that Eircom would withdraw merchant market provision of NG WLA in the Commercial NG WLA Market or continue to offer it, but potentially under different conditions compared to regulated supply (although this may not be uniformly the case in practice, and any such provision would not necessarily be on existing regulated terms and conditions). In those circumstances, Eircom merchant market supply of NG WLA-based VUA and NG WCA-based Bitstream will revert back to Eircom self-supply, unless those premises are also passed by SIRO, in which case an Access Seeker may be capable of switching some of its purchases of Eircom VUA to SIRO VUA. At the wholesale level, no other options are available to Access Seekers, given that NBI is not present on the Commercial NG WLA Market, and, as of October 2023, VMI does not yet provide wholesale services.

Table 44: Market Shares in the Commercial NG WLA Market, absent regulation – Q1 2023[662] [✂REDACTED✂]

Operator	Lines	Share
Eircom merchant market supply of VUA and VUA use in supplying NG Bitstream[663]	[redacted]	
Eircom self-supply of VUA & supply of NG Bitstream		
SIRO merchant market supply of VUA		
Total		

[662] Q1 2023 QKDR.

[663] Supply of VUA used in the supply of NG WCA is included here. The case presented in the table assumes the worst-case scenario, i.e., that all Eircom merchant market VUA and NG Bitstream supply will revert back to Eircom Retail once WLA regulation is removed, and Access Seekers do not switch to VUA provided by other NOs.

6.53 As Table 44 above indicates, in an absent regulation scenario, Eircom would likely retain a high NG WLA market share, as only limited Access Seeker switching to SIRO would be possible, given the current and expected extent of SIRO rollout in the Commercial NG WLA Market. Under the assumption that SIRO rolls out to an additional approximate 270,000 premises within the review period to cover 770,000 premises, this will be considerably less than Eircom's own announced and rapidly progressing FTTP upgrade programme which is expected to pass 1.9 million premises over the same period. SIRO rollout data over the last three and a half years suggest average annual rollout capability of approximately 58,000 premises, which implies completion of the Phase 2 770,000 premises target by approximately the end of 2027.[664]

6.54 Therefore, ComReg considers that absent regulation, Eircom's high and slowly declining market share in the Commercial NG WLA Market is suggestive (but not determinative in itself) of its ability to behave, to an appreciable extent, independently of competitors, customers and consumers.

6.55 Eircom has indicated that, by 2026, it aims to have rolled FTTP out to 1.9 million premises by means of its [✂ [redacted] ✂]

6.56 Eircom suggests that, in assessing future rollout, *"It is unclear as to whether ComReg has misinformed itself relative to the future plans of NOs, which it discounts in the Consultation."*[665] However, in the same paragraph, Eircom admits that it was unable to provide a response when ComReg sought specific data on Eircom's own rollout plans. ComReg has followed reasonable practice and EC guidance in relation to taking account of future plans of NOs.

[664] ComReg calculations based on data provided by SIRO.

[665] Eircom Non-confidential Submission, at paragraph 41.

6.57 Eircom's pace of FTTP rollout significantly outstrips both that of SIRO on the Commercial NG WLA Market and NBI on the IA NG WLA Market. ComReg has sought network rollout information from NOs using its statutory information gathering powers. Publicly available information also suggest average monthly FTTP rollout of 5,000 premises in the case of SIRO, 15,000-18,000 in the case of Eircom, and (for the sake of comparison, although it is not present on the Commercial NG WLA Market) 8,000-9,000 in the case of NBI. This indicates that Eircom's pace of FTTP rollout is significantly faster than the pace of other NOs, and is accelerating in recent quarters, as Figure 30 above demonstrates.

6.58 Accordingly, in the Commercial NG WLA Market, Eircom sees itself as already occupying a market leading position, measured by existing competition, and has also identified strategic rollout targets out to 2026[666] which will allow it to compete more vigorously with SIRO and VMI in particular. As set out in its Wholesale Workshop slides, **[✂** [redacted] **✂]**[667]

Impact on existing competition of hypothetical VMI NG WLA provision

6.59 As of October 2023, VMI has not commenced provision of NG WLA services. Nevertheless, ComReg assesses the likely impact on existing competition on the Commercial NG WLA Market under a set of reasonable assumptions about VMI service provision. This is an unavoidably uncertain exercise, which requires ComReg to make reasoned judgements about likely future market dynamics under a range of hypothetical assumptions.

6.60 At one extreme, a low level of VMI NG WLA service provision may occur over the lifetime of the market review period, arising from the facts that VMI has indicated that NG WLA service provision will not commence until at least **[✂** [redacted] **✂]**, and also that **[✂** [redacted] **✂]**[668]

6.61 Under this scenario – which ComReg considers possible – there is limited VMI NG WLA availability, and therefore little impact on existing competition in the Commercial NG WLA Market.

[666] https://www.eir.ie/pressroom/eir-announces-results-for-the-quarter-to-30-September-2022/.

[667] 'Wholesale Workshop', Open Eir PowerPoint presentation (undated), slides 4 and 11.

[668] Email from Sky to ComReg, 18 October, 2023.

6.62 At the other extreme, VMI NG WLA service provision may be fully available and widely used across the entirety of VMI's FTTP network over the lifetime of the market review period. ComReg considers that this is unlikely to be the case, given that VMI would need to fully overlay its CATV network with FTTP, launch a NG WCA service and, **[✂** [redacted] **✂]** a NG WLA service which was available across the entirety of that network. VMI has indicated to ComReg that, **[✂** [redacted] **✂]**

6.63 Under this second scenario – which ComReg considers highly unlikely - VMI NG WLA is maximally available. VMI NG WLA would have a sufficiently material impact on existing competition if, absent regulation, it caused Eircom's market share on the Commercial NG WLA Market to decline to a level consistent with a finding of effective competition. Following EC caselaw, this would require Eircom's market share to decline below the 50% threshold which raises a rebuttable presumption of dominance. Where full VMI NG WLA was available, VMI's market share would consist of its own self-supply of FTTP, together with merchant market supply of NG WLA to Access Seekers.

6.64 Under this less credible scenario, VMI NG WLA is available throughout its full CATV footprint within the Commercial NG WLA Market, all existing VMI CATV and RFoG self-supply is converted to its FTTP service and remains with VMI, and Access Seekers (with whom it enters into an agreement) migrate NG WLA purchases to VMI to the maximum extent. Under these circumstances, and holding SIRO constant, Eircom's market share would still exceed 50%, the threshold for a rebuttable presumption of dominance.[669]

[669] Based on the calculations set out at paragraphs 6.348 to 6.351 below, which suggest that Access Seeker switching from Eircom NG WLA to VMI NG WLA would be insufficient to cause Eircom market share to decline below the 50% threshold for a rebuttable presumption of dominance.

6.65 Under a more reasonable set of assumptions which do not assume (i) full VMI NG WLA availability over the lifetime of the market review period across VMI's footprint, which amounts to 51% of premises in the Commercial NG WLA Market, (ii) full VMI conversion of its existing RFoG and CATV base to FTTP self-supply and (iii) maximal switching to VMI where possible by Access Seekers, Eircom's NG WLA market share remains well above the 50% threshold for dominance. ComReg considers it most likely that, towards the latter half of the market review period, VMI NG WLA service provision will be available, where VMI has overlaid CATV with FTTP, where Access Seekers have incurred the capital infrastructure costs required to procure NG WLA, and where those Access Seekers have started purchasing service from VMI at a non-negligible level.

6.66 Having regard to the above, ComReg accordingly considers that hypothetical VMI VUA provision would be unlikely to lead to a level of sufficiently effective existing competition on the Commercial NG WLA Market.

IA NG WLA Market

6.67 ComReg expects NBI to be the main provider of services in the IA, which serves areas which would not otherwise be served by NG broadband on a commercial basis. In this context, it would likely hold a significant NG WLA market share, measured by subscribers. As of 27 October 2023, NBI reports that it has 58,332 active connections (that is, 30% of premises it has passed), although ComReg expects that this number is likely to increase as NBI rollout continues.[670] The NBP Contract[671] with the State[672] requires NBI, a wholesale-only operator that does not compete in retail markets, to rollout a high-speed broadband network within the IA, which it will operate and manage over a 25-year period. In accordance with the terms of the NBP Contract, NBI is subject to constraints on its conduct separate to any constraints arising from existing competition. The specific terms of NBI's contractual obligations and requirements are likely to substantially constrain its behaviour in a way which, as set out below, (where it would otherwise be hypothetically possible to do so), is likely to restrict its ability to act independently of its competitors, customers and end users and exert market power, even where it is likely to hold a significant market share.

[670] www.nbi.ie, accessed 4 November 2023.

[671] The full details of which, including the contract document are available at https://www.gov.ie/en/publication/16717-national-broadband-plan-contract/ ('**NBP Contract**'). The contract is subject to a change control procedure and elements may be updated over the lifetime of the project.

[672] Managed via the Department of the Environment, Climate and Communications ('**DECC**').

6.68 Under the NBP Contract, 'NBPCo' (that is, NBI)[673] must provide various wholesale products (including NG WLA) to SPs on an Equivalence of Inputs ('**EoI**') basis.[674] The NBP Contract outlines the 'Minimum Required Wholesale Products'[675] and 'Additional Required Wholesale Products'[676] that must be provided, and also states that NBI may choose to further provide 'Other Permitted Wholesale Products' that are not defined as a 'Minimum or Alternative Required Product', also on an EoI basis.

6.69 NBI is required under the NBP Contract to sell products which deliver minimum performance and service specifications as set out in the NBP Contract and must develop and publish a rolling 10 year 'Wholesale Product Roadmap' which provides information on product testing, availability and enhancement of functionality/processes. Moreover, NBI must ensure that Retail Service Providers ('**RSP(s)**') provide an anchor residential retail product based on the minimum bitstream wholesale product, which meets or exceeds the minimum performance for all specifications.

6.70 NBI must publish and update a Reference Offer[677] in relation to all wholesale products offered and provide those wholesale products at the pricing and under the terms and conditions outlined in the Reference Offer. The minimum requirements include functionality, specifications and availability timing, operational processes for SPs to manage the lifecycle of the wholesale product, SP SLA for the wholesale product, the wholesale price, and SP terms for the wholesale product. The NBP Contract also provides a detailed technical description of the specifics of each wholesale product to be offered and the operational performance required.

[673] The company that entered into the NBP Contract was made a new designated activity company limited by shares incorporated specifically for the project ('**NBPCo**'). NBPCo refers to NBI Infrastructure Designated Activity Company with registered number 631656 and a registered office at 10 Earlsfort Terrace, Dublin 2.

[674] Wholesale products, services and information must be made available to all SPs in the same timescales, on the same terms and conditions, and by means of the same systems and processes.

[675] Active and passive wholesale products, and passive backhaul wholesale products.

[676] Business wholesale products, other wholesale products that may be suitable for Strategic Community Points and any other variants of residential active wholesale products.

[677] Available online at https://nbi.ie/wp-content/uploads/2020/02/NBI-Reference-Offer-Bitstream-and-VUA-v1.1.2.pdf

6.71 In accordance with the NBP Contract, NBI must treat all SPs on a non-discriminatory basis and apply equivalent conditions and wholesale products to all SPs in equivalent circumstances (and, as noted above, on an EoI basis). It must charge all SPs the same price for a particular wholesale product in all circumstances and provide all wholesale products (including all related services and facilities) and information to all SPs under the same conditions and prices. NBI must also ensure that the list of wholesale products is sufficiently unbundled so a SP is not required to pay for or order wholesale products that are not necessary for the wholesale product required.

6.72 On a forward-looking basis, NBI is likely to be the largest NO in the IA NG WLA Market measured by coverage, ultimately with coverage of 100% by 2026/7, once full rollout is complete. This is likely to result in NBI accruing a large NG WLA market share compared to Eircom or SIRO or, on a forward-looking basis, VMI (in those cases where they overlap the IA), all of which have, or are likely to have, a substantially lower FTTx footprint in the IA NG WLA Market, (and are likely to do so on a forward-looking basis). As a result, the IA NG WLA market share of Eircom, SIRO, VMI and other SPs is likely to be significantly lower than in the Commercial NG WLA Market arising from the presence at scale of NBI. Accordingly, despite the presence of some SIRO, VMI and Eircom overlap with NBI, ComReg considers it likely that, on a forward-looking basis, and over the five-year lifetime of the market review period, NBI market share is likely to be extremely high on the IA NG WLA Market and remain so.

6.73 Absent regulation in the IA NG WLA Market, Eircom and SIRO would have freedom of commercial manoeuvre, but would face a much larger competitor in NBI, unless these SPs significantly increased their coverage footprint in the IA NG WLA Market (for which ComReg currently has no evidence). NBI is not currently subject to SMP regulation. Accordingly, in respect of NBI, the absent regulation assumption reflects NBI's existing and expected market position, rather than a hypothetical counterfactual in which existing SMP regulation is removed. For the purpose of the analysis, ComReg assumes that Eircom would withdraw merchant market provision of NG WLA in the IA NG WLA Market or continue to offer it, but potentially under different conditions compared to regulated supply – although the likelihood is that Eircom's presence would be predominantly characterised by CG WLA and/or CG WCA, given the nature of the IA. In those circumstances, it is not necessary to assume that Eircom merchant market supply of VUA and NG Bitstream would revert back to Eircom self-supply, since Access Seekers would, on a forward-looking basis, be able to switch to purchases from NBI instead. ComReg additionally notes that, since Eircom NG WLA is only present at **[✂** [redacted] **✂]**[678] of premises in the IA NG WLA Market, the overall impact of Eircom withdrawal of merchant market NG WLA absent regulation would be limited.

6.74 In its Submission, NBI argues[679] that, in the IA NG WLA Market, a Network Operator would have an enhanced incentive to roll FTTP out before NBI does if that Network Operator was not designated with SMP. In such a situation, the non-SMP Network Operator could refuse to serve other retailers or undercut the NBI VUA price. NBI considers that ComReg has not sufficiently analysed this potential outcome in deciding that no operator has SMP in the IA.

6.75 On the basis of the data available to it, ComReg has no grounds to designate any Network Operator (particularly Network Operators other than NBI) with SMP in the IA NG WLA Market. Absent such evidence, ComReg cannot make a finding of SMP or impose SMP remedies on any Network Operator. ComReg does not expect there to be entry at scale by other Network Operators in the IA, since, to date, this area has been commercially unattractive (including for reasons associated with higher costs and lower premises density).

6.76 Where a Network Operator enters the IA and undercuts NBI's pricing, NBI is entitled to form a pricing response across the IA in accordance with the Benchmark Reference Price, subject to Ministerial approval.

[678] Between 10% and 20%. ComReg is of the view that the significant majority of these premises will not be capable of providing broadband speeds over 30 Mbps.

[679] NBI Non-confidential Submission, at pp.8-9.

6.77 If a Network Operator were to enter the IA and build out FTTP network in advance of NBI, this would, in itself, provide insufficient evidence of SMP. Moreover, such rollout would suggest that at least some premises in the IA are worth serving on a commercial basis. NBI would, under the NBP Contract, have the ability[680] to request that those premises be removed from the IA, (although these premises would remain in the IA NG WLA Market for the purposes of this market review).[681]

6.78 Eircom, in its Investment Information Memorandum **[✂** [redacted] **✂]** However, Eircom has indicated to ComReg that it is unable to provide rollout forecasts more than two months in advance. Accordingly, rollout proposals out to 2026/7 are unlikely to have a level of reliability which would allow ComReg to take them into account at a sufficient level of granularity for competition assessment purposes. This is consistent with the approach ComReg has taken to other network rollout forecasts, as set out in detail below, and with guidance which ComReg has received from the EC.

6.79 SFG argued that the IA NG WLA Market should be split in three:[682]

(a) An **IA – NBI present** market, on which no finding of SMP should be made,

(b) An **IA – Eircom NG present** market, where Eircom should be designated with SMP, and

(c) A **CG WLA – no NG present** market, where Eircom should be designated with SMP.

6.80 SFG asserted that Eircom should be designated with SMP on two of these three suggested candidate markets on the basis that Eircom is not constrained in the IA by another Network Operator and can therefore act, to an appreciable extent, independently of Access Seekers. On the IA – Eircom NG present market, SFG argued that Eircom will have both the incentive (arising from a first mover advantage) and ability to win retail customers to itself and not engage in wholesale merchant market supply. SFG also argued that, under the current proposals, ComReg is protecting prospective SIRO or VMI investment, while having no regard for NBI.

[680] As set out at Annex 3 of Schedule 6.2 – Change Control Procedure of the NBP Contract.

[681] Data provided by NBI indicate that, over the period from Q1 2021 to Q1 2023, **[✂** [redacted] **✂]** were removed from the IA because they were served by another operator on a commercial basis.

[682] SFG Non-confidential Submission, at pp.15-16.

6.81 SFG's reasoning is grounded in market definition issues in the first instance. For the reasons set out in Section 5, ComReg disagrees that an Eircom NG Present market should be defined. ComReg is required to take a forward-looking view in its assessment, and thus is entitled to take account of planned NBI rollout, where sufficiently reliable deployment data are available. Similarly, ComReg may not take a differentiated remedies approach across the IA NG WLA Market unless it has first made a finding of SMP on that market.

6.82 Even where Eircom were the only NO present in the IA (for example, if NBI was permitted under the NBP Contract to not serve what were individual IA premises) ComReg expects, based on data which it has received to date from NBI, that this would be a relatively small number of non-contiguous premises and therefore is not likely to be a market worth monopolising.[683]

6.83 In respect of the first mover advantage argument (which exists for any NG operator, and not just Eircom), as set out at paragraph 6.77 above, NBI is entitled to request that any premises in the IA served on a commercial basis be removed from the IA.

6.84 NBI is governed by the NBP Contract with the State which restricts its freedom of commercial manoeuvre, even absent SMP regulation. Eircom is not so restricted. Potential Eircom entry to the IA does not, in itself, provide sufficient evidence to ground a finding of SMP. Indeed, in those circumstances, Eircom would have little incentive to engage in anti-competitive conduct such as excessive pricing (as SPs would switch to purchasing NBI VUA, so long as it was cheaper) or below-cost pricing (as NBI would not exit the market in response, due to its contractual obligations). Additionally, NBI, by virtue of the state-aided subsidy it receives, likely faces a different cost structure that confers on it an advantage relative to other potential entrants.

6.85 SFG also argues that ComReg should protect NBI investment in the same way that it protects SIRO/VMI investment. It is ComReg's role not to protect investments by specific operators, but to promote competition and efficient investment. SFG's argument presumes that Eircom would be willing to incur network rollout costs in areas previously deemed to be commercially unattractive. The evidence to date suggests that there has been some Eircom FTTP incursion into the IA, but that this has been extremely limited in scope, with a total of **[✂** [redacted] **✂]**[684] of IA premises passed by Eircom FTTP, as of Q1 2023.

[683] From Q1 2021 to Q1 2023 a total of **[✂** [redacted] **✂]** were removed from the IA, according to data provided to ComReg by NBI. 69% of these removals occurred in Q2 2021, with **[✂** [redacted] **✂]** being removed from Q3 2021 to Q1 2023.

[684] Between 0% and 10%.

6.86 Accordingly, in the IA NG WLA Market, ComReg considers that market share data suggest that, on a forward-looking basis, NBI is unlikely to face sufficiently strong competitive constraints in the form of existing competition from other NG WLA SPs. However, its market share in and of itself is not necessarily suggestive of any position of market power. As noted above, NBI is subject to a number of strict conditions under the NBP Contract (which exist absent regulation), which in many respects effectively mirror the range of access, transparency, non-discrimination, price control and cost accounting obligations that could be imposed under regulation in an SMP scenario. Additionally, NBI is a wholesale-only SP, which means it does not face the same incentives to act in an anti-competitive manner as a vertically-integrated SP. In ComReg's view, despite an absence of existing competition in the IA, these factors are likely to constrain NBI's ability to behave, to an appreciable extent, independently of its competitors, customers and consumers.

Conclusions on market shares

6.87 As set out in paragraphs 6.23 to 6.86 above, ComReg is of the view that, based on evidence from market share data (which, as noted above, may not be a useful indicator in the cases of the CG WLA Market or the IA NG WLA Market), no SP is likely to face sufficiently effective competitive constraints from existing competition on the Relevant WLA Markets in an absent regulation scenario, in the short term. Measured by market shares, NBI faces limited competitive constraints in the provision of NG WLA in the IA NG WLA Market while, in the Commercial NG WLA Market, Eircom faces insufficient constraints from SIRO alone, where SIRO has rolled out its network. In the CG WLA Market, Eircom faces constraints from outside the market only, in the form of asymmetric substitution from NG WLA.

6.88 The market share figures presented above indicate that Eircom would have the ability to behave, to an appreciable extent, independently of competitors, customers and consumers on the Commercial NG WLA Market.

6.89 Factors other than market shares must also be considered in carrying out an SMP assessment. In particular, NBI faces constraints arising, not from existing competition, but from the terms of its NBP Contract with the State, as set out in greater detail at paragraphs 6.67 to 6.71 above. Similarly, as set out above, Eircom occupies a higher market share on the CG WLA Market, but this market appears to be shrinking in size and is also characterised by constraints arising from asymmetric substitution from outside the market.

6.4.2 Indirect Retail Constraints in the Relevant WLA Markets

6.90 ComReg has set out at paragraphs 5.146 to 5.283 above its view that indirect retail constraints from CATV, alternative FTTP, FWA, satellite and mobile networks are likely to be insufficiently effective and that, accordingly, such retail products should not be included in the Relevant CG WLA or NG WLA Markets. In each case, ComReg considered that indirect substitution to services provided over such networks is not likely to be sufficiently effective or immediate to prevent Eircom from exercising a profitable SSNIP of WLA.

6.91 Similarly, while ComReg has excluded self-supply by retail only vertically-integrated SPs (such as VMI CATV)[685] from the Relevant NG WLA Markets, ComReg nonetheless examines what SPs' market shares might be in the scenario where such alternative platforms were to be included in the Relevant NG WLA Markets,[686] bearing in mind, as set out in the 2020 Explanatory Note, that a product or service not included in a relevant market may nevertheless constrain the exercise of SMP on that market.

6.92 Even in the absence of existing competition, a vertically-integrated retail SP's self-supply could pose a competitive constraint in the Relevant NG WLA Markets if it were shown that its presence on the retail broadband market were to exercise a sufficiently strong constraint on the supply of WLA.

[685] For the avoidance of doubt, once VMI commences provision of NG WLA, its self-supply of NG WLA to its own downstream retail arm will also fall within the NG WLA product market.

[686] ComReg infers that VMI is unlikely to be present to a material degree at premises passed by Eircom CG. This is because CG-only premises are likely to be located in the IA, where VMI has limited presence.

Indirect Constraints in the Commercial NG WLA Market

6.93 ComReg considers that there are insufficient grounds to include any retail products in the NG WLA product market definitions on the basis that there are ineffective indirect constraints. In particular, ComReg data suggest that VMI CATV broadband does not act as an effective indirect constraint. ComReg notes that, in its quarterly results, Eircom reports having increased its FTTP footprint from 263,000 premises at the time of the 2018 Decision, to 1.083 million premises as of Q2 2023 – a more than three-fold increase. Eircom's FTTP footprint is likely to overlap, to a non-trivial extent, with VMI's CATV network, which is largely in urban areas. This is likely to strengthen Eircom's position in the provision of NG WLA initially, although over the review period VMI is likely to overlay its CATV with FTTP, which ComReg considers at sub-section 6.5 below in its discussion of potential competition. In this regard, ComReg notes that, as of Q2 2023, VMI's retail CATV broadband subscriptions have declined in seven consecutive quarters, falling 4.7% over this period.[687] As Eircom FTTP rolls out further, the strength of any indirect constraint from VMI CATV is likely to weaken (until and unless VMI upgrades its network to FTTP).

6.94 Eircom[688] suggested that FTTP rollout by SIRO and VMI has resulted in Eircom's retail fixed broadband market share **[✂** [redacted] **✂]** and that this provided evidence that Eircom is subject to strong direct constraints on the Commercial NG WLA Market.. In a similar vein, Copenhagen Economics[689] argued that Eircom's declining retail market share provides evidence that it does not have SMP on the Commercial NG WLA Market and is constrained in its wholesale pricing. Copenhagen Economics reasons that Eircom market power at the wholesale level would be limited if a substantial share of retail volumes derives from networks other than Eircom's.

6.95 ComReg does not agree that generally declining Eircom retail broadband market share provides sufficient evidence to suggest that Eircom does not have SMP on the Commercial NG WLA Market, and also notes that Eircom increased its retail broadband market share in Q4 2022 and again in Q1 2023, according to ComReg QKDR data.

[687] ComReg QKDR Data.

[688] Eircom Confidential Submission, at paragraph 39.

[689] Copenhagen Economics Non-confidential Submission, at paragraphs 3.9 to 3.14.

6.96 The retail market shares referred to by Eircom are in the presence of upstream WLA market regulation nationally. This means that Eircom provision of merchant market NG WLA to Access Seekers is guaranteed by means of regulation. This axiomatically results in Eircom's retail arm having a lower market share relative to a counterfactual scenario in which it was not subject to SMP regulation requiring it to offer merchant market NG WLA to Access Seekers. In an MGA, Eircom retail market shares would likely increase in the footprint of the Commercial NG WLA Market if Eircom were to withdraw provision of merchant market NG WLA, or continue to provide it, but under comparatively different conditions, compared to vertically-integrated self-supply to its own downstream retail business (which enjoys strong brand recognition). Current retail market shares are therefore unlikely to be a reliable indicator of the presence or absence of upstream SMP. Eircom retail market shares alone fail to provide all relevant information for an assessment of upstream WLA market power, and Access Seekers' retail market shares based on their use of Eircom VUA inputs must also be taken into account.

6.97 As set out at Section 3 above, Eircom's national fixed retail broadband market share has declined from 33% at the time of the 2018 Decision to 28%, as of Q1 2023. ComReg QKDR data indicate that Eircom continues to be the largest retail SP nationally. Eircom FTTx penetration and rollout data also suggest that Eircom retains a strong position in the provision of retail broadband over FTTx. As of Q2 2023, it reports passing 90% of premises in the State with FTTx – a total of 2 million premises, split almost evenly between FTTC (48%) and FTTP (52%), with a year-on-year increase of 94,000 in FTTP subscriptions from 264,000 to 358,000. Eircom also reports having increased its percentage of active FTTx subscriptions, from 38% in Q1 2021 to 41% in Q2 2023.[690] Additionally, an internal Open Eir presentation suggests that Eircom retains a significant position in the provision of retail broadband on both a self-supply and a wholesale basis:

Table 45: Open Eir reported retail market shares[691] [✂REDACTED✂]

Area	Homes	Open Eir	Eircom Retail	Total
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

690 Eir Group Results, Q2 2023, slides 6 and 7.

691 'Wholesale Workshop', Open Eir PowerPoint presentation (undated), slide 10. Open Eir does not indicate in its slide deck which forms of retail broadband it counts (CG, FTTC, FTTP etc).

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

6.98 In the footprint of the Commercial NG WLA Market, ComReg data indicate that, in the presence of WLA regulation, 40% of NG WLA lines are Eircom self-supply to its own retail arm. All other things being held equal, this share would increase to 82% absent regulation, if Eircom withdrew merchant market supply of NG WLA and the end users of those Access Seekers switched to Eircom retail in response (although ComReg recognises that a portion of Access Seeker's users could switch elsewhere). Accordingly, at retail level, Eircom has the highest market share on the Commercial NG WLA Market.

6.99 Eircom also suggests at Figure 6 of its Submission (replicated at Table 46 below) that it is experiencing a market share decline **[✂ [redacted] ✂]**, based on a snapshot of data from August 2022 to January 2023, with this data purporting to show movements in FTTP, FTTC and copper broadband services.

Table 46: Figure 6 of Eircom Submission - suggested movement in Eircom's Fixed Broadband Base [✂REDACTED✂]

[redacted]

6.100 Data provided by it to ComReg show that Eircom has recorded an increase in its FTTx subscriber base in five of the six time periods it reports. This is not consistent with Eircom's contention that it is losing market share as a result of **[✂ [redacted] ✂],** including in the presence of competition from other SPs.

6.101 Additionally, ComReg met with Eircom in June 2023 to get a better understanding of the data provided by Eircom to ComReg as part of its Submission. As part of that engagement Eircom provided an update of Figure 6 in its Submission, updating the data provided to an extended period to August 2023. This is replicated in Table 47 below. According to Eircom these figures showed a net loss of its customer base amounting to **[✂ [redacted] ✂]**.[692]

[692] Less than 50,000.

Table 47: Eircom's Suggested Movement in its Fixed Broadband Base Updated on 22 June 2023 [✂REDACTED✂]

[redacted]

6.102 During and following that meeting ComReg raised a number of data queries with Eircom, including in relation to which services were included in the figures for 'Copper Services', given that these data, according to Eircom, provided evidence of a decline in broadband services. On 28 July 2023 Eircom responded to a number of ComReg queries and clarified that the copper-only figures provided in Figure 6 of its Submission and updated at the 22 June 2023 meeting included non-broadband services, specifically SB-WLR and ISDN services used for voice telephony and other purposes.[693] Table 48 below replicates Table 47 above, but this time separating out broadband from non-broadband copper services. This shows that some **[✂ [redacted] ✂]** ISDN and SB-WLR lines were included in the figures within its Submission (an those updated on 22 June 2023) (representing **[✂ [redacted] ✂]**[694] of the Copper Services figures provided), although they are not used to provide broadband services. The figures provided therefore overstated the extent of broadband movements.

Table 48: Eircom's Suggested Movement in its Fixed Broadband Base Updated on 28 July 2023 [✂REDACTED✂]

[redacted]

[693] Eircom also clarified that the figures related to the Commercial NG WLA Market only, and represented average movements in lines during the periods.

[694] Between 40% and 50%.

6.103 The services of relevance to the NG WLA product market are FTTx services, with copper-only broadband services forming part of the CG WLA Market. Taking FTTx services only, ComReg's assessment of the data presented in Table 49 shows that over the period, and contrary to Eircom's views, Eircom experienced an overall net gain in FTTx lines, with net gains in 7 of the 10 periods presented. It is also ComReg's view that there is likely to be a strong correlation between FTTC to FTTP migrations and Eircom's FTTP rollout, including its overall FTTP coverage and rate of rollout relative to other NOs. Such patterns are not consistent with Eircom having a weakening competitive position. Furthermore, ComReg considers that a sizeable number of copper-only broadband services, given their characteristics, are likely to be in the IA, and NBI subscriber growth (approximately 25,000 from Q3 2022 to Q2 2023) is likely to account for the loss of a sizeable number these copper only broadband customers from the Eircom network, although ComReg acknowledges that other SPs could also account for some of these loses.

Table 49: Eircom's Movement in its Fixed FTTx Broadband Base Updated on 28 July 2023 [✂REDACTED✂]

[redacted]

6.104 Table 50 below shows the evolution of FTTP market shares over time, excluding NBI (given that NBI is present only in the IA). Eircom has continuously grown its share of FTTP subscribers from **[✂** [redacted] **✂]**.[695]

[695] Figures in the range 60-70%.

Table 50: FTTP Active Subscriber Line Shares (excluding NBI) [✂REDACTED✂]

[redacted]

6.105 As part of the abovementioned communication with Eircom, ComReg sought further information setting out the number of CG WLA and FTTC-based NG WLA services that Eircom considered had ceased on its network, and which of those ceased lines had, at the time of the cease, Eircom FTTP available at the relevant premises. This information was provided in the context of seeking to understand whether Eircom was ceasing CG WLA lines due in part to such lines being located in the IA (given their characteristics), and whether the presence or otherwise of Eircom FTTP at these premises had a bearing on whether the cease premises migrated off Eircom's network altogether ('offnet') or migrated onto Eircom FTTP.

6.106 Eircom provided data to ComReg in August 2023 showing ceases for a range of services over the period July 2021 to June 2023. Following an initial analysis ComReg sent a number of follow-up queries to Eircom, including a query as to whether some of the premises cited as having been passed with FTTP at the time of the cease were in fact so passed. This resulted in Eircom re-submitting data to ComReg in September 2023. At that point Eircom identified that the dataset provided by it to ComReg in August 2023 had incorrectly identified premises as being passed by FTTP owing to **[✂** [redacted] **✂]** and had incorrectly captured the availability of FTTC services at the time of the cease. This data error had the effect of overstating the availability of FTTP at a premises at the time an order was ceased. The updated data provided in September 2023 also removed most duplicate records.

6.107 Accordingly, Eircom then provided corrected data in relation to some [✂ [redacted] ✂] ceases ('**Cease Records**') occurring over the two year period July 2021 to June 2023. It should be noted that the data provided by Eircom do not include services that Eircom gained on its network as a result of end users leaving other networks and moving to Eircom's network (for example, in the case of a cease on the SIRO or VMI network where the end user moves to the Eircom network). It therefore provides a partial analysis of switching and competitive impact, although, as noted in Table 49 above, in the period August 2022 to May 2023 Eircom experienced (taking account of movements offnet and movements onto its network) an overall net gain in FTTx lines and a loss of CG broadband lines, translating into a total net loss of [✂ [redacted] ✂] lines in that 10 month period.

6.108 The ceased products in the corrected September 2023 data comprised of:

(a) Single-Billing Wholesale Line Rental ('**SB-WLR**'), a wholesale copper based voice telephony service;

(b) Bitstream Managed Backhaul ('**BMB**'), a copper-only based wholesale broadband service called which can be provided on a standalone ('**SA**') basis whereby it is provided without RFTS or provided with RFTS (commonly referred to as **'POTS-based'**[696] ('**PB**');

(c) Copper-only based legacy Current Generation Access ('**CGA**') broadband;

(d) Copper-only based LLU services which include Unbundled Local Metallic Path ('**ULMP**') and LS; and

(e) Both SA and PB variant FTTC services.

6.109 For the purposes of this Decision, the BMB, CGA and LLU copper-based broadband services are categorised as CG WLA services. The FTTC services are categorised as FTTC based NG WLA services.

6.110 ComReg considers that SB-WLR services are not relevant to this Decision given they concern the supply of RFTS (although ComReg recognises that RFTS can be supplied with broadband services). Eircom also identified some ceases as an 'unknown' product type, and these are excluded from ComReg's analysis as the relevant service in place at the time of the cease is unknown.

6.111 The ceased services are identified by Eircom as either going off-net (i.e. leaving the Eircom network altogether) or staying on the Eircom network but migrating to Eircom (retail and wholesale) FTTP.

[696] Plain old telephony service.

6.112 In Table 51 and Table 52 below, ComReg sets out some high level characteristics of the data, including the period[697] at which the cease occurred and the proportion of total ceases consisting of each service. These tables show that SB-WLR and unknown ceased services constitute **[✂** [redacted] **✂]** of all ceases, while CG WLA constitutes **[✂** [redacted] **✂]** and FTTC-based NG WLA constitutes the remaining **[✂** [redacted] **✂]**[698]

Table 51: Eircom service in place when ceased (lines by year) [✂REDACTED✂]

Service/Year	YR 2021	YR 2022	YR 2023	Total
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 52: Eircom Service in place when ceased (% lines by year) [✂REDACTED✂]

Ceased Service	YR 2021	YR 2022	YR 2023	Total Over Period
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[697] The time periods are as follows: YR 2021 captures ceases in the period July to December 2021; YR 2022 captures ceases in the period January to December 2022; and YR 2023 captures ceases in the period January to June 2022.

[698] Between 60% and 70%.

6.113 Across all Cease Records, Eircom data show that **[✂** [redacted] **✂]**[699] were passed by FTTP at the time of the cease, while **[✂** [redacted] **✂]**[700] were not.

6.114 Looking at the **[✂** [redacted] **✂]** CG WLA ceases, Eircom data show that **[✂** [redacted] **✂]**[701] were passed by FTTP at the time of the cease, while **[✂** [redacted] **✂]**[702] were not. Where passed by Eircom FTTP, **[✂** [redacted] **✂]**[703] of total CG WLA ceases went to Eircom FTTP, while **[✂** [redacted] **✂]**[704] went offnet. However, when not passed by FTTP, **[✂** [redacted] **✂]**[705] of total CG WLA ceases went offnet, while **[✂** [redacted] **✂]**[706] went to Eircom (presumably to non-FTTP). Based on ComReg analysis,[707] **[✂** [redacted] **✂]**[708] of total CG WLA ceases fall within the NBP IA. Having regard to the above, this suggests that a significantly higher proportion of total CG WLA ceases occur where Eircom does not have FTTP relative to those where it does. Additionally, a sizeable proportion are in the NBP IA. Where Eircom FTTP is in place, a far higher proportion (over 140% more) of CG WLA ceases go to Eircom FTTP relative to those which go offnet.

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[699] Between 40% and 50%.

[700] Between 50% and 60%.

[701] Between 20% and 30%.

[702] Between 70% and 80%.

[703] Between 10% and 20%.

[704] Between 0% and 10%.

[705] Between 70% and 80%.

[706] Between 0% and 10%.

[707] Eircom provided Eircodes for **[✂** [redacted] **✂]** (between 70% and 80%) of ceased CG WLA services. ComReg clashed these Eircode data with the Eircodes for those premises falling within the IA. Where there are no Eircodes ComReg cannot check if the ceased service was in the IA. However, ComReg expects a proportion of these ceased cervices for which there are no Eircodes to be in the IA.

[708] Between 30% and 40%.

6.115 For the [✂ [redacted] ✂] FTTC based NG WLA ceases, Eircom data show that [✂ [redacted] ✂][709] were passed by FTTP at the time of the cease, while [✂ [redacted] ✂][710] were not. Where passed by Eircom FTTP, [✂ [redacted] ✂][711] of total FTTC based NG WLA ceases went to Eircom FTTP, while [✂ [redacted] ✂][712] went offnet. However, when not passed by FTTP, [✂ [redacted] ✂][713] of total FTTC based NG WLA ceases went offnet while [✂ [redacted] ✂] went to Eircom (presumably to non FTTP).[714] Based on ComReg analysis,[715] [✂ [redacted] ✂][716] of the total FTTC based NG WLA ceases fall within the NBP IA. Having regard to the above, this suggests that a sizeably higher proportion of total FTTC based NG WLA ceases occur where Eircom does not have FTTP relative to those where it does. Where Eircom FTTP is in place, a far higher proportion (over 50% more) of FTTC based NG WLA ceases go to Eircom FTTP relative to those which go offnet.

6.116 Given Eircom's ambition to roll out FTTP to 1.9 million premises, having passed 1.083 million premises at Q2 2023, and having regard to both the pace and overall level of FTTP rollout by SIRO and, prospectively, VMI, ComReg considers that Eircom's position relative to its competitors would not be sufficiently weakened through switching over the review period, such that existing (or potential) competition would sufficiently constrain Eircom's ability to behave, to an appreciable extent, independently of its competitors and customers over the review period.

[709] Between 50% and 60%.

[710] Between 40% and 50%.

[711] Between 30% and 40%.

[712] Between 20% and 30%.

[713] Between 40% and 50%.

[714] Between 0% and 10%.

[715] Eircom provided Eircodes for [✂ [redacted] ✂] (between 90% and 100%) of ceased NG WLA services. Using this Eircode data, ComReg clashed it with the Eircodes for those premises falling within the NBP IA. Where there are no Eircodes ComReg cannot check if the ceased service was in the IA. However, we would expect a proportion of these ceased services for which there are no Eircodes to be in the IA.

[716] Between 0% and 10%.

6.117 ComReg has also sought to assess whether it could identify, in the case of off-net ceases identified by Eircom, which Network Operator, if any, the ceases migrate to. To do so, ComReg has sought to clash the Eircode data provided by Eircom for the off-net ceased CG WLA and FTTC-based NG WLA services against QKDR data its collects from SPs (using its statutory information gathering powers) to determine whether these Eircodes were active on these SPs networks around the time of the cease (thus indicating a switch to an alternative network). In this respect, based on the data provided by Eircom, ComReg notes that 83% of CG WLA and FTTC-based NG WLA ceases going off-net have an Eircode associated with them. For the remaining 17% ComReg is unable to assess network switching as it is the Eircode which enables this analysis, since it is a unique record capable of comparison across networks.

6.118 In assessing network switching, ComReg seeks to identify which was the network with the active wholesale broadband service based on the following:

(a) For YR 2021 ceases (covering the period July to December 2021), the active network 'as at' 31 December 2021;

(b) For YR 2022 ceases (covering the period January to December 2022), the active network 'as at' 31 December 2022; and

(c) For YR 2023 ceases (covering the period January to June 2023), the active network 'as at' 30 June 2023.

6.119 ComReg recognises that the possibility exists that between these 'as at' reference dates an end user could have switched networks again. For example, a cease occurring in, say, March 2022 could switch to another network in Q3 2022 and again in Q4 2022 (given the latter is the 'as at' reference date, the first switch would not be identified in the analysis). However, given that retail contracts tend to have a minimum one year term, such instances should be limited.

6.120 As a sense check, ComReg has also carried out further checks taking ceases in YR 2021, YR 2022 and YR 2023 and clashing the active network at an 'as at' date of 30 June 2023 to identify which network had the active line. This does not show material differences in the overall total number of switches to other networks relative to the year by year approach above.

6.121 Eircom data show that, over the two year period, **[✂ [redacted] ✂]** FTTC-based NG WLA ceases went off-net or were no longer active on the Eircom network. **[✂ [redacted] ✂]**[717] of these were not passed by Eircom FTTP at the time of the cease, while **[✂ [redacted] ✂]**[718] were. 86.6% of FTTC-based NG WLA off-net ceases (**[✂ [redacted] ✂]**) have an Eircode associated with them.

6.122 Of these **[✂ [redacted] ✂]** ceases with an Eircode, Table 53 and Table 54 below set out a breakdown of which network these FTTC-based NG WLA ceases were subsequently active on at the relevant 'as at' reference date.

Table 53: FTTC-based NG WLA Ceases that went Offnet - Active SP Status after cease (lines by year) [✂REDACTED✂]

[redacted]

Table 54: FTTC-based NG WLA Ceases that went Offnet - Active SP Status after cease (% lines by year) [✂REDACTED✂]

[redacted]

[717] Between 70% and 80%.

[718] Between 20% and 30%.

6.123 Across the entire two year period, the analysis shows that, of the **[✂** [redacted] **✂]** off-net ceases, **[✂** [redacted] **✂]** are identified as moving network (**[✂** [redacted] **✂]**[719]), **[✂** [redacted] **✂]** (**[✂** [redacted] **✂]**[720]) as staying on the Eircom network, and a sizeable amount of **[✂** [redacted] **✂]**[721] for which no active network operator is identifiable (although 27.5% of such ceases (**[✂** [redacted] **✂]** do not have Eircodes associated with them).

6.124 For the two year period, the **[✂** [redacted] **✂]** ceases identified as having an active network operator after the cease represent **[✂** [redacted] **✂]**[722] of all FTTC based NG WLA ceases (including those that went offnet and on-net to Eircom FTTP). Of these, over the two year period, **[✂** [redacted] **✂]**[723] went to Eircom, **[✂** [redacted] **✂]**[724] to NBI, **[✂** [redacted] **✂]**[725] to VMI and **[✂** [redacted] **✂]**[726] to SIRO.

6.125 ComReg has also examined whether the presence or otherwise of Eircom FTTP impacts the numbers of lines switching off-net to NBI, VMI and SIRO.

(a) For the **[✂** [redacted] **✂]** lines identified as having switched to NBI, for **[✂** [redacted] **✂]**[727] of these Eircom did not have FTTP present, whereas for the remaining **[✂** [redacted] **✂]**[728] it did.

(b) For the **[✂** [redacted] **✂]** lines identified as having switched to VMI, for **[✂** [redacted] **✂]**[729] of these Eircom did not have FTTP present, whereas for the remaining **[✂** [redacted] **✂]**[730] it did.

[719] Between 40% and 50%.

[720] Between 0% and 10%.

[721] Between 40% and 50%.

[722] Between 30% and 40%.

[723] Between 0% and 10%.

[724] Between 0% and 10%.

[725] Between 30% and 40%.

[726] Between 50% and 60%.

[727] Between 80% and 90%.

[728] Between 10% and 20%.

[729] Between 70% and 80%.

[730] Between 10% and 20%.

(c) For the **[✂ [redacted] ✂]** lines identified as having switched to SIRO, for **[✂ [redacted] ✂]**[731] of these Eircom did not have FTTP present, whereas for the remaining **[✂ [redacted] ✂]**[732] it did.

6.126 This suggests that the absence of Eircom FTTP results in a significant proportion of switches to NBI and VMI, whereas for SIRO it is more marginal.

6.127 Having regard to the above and when considered alongside the overall analysis, including the relative rollout of FTTP networks by Eircom, SIRO, NBI and, prospectively, VMI, ComReg considers that Eircom's position in the Commercial NG WLA Market. relative to its competitors would not be sufficiently weakened through switching over the review period, such that existing (or potential) competition would undermine its SMP position. The data shows that while there is switching to SIRO and to VMI (to VMI being sizeably lower relative to SIRO), such switching is unlikely to undermine Eircom's SMP position. Furthermore, switching tends to be more prevalent overall where Eircom does not have FTTP and in the context of Eircom's ongoing FTTP rollout existing or (potential competition) in the context of switching will not sufficiently constrain Eircom's ability to behave, to an appreciable extent, independently of its competitors and customers over the review period.

6.128 ComReg carried out a similar switching assessment with respect to CG WLA. Eircom data show that over the two year period, **[✂ [redacted] ✂]** CG WLA ceases went offnet or were no longer active on the Eircom network. **[✂ [redacted] ✂]**[733] of these were not passed by Eircom FTTP at the time of the cease, while **[✂ [redacted] ✂]**[734] were. 70.6% of CG WLA offnet ceases (**[✂ [redacted] ✂]**) have an Eircode associated with them.

6.129 Of these **[✂ [redacted] ✂]** ceases with an Eircode, Table 55 and Table 56 below set out a breakdown of which network CG WLA ceases were subsequently active on at the relevant 'as at' reference date.

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[731] Between 50% and 60%.

[732] Between 40% and 50%.

[733] Between 80% and 90%.

[734] Between 10% and 20%.

Table 55: Off-net CG WLA ceases - Active SP status after cease (lines by year) [✂REDACTED✂]

[redacted]

Table 56: Off-net CG WLA ceases - Active SP status after cease (% lines by year) [✂REDACTED✂]

[redacted]

6.130 Across the entire two year period, the analysis shows that, of the **[✂** [redacted] **✂]** off-net ceases, **[✂** [redacted] **✂]** are identified as moving network (**[✂** [redacted][735] [redacted] **✂]**[736] as staying on the Eircom network, and a sizeable amount of **[✂** [redacted] **✂]**[737]) for which no active network operator is identifiable (although 42% of such ceases (**[✂** [redacted] **✂]** do not have Eircodes associated with them).

[735] Between 30% and 40%.

[736] Between 0% and 10%.

[737] Between 70% and 80%.

6.131 For the two year period, the **[✂** [redacted] **✂]** ceases identified as having an active Network Operator after the cease, this represents **[✂** [redacted] **✂]**[738] of all CG WLA ceases (including those that went offnet and on-net to Eircom FTTP). Of these, over the two year period, **[✂** [redacted] **✂]**[739] went to Eircom, **[✂** [redacted] **✂]**[740] to NBI, **[✂** [redacted] **✂]**[741] to VMI and **[✂** [redacted] **✂]**[742] to SIRO.

6.132 ComReg has also examined whether the presence or otherwise of Eircom FTTP impacts the numbers of lines switching off-net to NBI, VMI and SIRO.

(a) For the **[✂** [redacted] **✂]** lines identified as having switched to NBI, for **[✂** [redacted] **✂]**[743] of these Eircom did not have FTTP present, whereas for the remaining **[✂** [redacted] **✂]**[744] it did.

(b) For the **[✂** [redacted] **✂]** lines identified as having switched to VMI, for **[✂** [redacted] **✂]**[745] of these Eircom did not have FTTP present, whereas for the remaining **[✂** [redacted] **✂]**[746] it did.

(c) For the **[✂** [redacted] **✂]** lines identified as having switched to SIRO, for **[✂** [redacted] **✂]**[747] of these Eircom did not have FTTP present, whereas for the remaining **[✂** [redacted] **✂]**[748] it did.

6.133 The above suggests that the absence of Eircom FTTP results in a sizeable proportion of CG WLA switches to NBI, SIRO and VMI, although this is less pronounced for SIRO.

[738] Between 20% and 30%.

[739] Between 0% and 10%.

[740] Between 50% and 60%.

[741] Between 20% and 30%.

[742] Between 10% and 20%.

[743] Between 90% and 100%.

[744] Between 0% and 10%.

[745] Between 80% and 90%.

[746] Between 10% and 20%.

[747] Between 50% and 60%.

[748] Between 40% and 50%.

6.134 Having regard to the above and when considered alongside the overall analysis, including the relative rollout of FTTP networks by Eircom, SIRO, NBI and, prospectively, VMI, ComReg considers that switching of CG WLA off Eircom's network is driven by the absence of it having FTTP (or FTTC). Also of relevance is ComReg's earlier conclusion that CG WLA and NG WLA are characterised by asymmetric substitution. between CG WLA and NG WLA driven by such substitution at the retail level. Given this, including Eircom's FTTP rollout, ComReg considers Eircom's position in the Commercial NG WLA Market relative to its competitors would not be sufficiently weakened through CG WLA offnet switching over the review period, such that it would sufficiently constrain Eircom's ability to behave, to an appreciable extent, independently of its competitors and customers.

6.135 Table 57 to Table 61 below give an overview of switching between technologies and network operators, generated using ComReg's internal data, with such data also obtained from SPs for QKDR and other regulatory purposes (using ComReg's statutory information gathering powers). This switching data is analysed over two time periods, Q1 2021 to Q1 2022 and Q1 2022 to Q1 2023 and captures switches to and from networks.[749] It has been analysed on a quarter by quarter basis over each of the two time periods and then aggregated across each time period to show switches in a one year time-period, i.e., Q1 2021 to Q1 2022 consists of the four quarters: Q1 2021 to Q2 2021, Q2 2021 to Q3 2021, Q3 2021 to Q4 2021 and Q4 2021 to Q1 2022.

6.136 While this data can be used to generate insights into network and product switching trends, there are certain limitations in its use (similar to those outlined with the analysis of the Eircom provided data above). Firstly, where a SP does not identify an active subscriber at an Eircode level, it cannot be determined if there has been a switch, as it is the Eircode which is the unique identifier which allows ComReg to examine switching. Even in the case where the current SP providing an active service can provide this at an Eircode level, if the SP previously providing the service at this Eircode did not provide an Eircode for its data, ComReg has no means to assess switching. This absence of an Eircode mainly affects CG WLA based products, but also some FTTC NG WLA based products. Switches where there are no Eircodes will therefore not be captured or will be underrepresented in the analysis - predominantly the CG and FTTC based WLA based services.

[749] Note there is no overlap between the two time periods where the analysis finishes in Q1 2022. Since switches are counted within each quarter, where the time period Q1 2021 to Q1 2022 ends, is simply where the time period Q1 2022 to Q1 2023 begins.

6.137 Secondly, multiple active lines can have the same Eircode, as multiple lines (potentially across different broadband network types) can be provided to the same premises, particularly in the case of businesses. In these circumstances, it cannot be definitively categorised which product was switched between these periods. In the analysis below, these have been counted as ‘others’, amounting to less than 1% of all switches and are not included in the analysis.

6.138 The analysis below is therefore indicative of switching patterns in general, but when it comes to the actual number of absolute subscribers on each platform/product, and relative changes between time periods, ComReg gives more weight to the figures published in its QKDR and referred to above.

Table 57: Network Operator and Technology switches for the year Q1 2021 to Q1 2022 (measured by lines for total ceases by technology) [✂REDACTED✂]

[redacted]

Table 58: Network Operator and Technology switches for the year Q1 2021 to Q1 2022 (according to % of total ceases by technology) [✂REDACTED✂]

[redacted]

6.139 Table 57 and Table 58 show that in the period Q1 2021 to Q1 2022 there were 118,631 instances of switching across or within networks. This includes switching from/to Eircom CG WLA based ADSL services, Eircom's FTTC based NG WLA services, FTTP based NG WLA services offered by Eircom, SIRO and NBI, as well as CATV and FTTP retail services offered by VMI.

6.140 Looking at it from the perspective of the products that were switched from, the largest was from Eircom VDSL broadband **[✂ [redacted] ✂]**;[750] followed by VMI CATV broadband, **[✂ [redacted] ✂]**[751]; Eircom ADSL broadband, **[✂ [redacted] ✂]**;[752] SIRO FTTP broadband, **[✂ [redacted] ✂]**;[753] Eircom FTTP Broadband, **[✂ [redacted] ✂]**;[754] and VMI FTTP broadband **[✂ [redacted] ✂]**.[755] There was minimal switching from NBI FTTP broadband.

6.141 Looking at it from the perspective of the products that were switched to, the largest was to Eircom FTTP broadband, **[✂ [redacted] ✂]**,[756] followed by SIRO FTTP broadband, **[✂ [redacted] ✂]**;[757] VMI CATV broadband, **[✂ [redacted] ✂]**;[758] Eircom VDSL broadband, **[✂ [redacted] ✂]**;[759] NBI FTTP broadband; **[✂ [redacted] ✂]**;[760] VMI FTTP broadband, **[✂ [redacted] ✂]**;[761] and Eircom ADSL broadband **[✂ [redacted] ✂]**.[762]

6.142 As evidenced from the data, there is very little switching from Eircom FTTP relative to other platforms, with only switching from VMI FTTP being lower. However, in the case of VMI, ComReg considers this to be a reflection of its much lower level of FTTP coverage and subscribers relative to other SPs, including Eircom.

[750] Between 50% and 60%.

[751] Between 20% and 30%.

[752] Between 0% and 10%.

[753] Between 0% and 10%.

[754] Between 0% and 10%.

[755] Between 0% and 10%.

[756] Between 30% and 40%.

[757] Between 30% and 40%.

[758] Between 20% and 30%.

[759] Between 20% and 30%.

[760] Between 0% and 10%.

[761] Between 0% and 10%.

[762] Between 0% and 10%.

6.143 Looking at the switches from Eircom ADSL and VDSL, the biggest switched to platforms for these are Eircom's FTTP, **[✂ [redacted] ✂]**,[763] followed by SIRO FTTP, **[✂ [redacted] ✂]**,[764] VMI CATV, **[✂ [redacted] ✂]**;[765] and NBI FTTP, **[✂ [redacted] ✂]**.[766]

6.144 Looking at the switches from VMI CATV, the biggest switched to platforms are to Eircom's FTTP and VDSL at **[✂ [redacted] ✂]**,[767] followed by SIRO FTTP at **[✂ [redacted] ✂]**.[768]

6.145 Looking at the switches from SIRO FTTP, the biggest switched to platforms are to Eircom's FTTP and VDSL at **[✂ [redacted] ✂]**,[769] followed by VMI CATV at **[✂ [redacted] ✂]**.[770]

6.146 The switching data for Q1 2021 to Q1 2022 shows that Eircom experienced a net loss of **[✂ [redacted] ✂]** ADSL lines, a net loss of **[✂ [redacted] ✂]** VDSL lines and a net gain of **[✂ [redacted] ✂]** FTTP lines, resulting in an overall loss of **[✂ [redacted] ✂]** lines**.** Of the ADSL and VDSL loses, **[✂ [redacted] ✂]** went to NBI FTTP. Although, as noted above, when considering absolute levels and changes in levels of subscribers, ComReg places more weight on the data published in the QKDR as some switches cannot be identified where Eircode data is not available.

6.147 Having regard to the above, ComReg considers that Eircom's current and future presence of FTTP (including relative to other Network Operators' rollout) to be a factor which will likely mitigate overall network losses and that where Eircom has an active FTTP subscriber (as opposed to an ADSL/VDSL subscriber), there will likely be a lower incidence of switching to other networks.

Table 59: Network Operator and Technology switches for the year Q1 2022 to Q1 2023 (measured by lines for total ceases by technology) [✂REDACTED✂]

TO → FROM ↓	Eircom ADSL	Eircom VDSL	Eircom FTTP	VMI CATV	VMI FTTP	SIRO FTTP	NBI FTTP	NBI FWA	TOTAL

[763] Between 40% and 50%.

[764] Between 30% and 40%.

[765] Between 20% and 30%.

[766] Between 0% and 10%.

[767] Between 60% and 70%.

[768] Between 30% and 40%.

[769] Between 70% and 80%.

[770] Between 20% and 30%.

[redacted]

Table 60: Network Operator and Technology switches for the year Q1 2022 to Q1 2023 (according to % of total ceases by technology) [✂REDACTED✂]

[redacted]

[redacted]

6.148 Table 59 and Table 60 above show that in the period Q1 2022 to Q1 2023 there were 130,444 instances of switching across or within networks.

6.149 Looking at it from the perspective of the products that were switched from, the largest was from Eircom VDSL broadband, **[✂ [redacted] ✂]**,[771] followed by VMI CATV broadband, **[✂ [redacted] ✂]**;[772] Eircom ADSL broadband, **[✂ [redacted] ✂]**;[773] SIRO FTTP broadband, **[✂ [redacted] ✂]**;[774] Eircom FTTP broadband, **[✂ [redacted] ✂]**;[775] and VMI FTTP Broadband at **[✂ [redacted] ✂]**.[776] There was minimal switching from NBI FTTP broadband.

6.150 Relative to the period Q1 2021 to Q1 2022, there is a marginally lower level of switching from Eircom VDSL broadband, down **[✂ [redacted] ✂]**,[777] VMI CATV broadband, down **[✂ [redacted] ✂]**[778] and Eircom ADSL broadband, down **[✂ [redacted] ✂]**.[779] However, 'switching from' is marginally higher for SIRO FTTP broadband, up **[✂ [redacted] ✂]**,[780] Eircom FTTP Broadband, up **[✂ [redacted] ✂]**[781] and VMI FTTP broadband being largely unchanged.

[771] Between 50% and 60%.

[772] Between 20% and 30%.

[773] Between 0% and 10%.

[774] Between 0% and 10%.

[775] Between 0% and 10%.

[776] Between 0% and 10%.

[777] Between 0% and 10%.

[778] Between 0% and 10%.

[779] Between 0% and 10%..

[780] Between 0% and 10%.

[781] Between 0% and 10%.

6.151 Looking at it from the perspective of the products that were <u>switched to</u> in the period Q1 2022 to Q1 2023, the largest was to Eircom FTTP Broadband, **[✂ [redacted] ✂]**,[782] followed by SIRO FTTP broadband, **[✂ [redacted] ✂]**;[783] VMI CATV broadband, **[✂ [redacted] ✂]**;[784] Eircom VDSL broadband, **[✂ [redacted] ✂]**;[785] NBI FTTP broadband, **[✂ [redacted] ✂]**;[786] VMI FTTP broadband, **[✂ [redacted] ✂]**;[787] and Eircom ADSL broadband at **[✂ [redacted] ✂]**.[788]

6.152 Relative to the period Q1 2021 to Q1 2022, there is a noticeably higher level of switching to Eircom FTTP broadband, up **[✂ [redacted] ✂]**[789] and NBI FTTP broadband, up **[✂ [redacted] ✂]**.[790] However, switching is noticeably lower to SIRO FTTP broadband, down **[✂ [redacted] ✂]**,[791] VMI CATV broadband, down **[✂ [redacted] ✂]**,[792] and Eircom VDSL broadband down **[✂ [redacted] ✂]**,[793] with marginal declines for VMI FTTP broadband which was down **[✂ [redacted] ✂]**[794] and Eircom ADSL, down **[✂ [redacted] ✂]**.[795]

6.153 As evidenced from the data, there is very little switching from Eircom FTTP relative to other platforms (although is marginally higher between the two periods presented), with only switching from VMI being lower. However, in the case of VMI, ComReg considers this level of switching is likely to be a reflection of VMI's lower level of FTTP coverage and subscribers relative to other SPs.

6.154 The noticeably lower levels of switching to SIRO FTTP and VMI CATV between reporting periods are also evident, with this likely to be a reflection of increased FTTP rollout by Eircom relative to the pace of rollout by SIRO resulting in Eircom losing less ADSL and VDSL lines off its network completely.

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[782] Between 40% and 50%.

[783] Between 20% and 30%.

[784] Between 10% and 20%.

[785] Between 0% and 10%.

[786] Between 0% and 10%.

[787] Between 0% and 10%.

[788] Between 0% and 10%.

[789] Between 0% and 10%.

[790] Between 0% and 10%.

[791] Between 0% and 10%.

[792] Between 0% and 10%.

[793] Between 0% and 10%.

[794] Between 0% and 10%.

[795] Between 0% and 10%.

6.155 In the period Q1 2022 to Q1 2023, looking at the switches from Eircom ADSL and VDSL, the biggest switched to platforms for these are Eircom's FTTP at **[✂ [redacted] ✂]**,[796] followed by SIRO FTTP at **[✂ [redacted] ✂]**,[797] VMI CATV at **[✂ [redacted] ✂]**[798] and NBI FTTP at **[✂ [redacted] ✂]**.[799] Relative to the period Q1 2021 to Q1 2022, switching from Eircom ADSL/VDSL continues to be predominantly to its own FTTP platform with a sizeable increase (up **[✂ [redacted] ✂]**),[800] with switching to NBI also sizeably increasing (up **[✂ [redacted] ✂]**).[801] This is likely attributable to Eircom's and NBI's increased FTTP coverage over the period and the likelihood that a proportion of Eircom's ADSL/VDSL subscribers are located within the NBP IA. Relative to the period Q1 2021 to Q1 2022, switching from Eircom ADSL/VDSL to SIRO FTTP declined noticeably (down **[✂ [redacted] ✂]**),[802] with a similar experience with respect to VMI (down **[✂ [redacted] ✂]**).[803]

6.156 In the period Q1 2022 to Q1 2023, looking, looking at the switches from VMI CATV, the biggest switched to platforms for these are Eircom's FTTP and VDSL **[✂ [redacted] ✂]**[804] (up **[✂ [redacted] ✂]**[805] relative to the previous period), followed by SIRO FTTP **[✂ [redacted] ✂]**[806] (down **[✂ [redacted] ✂]**[807] relative to the previous period).

6.157 In the period Q1 2022 to Q1 2023, looking at the switches from SIRO FTTP, the biggest switched to platforms are to Eircom's FTTP and VDSL **[✂ [redacted] ✂]**[808] (up **[✂ [redacted] ✂]**[809] relative to the previous period), followed by VMI CATV **[✂ [redacted] ✂]**[810] (down **[✂ [redacted] ✂]**[811] relative to the previous period).

[796] Between 40% and 50%.

[797] Between 20% and 30%.

[798] Between 10% and 20%.

[799] Between 0% and 10%.

[800] Between 0% and 10%.

[801] Between 0% and 10%.

[802] Between 0% and 10%.

[803] Between 0% and 10%.

[804] Between 60% and 70%.

[805] Between 0% and 10%.

[806] Between 30% and 40%.

[807] Between 0% and 10%.

[808] Between 70% and 80%.

[809] Between 0% and 10%.

[810] Between 20% and 30%.

[811] Between 0% and 10%.

6.158 The switching data for Q1 2022 to Q1 2023 shows that Eircom experienced a net loss of **[✂** [redacted] **✂]** ADSL lines, a net loss of **[✂** [redacted] **✂]** VDSL lines and a net gain of **[✂** [redacted] **✂]** FTTP lines, resulting in an overall loss of **[✂** [redacted] **✂]** lines (a sizeable decline of **[✂** [redacted] **✂]** relative to the previous period. Of the ADSL and VDSL loses, **[✂** [redacted] **✂]** went to NBI FTTP (higher than in the previous period and reflecting NBI's increased FTTP rollout) and given they are in the IA would be likely to leave the Eircom network altogether - and the overall Eircom net loses should be considered in this context. As noted above, when considering absolute levels and changes in levels of subscribers, ComReg places more weight on the data published in the QKDR.

6.159 ComReg considers that Eircom's current and future presence of FTTP (including its rate of increase relative to other Network Operators) to be a factor which will likely mitigate overall Eircom network losses and that where Eircom has an active FTTP subscriber (as opposed to an ADSL/VDSL subscriber), there will likely be a lower incidence of switching away to other networks.

6.160 An overall summary of the net migration for each product/network over the two periods is outlined in Table 61 below. The net migration is derived by taking the difference between the total gains and total losses for each network operator product. This outlines that while Eircom has an overall net loss from product switching between Q1 2021 and Q1 2023, these losses occur on its copper network and FTTC network, while it's FTTP network gained **[✂** [redacted] **✂]** over the two-year period. Similarly, VMI lost **[✂** [redacted] **✂]** on its network over the same period. While SIRO and NBI gained **[✂** [redacted] **✂]** and **[✂** [redacted] **✂]** respectively. While the rate of losses slowed for Eircom between the first year and second year, the losses for VMI increased, while SIRO's gains slowed down. NBI also saw an increase in its gains between the two periods, but this is likely due to NBI being in the early stages of rollout during this period in the IA, where premises are likely to be predominantly using ADSL and VDSL (the latter at speeds <30 Mbps).

Table 61: Net migration from product switching [✂REDACTED✂]

	Q1 2021 – Q1 2022	Q1 2022 – Q1 2023	Total over both time periods (Q1 2021 – Q1 2023)
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

6.161 Copenhagen Economics further suggests[812] that, on a notional 'high-speed retail broadband' market segment, Eircom is the third largest SP, behind Vodafone and VMI. ComReg has defined no such market, and Eircom did not argue at any point in its Submission that such a market should be defined. ComReg therefore does not consider that market shares on a cherry-picked sub-section of the retail market are probative in respect of findings of SMP on an upstream wholesale market.

6.162 This aside, ComReg considers that, over a longer time horizon, any indirect retail constraint on the exercise of SMP in the supply of NG WLA from any downstream competitors (such as FWA, satellite, and mobile broadband) in the retail market would be mitigated:

[812] Copenhagen Economics Non-confidential Submission on behalf of Eircom, at Figure 4.

(a) Given the price-cost ratio ([✂ [redacted] ✂] for residential customers and [✂ [redacted] ✂] for business customers), a SSNIP of wholesale VUA would (assuming pass-through) translate into a smaller diluted retail price increase. Fewer customers are therefore likely to respond to such a diluted retail price increase, compared to a situation where a SSNIP is applied directly to retail services. As set out in Annex 10 ComReg calculates this retail price increase to amount to [✂ [redacted] ✂][813] for a 5% SSNIP and [✂ [redacted] ✂][814] for a 10% SSNIP. From the 2022 Market Research, when end users purchasing bundled broadband were faced with a hypothetical €4 price increase, only 4% of respondents would opt to switch their broadband subscription and of standalone broadband subscribers (faced with a €2 price increase), only 6% would opt to switch their subscription.[815] For residential end users, the profit maximising CLVs for a 5% and 10% SSNIP are [✂ [redacted] ✂][816] and [✂ [redacted] ✂][817] respectively, meaning if a hypothetical monopolist imposed a SSNIP of 10%, it would be rendered unprofitable if demand fell by more than [✂ [redacted] ✂].[818] For LLU products, the CLVs are [✂ [redacted] ✂][819] and [✂ [redacted] ✂][820] for a 5% and 10% SSNIP respectively; and

[813] Between €0 and €10.

[814] Between €0 and €10.

[815] See Slides 54 to 69 of the 2022 Residential Market Research. Note that, switching options in these slides are also informative as to the impact of a SSNIP.

[816] Between 1% and 10%.

[817] Between 1% and 10%.

[818] Between 1% and 10%.

[819] Between 1% and 10%.

[820] Between 1% and 10%.

(b) In practice, Eircom would be likely to sustain its retail prices (which ComReg notes Eircom has been increasing by 8%)[821] whilst applying a SSNIP of VUA in the Commercial NG WLA Market. In such circumstances, Eircom (given its brand recognition and network ubiquity) would be likely to gain a significant proportion of any retail customers that switch away from retail services delivered using merchant market Eircom VUA. The increased revenue accruing to Eircom from those switching retail customers would contribute to offsetting any loss in wholesale revenue,[822] thereby mitigating the effects of any indirect retail constraint that otherwise may have been present.

6.163 ComReg considers that these factors are likely to prevail when assessing the effectiveness of any indirect constraints arising from retail SPs operating in the geographic footprint of the Commercial NG WLA Market. For the reasons set out above, ComReg's view is that, over the period covered by this market review, vertically-integrated retail SPs, FWA and alternative retail only FTTP-based networks are unlikely to provide a sufficiently effective indirect competitive constraint on the Commercial NG WLA Market, such that it would prevent a HM of VUA from behaving, to an appreciable extent, independently of competitors, customers or consumers.

Indirect Constraints in the IA NG WLA Market

6.164 The IA NG WLA Market is, by design, an area where NBI is obliged under the terms of the NBP Contract to provide 100% FTTP coverage. Given the nature of the IA, there is no, or insufficient, material presence of alternative retail SPs which are not dependent on NBI NG WLA inputs (noting that there may be some commercial overbuild by other Network Operators). From outside the retail broadband market, FWA, mobile broadband, and satellite are, however, capable of providing retail broadband services to end users without relying on NBI wholesale inputs. However, ComReg considers that the scale and scope of retail broadband service provision over FWA, mobile broadband, or satellite, is likely to be insufficient to generate an effective indirect constraint on NBI WLA, for the reasons set at Section 5 above.

[821] See https://www.eir.ie/annual-price-increase/. Despite these price increases ComReg notes, for example, that CATV subscribers have been decreasing.

[822] There would also be some reduction in Eircom's wholesale costs corresponding to any decline in wholesale demand which would impact profitability.

6.165 ComReg also notes that, absent WLA regulation, if NBI were to impose a SSNIP of VUA, any limited indirect retail constraint on the supply by NBI of NG WLA from downstream competitors in the retail market (in those parts of the IA where Eircom or SIRO NG WLA has rolled out) would be mitigated for the reasons set out above at paragraphs 6.162(a). Since NBI is a wholesale-only operator, the eventuality set out at paragraph 6.162(b) would not likely arise.

6.166 Even if ComReg were to conclude that NBI was constrained by existing competition in the form of indirect retail constraints, those constraints would be secondary to the constraints placed on NBI's commercial freedom by the NBP Contract. Thus, ComReg considers that NBI would not be effectively constrained by indirect retail constraints on the IA NG WLA Market.

Indirect Constraints in the CG WLA Market

6.167 The (national) CG WLA market consists of LLU, SLU and Line Share delivered by Eircom over its ubiquitous copper network on both a merchant market and self-supply basis, together with Eircom merchant market and self-supply of CG WCA which is, itself, reliant on CG WLA inputs. As set out at Section 5, ComReg considers that no indirect retail constraints are present on the CG WLA product market. This reasoning applies equally to the SMP assessment.

Vertical Integration

6.168 A vertically-integrated SP enjoys significant efficiencies arising from its presence in upstream and downstream markets.[823] Such efficiencies can also be passed on to end users in the form of more competitive prices, lower transaction costs and/or enhanced product quality. However, vertical integration can also constitute an entry barrier where the presence of a firm at multiple levels of the production or distribution chain raises the costs of new entry (for example, where prospective new entrants perceive the need to enter multiple markets simultaneously to pose a viable competitive constraint on the vertically-integrated SP). It can also increase the possibilities for the integrated SP to foreclose competition at one or more levels in the value chain, the threat of which could, in turn, act as a disincentive to new entry.

[823] Such efficiencies may include vertical efficiencies.

6.169 As well as being the largest WLA supplier in the CG WLA Market and the Commercial NG WLA Market, Eircom is also a significant provider of RFTS and broadband (and other) services.[824] As such, Eircom's significant customer base in downstream retail markets is likely capable of consolidating its strength in the Commercial NG WLA Market and the CG WLA Market. In contrast, NBI, which is the largest WLA supplier on the IA NG WLA Market, is active only at the wholesale level and is therefore, by definition, not vertically-integrated.

6.170 Eircom's vertically-integrated structure also mitigates the extent to which it is dependent on its WLA revenue.[825] As such, absent regulation, Eircom could potentially seek to maximize its total profits by increasing LLU or VUA prices (or indeed refusing access to supply WLA) and, in doing so, seek to foreclose competition in downstream wholesale and/or retail markets. ComReg has, however, already noted above that LLU is in decline.

6.171 VMI provides retail services on a vertically-integrated basis, largely over its CATV network. VMI does not supply WLA over CATV but has announced its intention to commence the provision of wholesale services to Vodafone and Sky over its FTTP network as that network rolls out. ComReg notes, based on meetings with VMI, Sky and Vodafone, as well as a review of the agreements entered into by the parties, that Vodafone and Sky will be in a position to purchase NG WLA from VMI **[✂** [redacted] **✂]** ComReg also notes that **[✂** [redacted] **✂]** which would further reduce any competitive impact of VMI in the Commercial NG WLA Market. ComReg calculates, based on rollout data at Q1 2023, that, in the Commercial NG WLA Market, **[✂** [redacted] **✂]** of VMI's existing CATV and FTTP footprint is overlapped by SIRO, **[✂** [redacted] **✂]** overlapped by SIRO only, and **[✂** [redacted] **✂]** overlapped by both SIRO and Eircom. ComReg has assessed VMI entry to the WLA markets over FTTP at paragraphs 5.84 to 5.86. As set out in paragraphs 5.114 to 5.122, ComReg does not consider that it is technically feasible for WLA to be offered over a CATV network within the lifetime of this market review, nor is it commercially likely to be the case, given VMI's stated intention to replace its CATV network with FTTP.

[824] See Section 3 for discussion on Eircom's market shares in retail markets.

[825] See further discussion of this impact under the countervailing buyer power section below.

6.172 Other than VMI, SPs in downstream retail markets are not vertically-integrated. Vodafone and Sky provide RFTS and broadband services mainly using upstream wholesale inputs (although they may have built out certain network elements – such as backhaul – to avail of these), while NBI and SIRO are only active at the wholesale level.[826]

6.173 Having regard to the above, ComReg is of the view that its vertically-integrated structure is a factor which enables Eircom to behave, to an appreciable extent, independently of its competitors, customers and end users in the Commercial NG WLA Market and the CG WLA Market. In this respect, Eircom, absent regulation, is not solely reliant on its wholesale arm to generate sales (and profitability) as it could also do so via its downstream arm.

Barriers to Entry and Expansion

6.174 As set out in Sections 4 and 5 regarding the retail broadband and WLA markets, the commercial rollout of NG broadband networks in Ireland depends heavily on economies of density and scale. Arising from its incumbency in the Commercial NG WLA Market in particular, Eircom has largely overcome such barriers to entry and expansion, and is capable of providing VUA to itself and Access Seekers on a widespread basis outside the IA. A large component of its network costs are also sunk (although there are likely to be ongoing costs in its FTTP network upgrade which, when made, will also be sunk).

6.175 Some operators have already built networks and incurred sunk costs of entry – creating an asymmetry in cost structures which would likely undermine entry. Despite the high entry barriers associated with building a WLA network at scale, there is some evidence of entry by other operators on a commercial basis. Taking SIRO and VMI, in particular:

(a) VMI proposes to overlay its existing CATV network with FTTP over which it would offer retail broadband (as well as wholesale services). VMI's network overlay programme will require it to procure and install fibre optic cable to replace its existing DOCSIS 3.1 cable. This project will require VMI to incur substantial sunk costs of investment in FTTP cabling and associated ancillary infrastructure, even if it can avoid some sunk costs by reusing any CEI it has. In discussions with ComReg, VMI has suggested that the costs of its overlay programme may amount to some **[✂** [redacted] **✂]** €200m figure for total investment mentioned in press releases, which only covered the network element, a non-trivial proportion of which are likely to be sunk;

[826] There may be circumstances where NBI can act as a supplier of last resort where no retail SP purchasing NG WLA from NBI is willing to serve an end user in the IA. SIRO, according to the associated State Aid approval, is to be a wholesale only SP.

(b) SIRO has announced Phase 2 of its rollout programme (partially funded by the EIB), with the intention of passing an additional 270,000 premises[827] on top of the approximate 500,000 premises which it passed at Q1 2023. As of September 2023, SIRO reports in press releases as having passed some 515,000 premises.[828] SIRO therefore similarly incurs significant sunk costs in its network rollout programme, although its use of ESB's PI ameliorates some of these. ComReg also notes that SIRO's Phase 1 rollout programme was scaled back from an initial target of 500,000 premises to 450,000 premises, and that SIRO tended to miss its own rollout targets over the course of Phase 1 (as set out at paragraphs 4.175 and 5.97 of the 2018 Decision). For example, at the time of the 2016 Consultation it was initially supposed to achieve its scheduled Phase 1 rollout to 500,000 premises by the end of 2018. At the time of the 2018 Decision, SIRO had revised its schedule to say it would pass just over 250,000 premises – half its projected rollout – by the end of 2018. SIRO's Phase 1 rollout ultimately completed in September 2022. ComReg considers that the rollout delays which have characterised SIRO expansion to date similarly suggest the presence of barriers to entry and/or expansion in respect of networks potentially capable of facilitating indirect retail constraints in the NG WLA markets.

6.176 In contrast, and arising from a public policy decision, state-aided NBI rollout in the IA NG WLA Market is focused on areas characterised by low population or premises density which are, accordingly, unlikely to be served by NG broadband on a commercial basis. NBI is entering largely using access to Eircom's PI and its costs of entry to these areas are effectively supported with State Aid. In this regard, the PIA Decision which is published in parallel with this Decision designates Eircom with SMP in the provision of PIA on a national basis, resulting in Eircom being subject to regulatory obligations in respect of the provision of PIA to Access Seekers such as NBI.

6.177 Similarly, on the CG WLA Market Eircom is capable of providing LLU to itself and Access Seekers on a ubiquitous basis (although LLU and CG retail broadband is generally in decline).

[827] https://www.eib.org/en/projects/pipelines/all/20210132

[828] https://siro.ie/, accessed on 8 September 2023.

6.4.3 Pricing Behaviour

Introduction

6.178 The pricing of WLA products and services over time can provide important insights into the development and extent of competition in a market. In an SMP assessment, the ability of a SP to price WLA independently of the pricing behaviour of its competitors may be suggestive (but not determinative) of SMP, when considered in conjunction with other factors. In view of this, ComReg has reviewed trends in LLU and VUA pricing over time.

6.179 Eircom's wholesale prices for FTTC-based VUA and for LLU are (in the presence of regulation) subject to a cost orientation obligation pursuant to the 2018 Decision, while Eircom's wholesale prices for FTTP-based VUA are subject to margin squeeze obligations. Eircom is entitled to make changes to the prices of its LLU and VUA services so long as they comply with the regulatory obligations set out in the 2018 Decision, together with the 2018 Pricing Decision, and the 2018 Bundles Decision.

6.180 ComReg notes that Eircom, SIRO, and NBI price WLA uniformly within their respective network footprints, **[✂** [redacted] **✂]**. Eircom VUA pricing is currently regulated on a nationwide basis, while NBI is constrained to price VUA in accordance with a benchmark reference price ('**BRP**') pursuant to the NBP Contract, and SIRO and VMI are entitled to price VUA on a fully commercial basis. In addition, ComReg has assessed retail broadband pricing and has been unable to identify instances of retail broadband operators charging different prices for the same services in different geographic areas.[829] Where differences in pricing occur, this tends to arise on the basis of the availability of the underlying technology or access network in a particular geographic locale.

6.181 Table 62 below outlines Eircom's wholesale prices for LLU and VUA over time. It is difficult, however, to draw inferences from what Eircom's WLA pricing behaviour would be in an absent regulation scenario (in accordance with the MGA), given that its prices have been regulated to date.

6.182 Under the 2021 ANM Decision, since March 2022, Eircom has been subject to price ceilings in respect of CG WLA, and may price at the specified maximum, or below that maximum. Prior to the 2021 ANM Decision (i.e. since the 2018 Pricing Decision), Eircom was obliged to price CG WLA at specific price points, and accordingly had no pricing discretion.

[829] At Section 4.2 above.

6.183 In respect of Eircom FTTC-based VUA, the 2018 Pricing Decision obliged Eircom to price FTTC-based VUA at specific price points, albeit with limited pricing discretion to price to a floor in exceptional circumstances. The 2021 ANM Decision,[830] which replaced the 2018 Pricing Decision, and which took effect from March 2022 onwards, updated the specific price points, but did not alter the limited discretion Eircom had in respect of FTTC VUA pricing.

6.184 In respect of FTTP-based VUA pricing, Eircom has greater pricing freedom, subject to satisfying the standalone and bundles Margin Squeeze Tests (‘**MST(s)**’), as well as respecting the FTTP-based VUA price floor.

Table 62: Eircom regulated WLA monthly rental prices[831]

Effective from	Effective to	Price €
FTTC Standalone VUA		
01/07/2019	30/06/2020	19.79
01/07/2020	30/06/2021	20.10
01/07/2021	28/02/2022	20.36
01/03/2022	30/06/2022	18.36
01/07/2022	30/06/2023	18.54
01/07/2023		19.12
FTTC POTS-based VUA		
01/07/2019	30/06/2020	5.97
01/07/2020	30/06/2021	6.42
01/07/2021	28/02/2022	6.80
01/03/2022	30/06/2022	4.80
01/07/2022	30/06/2023	4.98[832]
01/07/2023		5.56

FTTP VUA	From	To	Price €
Standalone 150 Mbps	31/08/2015	31/08/2016	20.50
	01/09/2016		23.50

[830] The 2021 ANM Decision remains in effect while under appeal (High Court 2022/12 MCA) by Eircom.

[831] Open Eir Access Reference Offer (‘**ARO**’) Price List, v.26.0 (5 July 2023), Service Schedule 109: https://www.openeir.ie/wp-content/uploads/2023/07/ARO-Price-List-V26_0-Unmarked-05072023.pdf

[832] The price of FTTC POTS-based VUA declined arising from the reduction in WACC rate from 8% to 5.5% set out in ComReg’s ANM Decision.

Standalone 300 Mbps	01/09/2016	30/06/2020	28.50
	01/07/2020		23.50
Standalone 500 Mbps	27/04/2020	30/06/2020	28.50
	01/07/2020		23.50
Standalone 500 Mbps / 100 Mbps	05/08/2021		27.00
Standalone 1000 Mbps	01/02/2020	30/06/2020	33.50
	01/07/2020		28.50
Standalone 1000 Mbps / 150 Mbps	05/08/2021		32.00
Standalone 2000 Mbps	25/10/2021		33.50
POTS-based 150 Mbps	31/08/2015	31/08/2016	6.98
	01/09/2016		9.09
POTS-based 300 Mbps	01/09/2016	30/06/2020	14.09
	01/07/2020		9.09
POTS-based 500 Mbps	27/04/2020	30/06/2020	14.09
	01/07/2020		9.09
POTS-based 500 Mbps / 100 Mbps	05/08/2021		12.59
POTS-based 1000 Mbps	01/09/2016	31/01/2020	24.09
	01/02/2020	30/06/2020	19.09
	01/07/2020		14.09
POTS-based 1000 / 150 Mbps	05/08/2021		17.59
POTS-based 2000 Mbps	25/10/2021		19.09

LLU Monthly Rental	
Price €	**Applicability**
€12.41	09/03/2010 to 31/01/2013
€9.91	01/02/2013 to 30/06/2016
€9.34	01/07/2016 to 30/06/2017
€9.88	01/07/2017 to 30/06/2018
€10.40	01/07/2018 to 30/06/2019
€10.92	01/07/2019 to 30/06/2020
€11.52	01/07/2020 to date

Line Share Monthly Rental	
€8.41	01/12/2007 to 31/10/2009
€0.77	01/11/2009 to 30/06/2016
€0.77	01/07/2016 to 28/02/2022
€0.62	01/03/2022 to date
Sub Loop ULMP Monthly Rental	
€10.53	09/03/2010 to 31/01/2013
€9.03	01/02/2013 to 30/06/2016
€5.41	01/07/2016 to 30/06/2017
€5.60	01/07/2017 to 30/06/2018
€5.77	01/07/2018 to 30/06/2019
€5.92	01/07/2019 to 30/06/2020
€6.12	01/07/2020
Sub Loop Line Sharing Monthly Rental	
€7.61	01/12/2007 to 31/10/2009
€0.77	01/11/2009 to 30/06/2016
€0.77	01/07/2016 to 28/02/2022
€0.62	01/03/2022 to date

6.185 Similarly, ComReg has assessed changes to Eircom connection fees for NG WLA.[833] FTTC VUA connection charges have remained unchanged at €2.50 since 2013, while FTTP VUA connection charges have declined from €170 in 2019, to €100 in 2020, to €0 in 2022. Eircom has also sought to introduce promotions in respect of connection charges,[834] which are discussed in further detail at paragraphs 6.194 to 6.202 below.

6.186 As set out in detail at paragraphs 5.78 to 5.82 above, NBI VUA pricing is constrained by the NBP Contract. In particular, it is required to set its prices by reference to a BRP which is set against a comparable regulated wholesale product, if such a product exists. Otherwise, the BRP is set against the average wholesale prices which prevail in other, more competitive, parts of the State.

[833] As set out at Service Schedule 109 of the Open Eir ARO Price List.

[834] As set out at paragraphs 51 to 53 of Eircom Confidential Submission.

6.187 In any year, NBI may not increase its prices by more than 10%, unless the BRP increases by that amount. NBI is not obliged to price at the BRP and may price at any level below it. NBI must seek Ministerial approval to alter its VUA prices and, in doing so, must not exceed the BRP or cause a wholesale margin squeeze. NBI prices VUA on a uniform basis across the IA. It therefore follows that NBI is unable to price WLA independently of the pricing behaviour of its competitors, due to its obligation to set prices in accordance with the BRP.

6.188 SIRO offers a number of symmetric and asymmetric access products. LightStream is SIRO's asymmetric connectivity product for residential, SME and enterprise applications, while LightPulse is an asymmetric connectivity product for SMEs which features a higher specification SLA and enhanced delivery experience.[835] Since it is not subject to regulatory obligations in respect of its pricing conduct, SIRO is free to determine its own commercial pricing strategy including, for example, running short-term promotions on a national basis, or in areas where it has recently rolled out.

6.189 Table 63 below outlines SIRO's LightStream pricing, as of July 2023. ComReg notes that some SIRO prices increased marginally, by up to **[✂** [redacted] **✂]** while others have remained stable:

Table 63: SIRO LightStream Standard Monthly Rental [✂REDACTED✂][836]

Product	Monthly Rental (€)	
	To 31/006/2023	From 01/07/2023
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

[835] https://siro.ie/partners/wholesale/

[836] SIRO has multiple products, with its monthly rental pricing in the range €20-€45.

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Table 64: SIRO connection charges [✂REDACTED✂]

Product	Monthly Rental (€)	
	To 31/05/2021	From 01/06/2021
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		[redacted]

6.190 ComReg understands that VMI intends to offer [✂ [redacted] ✂] Like SIRO, since it is not subject to regulatory obligations in respect of its pricing conduct, VMI is free to determine its own commercial pricing strategy including, for example, running short-term promotions on a national basis, or in areas in which it has recently rolled out.

6.191 Table 65 below outlines VMI's intended pricing, based on [✂ [redacted] ✂]:

Table 65: VMI VUA monthly rental prices[837] [✂REDACTED✂]

Code	Download (mbps)	Upload (mbps)	Price €
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

837 [✂ [redacted] ✂]

6.192 Comparing Eircom, SIRO and VMI pricing on their most similar products as of September 2023, it is apparent that there are limited pricing differences between each operator's comparable VUA product rental fees, but that there are differences in connection fees, arising from Eircom charging no connection fee since 2022. In respect of monthly rental for comparable products, Eircom is **[✂** [redacted] **✂]**:

Table 66: Comparable SIRO, VMI and Eircom VUA pricing [✂REDACTED✂]

SIRO monthly rental		Eircom monthly rental		VMI monthly rental	
Product	**€**	**Product**	**€**	**Product**	**€**
[redacted]	[redacted]	[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Commercial NG WLA Market

6.193 Absent regulation, ComReg considers that the absence of sufficiently effective competitive constraints in the Commercial NG WLA Market, as set out at Section 5 above, affords Eircom the ability and incentive[838] to behave, from a pricing perspective, independently of its competitors and customers and in so doing to engage in pricing behaviours that could restrict or distort competition. Table 66 above suggests that Eircom does not face significant pricing pressure from SIRO or VMI, **[✂** [redacted] **✂]** There is, accordingly, insufficient evidence of sufficiently effective competitive constraints in the Commercial NG WLA Market, arising from SIRO or – on a forward-looking basis - VMI VUA pricing.

6.194 Eircom argues that it faces effective pricing constraints on the Commercial NG WLA Market and that it has been unable to respond to pricing constraints due to regulatory restrictions. Eircom points out that since 2020 it has:

(a) Implemented price reductions for FTTP VUA and Bitstream,[839] and

[838] These abilities and incentives are discussed in Section 8 below addressing competition problems.

[839] Eircom Non-confidential Submission, at paragraph 48.

(b) Notified five FTTP discount proposals to ComReg, all of which have been rejected as wholesale discounts are currently banned.[840]

6.195 Copenhagen Economics (on behalf of Eircom) argues[841] that the timing of Eircom's FTTP wholesale price reductions is consistent with increases in SIRO market share and declining Eircom wholesale market share.

6.196 However, Eircom's conduct does not provide evidence of an effective pricing constraint in its provision of NG WLA. Eircom's Submission does not identify those precise constraints, other than alluding to *"pressure from other providers and lack of take-up"*.[842] Eircom notes that it has reduced the price of its 1 Gbps VUA and Bitstream offerings, increased its FTTP profile speeds without increasing prices, and reduced FTTP connection and migration charges. It is worth noting however that this is in the presence of regulation. ComReg must, pursuant to the MGA, assess what Eircom's pricing conduct would likely be in the absence of NG WLA regulation.

6.197 Before doing so, ComReg notes that, in contrast to Eircom's contention that it faces a 'lack of take-up', Eircom has experienced significant growth on FTTP, both absolutely and compared to other NOs, since Q1 2019. ComReg data indicate that, since Q1 2019, Eircom FTTP sales have increased by 559%, split between 349% growth in self-supply and 1,561% growth in merchant market supply, compared to equivalent figures of 302% growth for VMI and 403% growth for SIRO. Eircom's FTTP growth over the same period, of 288,414 lines, is more than six times greater than NBI growth, twice as great as SIRO growth, and 23 times greater than VMI FTTP growth to date. It is accordingly not the case that Eircom faces pricing constraints arising from *"pressure from other providers and lack of take-up".* Rather Eircom has strongly increased FTTP growth and in fact significantly outstripped SIRO over the time period under consideration, as Figure 31 shows. The graph on the left shows absolute sales of FTTP lines, while the graph on the right shows monthly growth in sales, and shows in particular accelerating Eircom sales growth since Q2 2022, compared to sluggish SIRO growth:

[840] Eircom Non-confidential Submission, at paragraphs 50 to 68.

[841] Copenhagen Economics Non-confidential Submission, at paragraph 4.32.

[842] Eircom Non-confidential Submission, at paragraph 48.

Figure 31: Eircom and SIRO FTTP sales [✂REDACTED✂]

[redacted]

6.198 In respect of Eircom's pricing conduct, as set out at Table 62, while the monthly rental prices for some Eircom FTTP VUA products have declined, the prices of POTS-based and Standalone FTTC VUA products have both increased in 2022, and again in 2023, driven by the changes required by ComReg in line with the cost orientation obligation and prices set out in the 2018 Pricing Decision. Eircom fails to mention that **[✂** [redacted] **✂]**.[843]

6.199 As regards the five wholesale discount proposals which Eircom notified between November 2019 and February 2023, none were put into effect. The first three were all refused by ComReg on the basis that, as set out at paragraph 12.51 of D11/18, *"There shall be no wholesale promotions or discounts for WLA or WCA services."* Eircom withdrew the fourth proposal in June 2022 prior to ComReg making a formal determination.

6.200 In respect of the fifth proposal - the February 2023 notification, which was pending at the time of Eircom's Submission - ComReg notes that, in advance of notifying ComReg, Eircom took the unprecedented step of informing industry of a pricing proposal (Customer Requirements Document ('**CRD**') 967) in January 2023 stating that, *"The proposed structure will lower rental charges. The reduced rates would be applicable based on the individual operators FTTH base profile."*[844]

[843] 'Wholesale Workshop', Open Eir PowerPoint presentation (undated), slide 9.

[844] ComReg Information Notice CRD-967 FTTH Tariff Structure Review, ComReg 23/24, paragraph 1.

6.201 Eircom subsequently notified ComReg of its proposed discount scheme on 1 February 2023 as part of Wholesale Notification 2023-003 (‘**WN2023-003**’). ComReg wrote to Eircom on 9 March 2023 informing Eircom of its very significant concerns with the proposed discount scheme and sought confirmation from Eircom that it would not proceed to publish the pricing proposal. In particular, ComReg considered that the proposed discount scheme had clear anti-competitive effect, including a potential Margin Squeeze between FTTP VUA and FTTP Bitstream, uncertainty for Access Seekers in relation to potential retrospective refunds, and features characteristic of retroactive loyalty-inducing rebate schemes.

6.202 On 15 March 2023 ComReg received confirmation from Eircom that Eircom did not intend to publish the proposed Scheme.[845]

6.203 Over the time period under consideration, Eircom notified several FTTP price changes to ComReg, which ComReg did not object to, all of which are in the public domain.[846] The contention that ComReg has impeded Eircom’s pricing response in the provision of FTTP services does not stand up to scrutiny.

6.204 ComReg also notes that the level of returns recorded by Eircom does not appear to be consistent with the contention that it faces effective pricing constraints. Eircom is obliged to publish Historical Cost Separated Accounts which, *inter alia*, report its wholesale broadband returns.[847] As set out in greater detail at Section 9.3.4 below, Eircom records excess returns (that is, returns above the regulated WACC) in the Wholesale Broadband Access (‘**WBA**’) statement in its 2022 HCA Separated Accounts. The fact that Eircom has been able to report returns that are significantly above the level allowed for by the regulated WACC suggests that it has been able to maintain prices above the level that would be sustainable if it faced effective competition.

[845] ComReg Information Notice CRD-967 FTTH Tariff Structure Review – Further Update ComReg 23/25.

[846] WN 2020-005 FTTP Connection and FTTP rental price change in March 2020, WN 2022-017 FTTP connection/migration/activation price changes in July 2022, and WN 2023-006 FTTP connection/migration/activation price changes in March 2023.

[847] Historical Cost Separated Accounts for the year 2022 are available at https://www.eir.ie/opencms/export/sites/default/.content/pdf/regulatoryinformation/HCA.pdf

6.205 ComReg is aware that shorter reporting periods may fail to capture longer term trends in the context of the presence of fixed and sunk costs in network construction. Nevertheless, Eircom Additional Financial Information in respect of its WBA statement permits disaggregation of the returns between CGA, FTTC and FTTP. **[✂** [redacted] **✂]** Accordingly, Eircom regulatory accounting data suggest that it is not effectively price constrained by competition from other Network Operators in the provision of wholesale broadband services.

6.206 Copenhagen Economics claims[848] that Eircom's pricing conduct provides evidence that Eircom does not have the incentive or ability to exercise SMP in the Commercial NG WLA Market, even in areas where it is not overlapped by other networks. Copenhagen Economics provides three grounds for the claim that Eircom cannot exercise SMP by means of charging geographically differentiated wholesale prices (implicitly, differentiated according to the presence or absence of other networks).

6.207 However, ComReg notes, first, that Eircom sets geographically uniform retail prices which, according to Copenhagen Economics, due to the retail/wholesale MST obligation, lead to geographically uniform wholesale prices. This reasoning provides that Eircom is constrained to price nationally on the basis of regulation. In assessing SMP, ComReg must consider, rather, what would likely occur absent regulation, applying a MGA. Absent regulation, the MST would cease to apply and the consequent national pricing constraint at wholesale level would no longer exist.

[848] Copenhagen Economics Non-confidential Submission, at paragraphs 3.80 to 3.88.

6.208 Second, increasing network rollout by other Network Operators in the Commercial NG WLA Market limits Eircom's ability to charge geographically differentiated prices, whereby increasing prices where network rollout has not yet occurred would incentivise rollout by other Network Operators. ComReg considers that the presence in some areas but the absence in others of competing networks would be more likely to increase, rather than reduce, the incentive to engage in geographic price differentiation, and that as network rollout levels become more uniform, this incentive would decline. Moreover, from a Network Operator perspective, uniform wholesale pricing facilitates simplicity in terms of billing, products, marketing and process by avoiding the need to differentiate across regions.

6.209 ComReg's analysis based on data provided by Network Operators suggests that network rollout in the Commercial NG WLA Market continues to be limited. As of Q1 2023, approximately 21% of premises in the Commercial NG WLA Market are passed by two networks capable of delivering VUA (that is, Eircom and SIRO), while no premises are passed by three networks capable of delivering VUA now. This is on the basis of excluding VMI's CATV network. If that network were to be included as a proxy for full future VMI FTTP rollout, premises overlap figures would increase to 48% for two networks and 13% for three networks.

6.210 Third, Copenhagen Economics claims that Eircom cannot exercise SMP by charging geographically differentiated prices because it cannot categorise EAs according to the level of network overlap present. In its Submission, Copenhagen Economics provides its own calculated overlap estimates (if imperfectly). This suggests that Eircom does, in fact, have some capacity to determine the presence or absence of overlaps.

6.211 Eircom[849] and Copenhagen Economics[850] also suggest in their Submissions that Eircom is constrained in its capacity to price excessively, even where no network overlap is present, by the fact that it has offered what it characterises as 'voluntary commitments' [✂ [redacted][851] [redacted] ✂] For the avoidance of doubt, ComReg does not consider the [✂ [redacted] ✂] to amount to a voluntary commitment under Article 79 of the EECC, as transposed in regulation 61 of the ECC Regulations.

6.212 If Eircom were constrained by effective competition on the Commercial NG WLA Market, wholesale prices could differ geographically arising from differences in average costs in those regions. However, as set out in detail at Section 9 below, ComReg considers that costs per FTTP premises connected are unlikely to differ substantially on a geographic basis due to a number of factors. If the average cost per premises connected does not differ materially on a geographic basis, there is less reason for Eircom to differentiate prices.

6.213 ComReg notes Eircom's publication of a 'price guarantee' for FTTP VUA prices over 10 years from July 2023 which is in the presence of regulation, and therefore subject to the prevailing price control obligations imposed by ComReg. While this 'price guarantee' may reduce the possibility of excessive FTTP VUA prices, ComReg continues to have concerns that Eircom may be able to exploit its SMP by engaging in exclusionary pricing practices, such as reducing VUA prices to an extent that could undermine investment by rival Network Operators. For example, as detailed above, ComReg raised concerns around a discount scheme proposed by Eircom in February 2023 under WN2023-003 which Eircom subsequently confirmed it would not launch.

6.214 ComReg considers that, absent regulation, Eircom would have the capacity to price independently of its competitors and its customers on the Commercial NG WLA Market. Apart from excessive pricing ComReg is also concerned that, absent regulation, Eircom could foreclose competition by lowering prices.

[849] Eircom Confidential Submission, at paragraphs 70 to 73.

[850] Copenhagen Economics Confidential Submission, at paragraphs 3.89 to 3.90.

[851] [✂ [redacted] ✂] – see information notes IN 23/24 and IN 23/25.

IA NG WLA Market

6.215 In the IA NG WLA Market, it is ComReg's view that NBI does not face sufficiently effective competitive constraints from Network Operators. Accordingly, in an absent regulation scenario, NBI would not be constrained by other operators from profitably raising its VUA prices above the competitive level, thereby limiting its ability to behave, to an appreciable extent, independently of competitors, customers or end users. However, NBI would be constrained instead in its pricing conduct by the terms of the NBP Contract, such that it would be unable to profitably raise its VUA prices unless it received ministerial authorisation to do so, and unless the price increase was consistent with the other obligations set out in the NBP Contract. Thus, even absent regulation, it appears that NBI would remain constrained in its pricing conduct.

CG WLA Market

6.216 Absent regulation, it is ComReg's view that the lack of sufficiently effective competitive constraints in the CG WLA Market would, in principle, afford Eircom the ability and incentive to increase prices (above the competitive level) charged to Access Seekers for LLU, SLU, and Line Share.

6.217 In practice, ComReg considers that, even if Eircom were to do so, this would have a limited – and declining – impact on Access Seekers, given the very small numbers of CG WLA purchased by Access Seekers. Any such price increase would also be likely to be limited in time, given the ongoing overlay of Eircom's legacy network with FTTP by Eircom and SIRO outside the IA, and the rollout of NBI FTTP to those premises currently only served by Eircom CG. Thus, even absent regulation, where Eircom had the capacity and incentive to raise the price of its LLU inputs, the impact of such increases would likely decline over time.

6.4.4 Conclusion on Existing Competition

6.218 Based on the assessment in paragraphs 6.17 to 6.217 above, ComReg's view is that, absent regulation in the Commercial NG WLA Market, it is unlikely that Eircom would be sufficiently constrained by existing competition, such that it would prevent it from behaving, to an appreciable extent, independently of its competitors, customers and end users. Eircom's persistently high market shares, the lack of an effective pricing constraint and the absence of clear evidence of competition constraining its pricing behaviour are all suggestive of Eircom holding a position of SMP in the Commercial NG WLA Market.

6.219 Similarly, in the IA NG WLA Market, ComReg's view is that, absent regulation, it is unlikely that NBI would be sufficiently constrained by existing competition (as there is generally none), such that it would prevent it from behaving, to an appreciable extent, independently of its competitors, customers and end users. However, NBI would likely be constrained in its behaviour (including with respect to pricing), by the various obligations imposed on it through the NBP Contract with the State. While NBI is not likely to be effectively constrained by existing competition, the NBP Contract constraints largely mirror those which could be imposed in an SMP scenario.

6.220 In respect of CG WLA, absent regulation, it is unlikely that, in the short term, Eircom would be sufficiently constrained by existing competition, such that it would prevent it from behaving, to an appreciable extent independently of its competitors, customers and end users. However, as set out above, the specific context of CG WLA must be taken into account. Two points are salient:

(a) CG WLA will continue to be characterised by asymmetric substitution such that, where NG broadband is available, it will likely place a degree of constraint on CG WLA, in circumstances where the CG WLA market is likely to continue to shrink in size; and

(b) In the footprint of the IA, and on a forward-looking basis as NBI rollout continues, and subject to timing issues, NBI FTTP is likely to constrain CG WLA over time.

6.221 Given the small and declining numbers of CG WLA, as well as the rollout of NG WLA both in the IA and outside the IA, ComReg considers that any attempt by Eircom to exert its CG WLA market power would be limited in both time and geography and that, beyond the short term, Eircom has very limited capacity to exert market power in the provision of CG WLA.

6.222 Below, ComReg considers other relevant factors (potential competition and CBP) to determine whether those factors may diminish or undermine Eircom's potential SMP position in the Commercial NG WLA Market and the CG WLA Market, and NBI's potential SMP position in the IA NG WLA Market.

6.5 Potential Competition in the Relevant WLA Markets

6.223 ComReg now assesses the likely effectiveness of any constraints which may stem from potential competition in the Relevant WLA Markets.

6.224 This assessment considers whether entry (and expansion) in the Relevant WLA Markets is likely, timely, and credible to such an extent that it would effectively constrain an operator's ability to act independently of its competitors, customers and end users over the medium term.[852] In this regard, the discussion builds on the assessment of barriers to entry and expansion in the context of existing competition set out at paragraph 6.177 above.

6.225 In considering constraints posed by potential competition, ComReg first examines barriers to entry and expansion insofar as they may impact upon the effectiveness of the constraints posed by potential competitors. Then, ComReg assesses the strength of any such potential competition, having regard to the barriers to entry and expansion that have been identified.

6.5.1 Barriers to Entry and Expansion

6.226 In assessing the likelihood of potential competition acting as an effective constraint on Eircom or NBI over the period of this market review, ComReg has examined the nature and extent of any barriers to firms both entering, and subsequently expanding[853] in, the Relevant WLA Markets.

6.227 Barriers to entry[854] generally comprise any disadvantage that a new entrant faces when entering a market that incumbents do not currently face. According to the 2020 Explanatory Note:[855]

> *"…high structural barriers may be found to exist when the market is characterised by absolute cost advantages, substantial economies of scale and/or economies of scope, capacity constraints, and high sunk cost. Such barriers can be found in sectors that rely on the deployment of networks, such as fixed networks."*

6.228 Assessing barriers to entry and expansion requires identifying what represents credible entry into the Relevant WLA Markets. In practice, ComReg considers that this means focussing on two credible entry or expansion possibilities:

(a) SIRO FTTP market expansion, and

(b) VMI FTTP WLA market entry.

[852] See paragraph 61 of the SMP Guidelines.

[853] ComReg notes that barriers to expansion would more typically be considered under constraints from existing competition. However, given similarities associated with issues concerning barriers to entry ComReg considers them in this context.

[854] Barriers to growth and expansion are obstacles that a new entrant (or smaller existing competitor) faces in its ability to grow or expand in a particular market, and which limit its ability to exert an effective competitive constraint over the medium to longer term.

[855] 2020 Explanatory Note, page 12.

6.229 In determining the credibility of potential market entry or expansion, ComReg has regard to three relevant indicators, each of which are summarised below:

(a) The overall size of the incumbent, and whether it controls infrastructure that is not easily duplicated,

(b) Any requirement to incur sunk costs of market entry or expansion, and

(c) The presence of any economies of scale, scope, or density.

a. Overall size of the undertaking and control of infrastructure not easily replicated

6.230 The SMP Guidelines cite[856] control of infrastructure not easily duplicated as a relevant criterion for assessing whether SMP exists. This may apply where:

(a) access to certain infrastructure is necessary to produce a particular product or service (in this case, WLA);

(b) the required infrastructure is exclusively or overwhelmingly under the control of a single undertaking; and

(c) high and non-transitory barriers to entry, expansion or exit are associated with replacing the infrastructure in question.[857]

6.231 SPs require access to infrastructure in order to provide WLA. Potential entry or expansion into the Relevant WLA Markets would require a SP to either build an independent network or adapt an existing network to provide WLA.

6.232 Each approach entails significant barriers to entry or expansion, and the degree to which each would be potentially effective for replicating provision of NG WLA by Eircom, SIRO, or NBI (or VMI) (thereby effectively constraining Eircom's, SIRO's or NBI's behaviour) would vary, including having regard to network coverage. In this respect, ComReg assesses whether a SP's ability to replicate Eircom, NBI, or SIRO infrastructure would effectively constrain their behaviour in the Relevant WLA Markets over this market review period.

[856] At paragraph 58.

[857] The replicability of network infrastructure is also directly related to the criterion of sunk costs, the overall size of network coverage and customer base, as well as economies of scale, scope and density associated with extensive network infrastructure.

6.233 It may not be necessary to fully replicate an incumbent's network infrastructure for an SP to pose an effective competitive constraint in the Relevant WLA Markets by means of market entry or expansion. However, the geographic coverage of a hypothetical alternative WLA product is likely to be an important feature for Access Seekers. Additionally, factors such as cost advantages that an incumbent is likely to enjoy relative to potential competitors arising from sunk costs, economies of scale and scope, and vertical integration are all likely to influence the extent to which WLA infrastructure is replicable, and hence the degree of competitive constraint arising from potential competition.

b. Sunk costs

6.234 Sunk costs are costs incurred that cannot be recovered if an entrant decides, or is forced, to exit the market. The existence of sunk costs does not automatically imply that entry barriers are high. A certain level of sunk costs arise in entering most markets, and the incumbent may also have had to incur similar sunk costs before it entered the WLA markets (and/or related markets).

6.235 However, in some circumstances it is more difficult for new entrants to break into or expand in a market than it was for the first firm (or subsequent firms) to do so. This creates a decisional asymmetry, where an incumbent has already incurred and recovered sunk costs but a new entrant has not. In general, higher sunk costs associated with market entry discourage entry.[858]

6.236 Entry into the Relevant WLA Markets is likely to involve significant costs which would be largely sunk. In particular, building an independent network to provide WLA requires significant financial and time investment. The proportion of expenditure on, for example, trenches, ducts and overground and subterranean plant is likely to be particularly high and sunk.

6.237 The sunk costs of entering the Relevant WLA Markets may be somewhat reduced if the potential entrant has an existing network in place, as set out in greater detail in respect of VMI below.

[858] OECD, Barriers to Entry, (DAF/COMP(2005)42), 2006, Paris.

c. Economies of scale, scope, and density

6.238 Economies of scale, scope and density refer to potential advantages that larger operators may enjoy over smaller operators. Economies of scale generally refer to the cost advantage which a large-scale operator may have over a smaller operator, where the marginal cost of production decreases as the quantity of output produced increases. Economies of scope refer to the potential efficiencies which may be gained by a firm jointly producing a range of goods and services, for example, where a FTTx network could be used to provide RFTS, TV, broadband and leased line services. Economies of density refer to efficiencies associated with supplying customers who are geographically concentrated.

6.239 Economies of scale, scope and density in the provision of WLA must be considered in light of the retail market, where the cost of supply per end user decreases in line with the number of end users supplied, as fixed costs of supply are spread across a larger customer base, leading to lower average costs of supply. Economies of scale and scope could accordingly act as a barrier to entry to the WLA market where an incumbent has a more substantial customer base (comprised of the provision of WLA to Access Seekers, and self-supply to its own retail arm) than other SPs, or where it offers a diversified product range (by, for example, bundling retail products reliant on WLA inputs).

6.240 A large portion of the costs of building and maintaining a telecommunications network are fixed. Therefore, the average costs of providing services, per subscriber, will fall as the number of customers served by the network increases. Economies of scale and density will, therefore, be achieved where a SP can serve as many subscribers as possible from its investment in a given part of the network. That also means that the ability of a SP to offer a viable service can often depend on its ability to acquire a large number of retail and/or wholesale customers at regional or national level.

Barriers to entry and/or expansion in the CG WLA Market

6.241 The provision of CG WLA by Eircom continues to decline, measured by subscriber numbers. This trend reflects shifting end users preferences for NG broadband capable of delivering higher-quality services. For example, it is possible to offer dual play bundles of broadband and RFTS over Eircom's copper network, but it is not possible to offer TV as part of such a bundle, due to the absence of quality of service ('**QoS**') markers on CG broadband. In contrast, QoS markers are automatically assigned to NG broadband traffic.

6.242 ComReg accordingly considers that there are few or no incentives for an operator to build a copper network to enter the CG WLA Market, in view of declining numbers of customers availing of copper services.

6.243 Additionally, the CG WLA Market is characterised by economies of scale, scope and density, leading to the presence of structural barriers to entry. As CG WLA numbers decline over time due to end users switching away from CG retail broadband to NG retail broadband, the premises density over which CG WLA is delivered is also likely to decline. Similarly, compared to NG broadband, CG broadband is likely to exhibit lower economies of scope, as certain retail services, such as IPTV, cannot be delivered over CG broadband due to the absence of suitable QoS. Lastly, the continuing decline in CG WLA suggests that a new entrant would likely find it difficult to achieve economies of scale by growing service delivery over a larger number of end users, and would likely be unable to spread fixed costs over a large number of customers.

6.244 The CG WLA Market is therefore likely to be characterised by the presence of economies of scale, scope, and density which could strengthen Eircom's potential SMP position. These economies are likely to result in high barriers to entry for other SPs who may seek to enter the CG WLA Market. However, ComReg considers that this is a moot point, as there would likely be few incentives to enter the CG WLA Market, even absent such economies, for the reasons set out at paragraphs 6.241 and 6.242 above.

Barriers to entry and/or expansion in the Commercial NG WLA Market

6.245 The greater premises density in the Commercial NG WLA Market potentially makes network rollout easier and more cost effective, as fibre optic cable lengths between premises to be served are shorter, and the cost recovery risks potentially lower. Nevertheless, Eircom is the largest supplier of WLA products and retail telecommunications services in the Commercial NG WLA Market. It controls extensive NG broadband infrastructure capable of delivering VUA which is not easily replicable at the same level of scale by retail or wholesale competitors.[859] Eircom also benefits from its network footprint, subscriber base size and product portfolio, giving it the ability to exploit greater economies of scale and scope in the provision of WLA than actual or potential competitors likely could, thereby giving it greater cost advantages.

[859] However, as set out at Section 5 above, it should be noted that it may not be necessary to fully replicate Eircom's infrastructure in order to pose an effective potential competitive constraint in the Relevant WLA Markets.

6.246 Eircom operates an extensive FTTx access network capable of delivering VUA which according to Eircom passes 2 million premises (84%) in the State, as of Q2 2023.[860] Many of the costs incurred in the initial construction of Eircom's FTTx networks (including the associated duct, pole and other assets) are largely sunk. ComReg recognises that Eircom, through its ongoing FTTP network upgrade, is also likely to continue to utilise a large number of assets for which the costs are already sunk[861] in upgrading and replacing its copper and FTTC network infrastructure to FTTP. Given the size of the sunk costs that are likely involved for Eircom, coupled with its economies of scale and scope, this would create cost asymmetries for any new entrant considering entering and/or expanding in these markets.

6.247 Economies of density are evident from the uneven deployment of competing networks across Ireland. Eircom is in the process of rolling out an FTTP network (largely upgrading FTTC to FTTP) with target coverage of 1.9 million premises by 2026.

6.248 Competitors to Eircom such as Vodafone, Sky and BT (the latter of which sells WCA services to Sky and others) are already active in downstream markets, and offer a variety of retail and/or wholesale services. These SPs either have already, to one degree or another, or have the potential to, gain benefits from economies of scale and scope by growing retail customer numbers, including through cross-selling and bundling products. However, other than VMI, this has largely been enabled through regulated access to WLA (and, in the Revised Regional WCA Market, WCA) products. Absent regulation, these SPs would face diseconomies of scope, as they would only be able to access SIRO or NBI VUA (it is also possible that, being unable to serve national retail markets, purchases of services on these alternative networks could also be impacted). ComReg also considers it unlikely that these SPs would seek to enter the Relevant NG WLA Markets by constructing a network capable of delivering VUA.

6.249 In the footprint of the Commercial NG WLA Market, a market entrant not already active (or which has not signalled an intention to be active) in the provision of VUA on a merchant market or self-supply basis is unlikely to rollout a network across a large geographic area on a commercial basis. ComReg therefore focusses, in particular, on whether either SIRO or VMI have overcome, or are likely to be capable of overcoming, barriers to entry or expansion in the Commercial NG WLA Market.

[860] Eir Group Results, Q2 2023, at p.7.

[861] Eircom's FTTx deployment re-utilises existing assets such as ducts, trenches, exchanges and so on.

SIRO

6.250 SIRO has, to a reasonable degree, overcome barriers to entry in certain geographic areas, having rolled out to approximately 500,000 premises as of Q2 2023 and, on a forward-looking basis, it will compete with Eircom (absent regulation in the Commercial NG WLA Market) where their networks overlap (at **[✂** [redacted] **✂]**). On the basis of its announced rollout plans to eventually reach a further 270,000 premises, SIRO's footprint will amount to 770,000 premises passed on completion of Phase 2 rollout. SIRO's FTTP network will not be as extensive as Eircom's FTTx network (which, factoring in its FTTP upgrade plans, is targeted to pass some 1.9 million premises), although it is likely that achieving a certain level of connections from premises passed is likely to be an important element of SIRO's current and future network investment plans. In addition, Eircom's market share in the Commercial NG WLA Market suggests that it currently faces a degree of competition from SIRO but that this is limited to those Commercial EAs where SIRO has rolled out, predominantly in areas of higher premises density. As SIRO rollout progresses in the Commercial NG WLA Market over time Eircom will likely face additional competition from SIRO, where that additional new rollout occurs.

6.251 In its Submission,[862] SIRO argued that ComReg should take a cautious approach to its rollout and suggested that, despite its best efforts, its rollout volume and timelines would likely be impacted by practical network rollout considerations. ComReg has taken a reasoned approach to accounting for SIRO rollout, since SIRO has been unable to provide ComReg with sufficiently reliable deployment forecasts which would allow it to take a more specific forward-looking view of SIRO network rollout. ComReg notes, however, that in May 2023, SIRO advertised its intention to roll FTTP out to 2,300 premises in 13 locations in Birr, Co. Offaly, commencing in late 2023.[863] When ComReg queried SIRO's network forecasting capacity it indicated that as of June 2023, SIRO is forecasting just under **[✂** [redacted] **✂]** homes for rollout in the period to February 2024. However, SIRO expects that, at most, **[✂** [redacted] **✂]** be passed by SIRO FTTP. SIRO also indicated that it will initially conduct a survey of the ESB infrastructure in a candidate rollout area. Each candidate town is profiled, and each premises in that town is assigned to a profile category based on the ESB infrastructure available. Each profile category has a percentage probability that the associated premises will be converted to a home passed.[864]

6.252 SIRO's existing rollout of 500,000 premises as of Q2 2023 amounts to approximately **[✂** [redacted] **✂]**[865] of the premises in Commercial NG WLA Market, measured by premises, potentially rising to **[✂** [redacted] **✂]**[866] once its Phase 2 rollout is complete. This suggests that SIRO has no immediate plans to roll out to the remaining **[✂** [redacted] **✂]**[867] of premises in the Commercial NG WLA Market within the lifetime of this market review.

[862] SIRO Non-confidential Submission, at p.15.

[863] https://siro.ie/news-and-insights/siro-announce-e10-million-investment-in-full-fibre-broadband-network-for-three-offaly-towns/

[864] SIRO email to ComReg, 27 June 2023.

[865] Between 20% and 30%.

[866] Between 40% and 50%.

[867] Between 50% and 60%.

6.253 Copenhagen Economics argues[868] that SIRO is exerting an increasingly strong direct constraint on Eircom, incentivising Eircom to retain (rather than foreclose) Access Seekers. It suggests that Eircom's position in the wholesale market has been significantly weakened since SIRO entered the market, with SIRO (according to Copenhagen Economics) accruing a market share of 30-40% in the period Q1 2019 and Q2 2022, primarily at the expense of Eircom. Copenhagen Economics also argues that Eircom's net growth over the past 15 months has been in decline while SIRO and the market overall have shown positive growth.

6.254 However, Eircom has been able to maintain a sizeable market share which has declined slowly over time. The data compiled by Eircom and provided to ComReg in June 2023 suggest that **[✂** [redacted] **✂]** As of Q1 2023, ComReg data indicate that SIRO holds an 18% market share on the Commercial NG WLA Market, while Eircom holds the remaining 82%.[869] This amounts to a decline compared to Eircom's market share of >95% on a national WLA Market, at the time of the 2018 Decision, but it still amounts to a sizeable market share that has declined slowly over the last 5 years. ComReg also notes, as set out at paragraph 6.197 above, that Eircom has successfully increased its share of FTTP sales. SIRO market entry therefore is not yet at a level which gives clear evidence that Eircom does not hold a position of SMP on the Commercial NG WLA Market.

6.255 The more limited presence of SIRO FTTP capable of offering NG WLA to premises in the Commercial NG WLA Market suggests that barriers to entry and expansion arising from economies of scale, scope and density are present (although not likely to be uniform), but at a lower level than in the CG WLA Market, or the IA NG WLA Market.

[868] Copenhagen Economics Non-confidential Submission, at paragraphs 3.19 and 3.20.

[869] These figures were calculated using Eircom merchant market supply of VUA and NG Bitstream, Eircom self-supply of VUA and NG Bitstream, and SIRO merchant market supply of VUA.

VMI FTTP

6.256 The sunk costs involved in entering the Relevant WLA Markets may be lessened where the entrant has an existing network in place. For example, VMI, as an existing CATV network SP, may be able to avoid certain sunk costs that would otherwise be incurred by SPs entering the WLA markets, bearing in mind its stated intention to overlay CATV with FTTP and then to commence provision of wholesale services. For example, if VMI were able to re-use some existing ducts and chambers, it could avoid some of the costs associated with the provision of access infrastructure during rollout.

6.257 VMI's CATV network - which is likely to provide a reasonable indicator of its eventual FTTP network presence - is predominantly located in more densely populated areas in the Commercial NG WLA Market. However, although VMI has indicated its intent to commence provision of WCA and WLA services over its FTTP network, in response to information requests from ComReg, it has been unable to provide detail on its network upgrade forecasts, or wholesale service provision over that network, other than to note that it intended to commence the provision of **[✂** [redacted] **✂]**

6.258 VMI would, additionally, likely incur other sunk costs associated with developing and marketing a wholesale product and putting in place the necessary wholesale order handling, product management and billing systems. VMI has, for example, indicated to ComReg that the replacement of CATV with FTTP **[✂** [redacted] **✂]**

6.259 VMI has indicated its intention to overlay its CATV network with FTTP and to offer wholesale services. In its Submission,[870] VMI stated that, over the course of the market review period, the scale of SIRO and VMI rollout would be insufficient to constrain Eircom, **[✂** [redacted] **✂]** Bearing in mind the length of time it would likely take VMI to complete its FTTP overlay, and noting that it will be providing WCA for **[✂** [redacted] **✂]** after its launch, ComReg is of the view that any impact in the Commercial WLA Market arising from such potential competition would likely not be sufficiently material until the end of the market review period. VMI will, in the first instance, be offering a WCA service until it attains a sizeable degree of coverage. This is because potential Access Seekers would not likely invest in backhaul and associated facilities to procure WLA from VMI until it is economic for them to do so, including having regard to the potential customer base.

6.260 In its Submission, Eircom argues[871] that ComReg should be more forward-looking and give more weight to announced network rollout plans in assessing direct constraints on Eircom in the Commercial NG WLA Market.

6.261 ComReg has given due consideration to current and expected rollout plans on the basis of the information available to it. Network availability, is not in and of itself the sole indicator of potential competition and ComReg must also have regard to the actual and potential impact on the market As set out elsewhere in this Decision, ComReg takes into account network deployment plans which are sufficiently reliable in respect of timing and location data. In this regard, ComReg has requested network rollout forecast data from Network Operators using its statutory information gathering powers. On the basis of Network Operator responses:

(a) Eircom provides forecasts up to 1-2 months in advance and for assessment purposes ComReg uses actual rollout only;

(b) SIRO provides forecasts up to 1-2 months in advance and for assessment purposes ComReg uses actual rollout only;

(c) NBI is required under the terms of the NBP Contract to provide forecast data out to network completion. ComReg therefore uses actual and forecast NBI rollout data; and

(d) VMI cannot, as of October 2023, provide any specific forecast data other than noting its intention to overlap its CATV network with FTTP.

[870] VMI Confidential and Non-confidential Submissions, at p.16.

[871] Eircom Non-confidential Submission, at paragraph 41.

6.262 This approach is consistent with guidance provided to ComReg by the EC, and also takes account of experience in respect of FTTP rollout whereby, for example, SIRO repeatedly missed the rollout targets which it had announced as part of its Phase 1 rollout, as set out at paragraph 6.175(b) above. ComReg accordingly takes a forward-looking approach to network rollout, subject to the requirement that any such deployment plans are available and sufficiently reliable and detailed. ComReg has noted SIRO's plans to pass an additional 270,000 premises and ComReg's view is that it will take several years, based on progress to date, for this rollout to complete. VMI has indicated to ComReg that it intends to overlay its existing CATV network with FTTP. Accordingly, despite timing uncertainty on VMI FTTP rollout, its existing CATV network is likely to provide a reasonably accurate proxy for its eventual FTTP rollout – although the timing and specific progress at location-specific level is uncertain.

6.263 VMI's entry to wholesale broadband markets is a new venture for it and there is, as of yet, no practical experience or evidence of its likely impact on these markets. It remains to be seen what service volumes will be purchased from VMI by Access Seekers and thus, its potential impact on competition is unproven and any impacts are not likely to be seen for a number of years – noting its FTTP rollout to date along with **[✂** [redacted] **✂]** In Section 5 ComReg has noted that despite the uncertainties, even assuming VMI were to overlay its CATV network with FTTP within the review period, it would not lead to a substantial change in the number of Commercial EAs potentially meeting the network presence and overlap criteria.

6.264 Similarly, Eircom is upgrading its network to FTTP outside of the IA, and, although exact location and timing uncertainty remain, Eircom's existing CG and NG network footprint outside the IA is also likely to provide a reasonably accurate proxy for its eventual FTTP rollout. In comparison, SIRO is building out a greenfield network rather than overlaying legacy network, so it is not possible to assign proxies for likely location rollout. Where such data are available, ComReg has taken them into account in assessing likely rollout and network overlap scenarios.

6.265 Overall, ComReg considers that, aside from SIRO's limited but growing presence and VMI's proposed FTTP rollout (which overlays its existing CATV network) and subsequent potential entry into the provision of wholesale broadband services (**[✂** [redacted] **✂]**, there is insufficient evidence to conclude that the Commercial NG WLA Market is characterised by the absence of barriers to entry or expansion. Rather, the Commercial NG WLA Market is characterised by the presence of variable barriers to entry and/or expansion, but these barriers are being gradually overcome by certain Network Operators in certain geographic areas. This limited entry does not appear to provide sufficient evidence in favour of the contention that the market is characterised by the absence of barriers to entry and expansion.

6.266 ComReg accordingly concludes that the Commercial NG WLA Market is characterised by the presence of variable barriers to entry and expansion.

Barriers to entry and/or expansion in the IA NG WLA Market

6.267 In the IA NG WLA Market, NBI is, on a forward-looking basis, likely to be the largest provider of VUA, and it currently faces a marginal presence from both Eircom and SIRO, both of whom are active in the provision of VUA in some parts of the IA (and CG WLA in the case of Eircom).

6.268 NBI is rolling out to areas generally characterised by lower premises density and higher cost on a non-commercial basis, arising from a public policy decision and funded by State Aid to justify the business case for the investment. This suggests the comparative absence of economies of density in the IA NG WLA Market. This lower premises density increases the average cost of network rollout, evidenced by the comparative absence of material commercial FTTx rollout. ComReg accordingly considers that the IA NG WLA Market is characterised by the absence of economies of scale, scope or density, leading to structural barriers to entry to, or expansion in, that market.

6.269 Since the IA NG WLA Market addresses a market failure arising from the absence of commercial incentives to engage in NG broadband rollout, there is unlikely to be material entry or expansion by other SPs to this market during the lifetime of this market review. ComReg therefore considers that the IA NG WLA Market is characterised by the presence of structural barriers to entry and expansion which are likely to inhibit potential market entry or expansion. ComReg also notes that the PIA Decision maintains obligations imposed on Eircom to provide access to its PI, with NBI's rollout in the IA being critically dependent on this, since its entry and presence in the IA NG WLA Market is only enabled through having upstream access to Eircom's PI.

6.5.2 Strength of Potential Competitors

6.270 Having regard to the barriers to entry identified in sub-section 6.5.1 above, ComReg now examines the likelihood, extent and timeliness of potential entry occurring in the Relevant WLA Markets over the lifetime of this market review and whether such potential competition is likely to mitigate any Eircom market power on the Commercial NG WLA Market and the CG WLA Market, and any NBI market power on the IA NG WLA Market.

6.271 While Section 5 defined the Relevant WLA Markets in the context of short to medium term constraints on a HM provider of WLA, an SMP assessment considers the potential competitive constraints that may materialise over a longer term horizon. Repeating the approach set out above, ComReg focusses on the strength of credible potential competitors, that is to say, SPs who have prior experience in large scale network rollout or wholesale service provision – specifically, SIRO network expansion and VMI WLA market entry.

6.272 In Section 4, ComReg excludes retail broadband offered over FWA, localised alternative FTTP, and satellite from the retail broadband product market definition. ComReg nevertheless now assesses whether potential entry to the Relevant WLA Markets by these retail-only SPs would be likely and would be capable of mitigating any market power on these markets. ComReg notes that SPs offering retail broadband over technologies such as FWA and localised alternative FTTP SPs do not intend to commence offering WLA on a merchant market basis to Access Seekers (assuming it was hypothetically possible to do so). Moreover, such retail SPs currently lack, and are likely to continue to (over the period of this market review) lack the substantial – that, is, at least regional – presence expected by Access Seekers wishing to purchase WLA. Therefore, ComReg does not consider that retail-only SPs delivering broadband over FWA, localised alternative FTTP, or satellite are likely to warrant consideration as a sufficiently effective constraint on the exercise of market power by means of potential competition.

Potential competition on the CG WLA Market

6.273 For the reasons set out at paragraphs 6.241 to 6.244 above, ComReg considers that there is very little likelihood of potential competition on the CG WLA Market, given the absence of commercial incentives to enter a declining market. ComReg has noted the asymmetric substitution between CG WLA and NG WLA (where available), and constraints are more likely to materialise in this context.

Potential competition on the Commercial NG WLA Market

Potential WLA entry by VMI

6.274 ComReg has considered the extent to which potential competition from future VMI FTTP rollout and potential entry to the Commercial NG WLA Markets would be likely to materialise and sufficiently constrain a HM provider of CG WLA or NG WLA over the period of this market review.

6.275 VMI is the second-largest vertically-integrated SP in the State after Eircom. VMI's CATV network coverage is largely targeted at residential premises and extends to approximately 41% of premises in the State.[872] VMI has a large residential subscriber base, and as at Q1 2023, had a retail fixed broadband market share of 23.6% nationally of (predominantly residential) retail broadband subscribers.[873] **[✂** [redacted] **✂]** are passed by VMI's CATV network.[874] 99% of VMI's combined FTTP and CATV network lie within the Commercial NG WLA Market.

6.276 As discussed above, VMI has announced its intention to overlay its existing CATV network with FTTP. It has also announced its intention to commence the provision of wholesale services – including WLA – to Vodafone and Sky over that FTTP network. As of October 2023, VMI is not in a position to provide ComReg with concrete plans as to its intended FTTP rollout forecasts, but has suggested that provision of merchant market VUA to Vodafone **[✂** [redacted] **✂]**. ComReg also considers that, for the reasons set out earlier, FTTP rollout is likely to be subject to long lead-in timelines arising from the need to develop a specific technical solution to suit its network (for which VMI has stated there is a vendor solution has only just been developed but with certain deployments still being trialled), procure the necessary network and end user infrastructure, build wholesale systems capability, and infrastructure delivery solutions capable of rolling FTTP out to end user premises.

[872] Expressed as a percentage of approximately 2.36 million premises in the State, measured by postal addresses. VMI's Q2 2023 Fixed Income Release reports a figure of 970,200 homes passed, as of June 2023 (https://www.libertyglobal.com/wp-content/uploads/2023/07/Virgin-Media-Ireland-Fixed-Income-Q2-2023-Release.pdf).

[873] Q1 2023 QKDR, which includes all fixed broadband. Where only CATV and FTTx broadband subscriber lines are considered, VMI's market share as at Q1 2023 was 25.8% (25.2% Q2 2023), having fallen from 29.2% at its peak (in subscriber terms) in Q1 2021.

[874] In the range of 850,000 to 900,000 premises. This figure does not include those premises where VMI RFoG is available.

6.277 Assuming that future VMI FTTP network coverage matches its existing CATV coverage, it would ultimately pass c.961,000 largely residential premises. This is less than Eircom's planned FTTP network (1.9 million premises) – but greater than SIRO's planned FTTP network coverage. VMI NG WLA would not be available in those parts of the State unserved by VMI's FTTP network. In particular, assuming that (i) VMI's FTTP footprint matches its CATV footprint and (ii) that footprint is located almost entirely within the Commercial NG WLA Market, approximately 51% of premises in the Commercial NG WLA Market would be potentially be passed by VMI FTTP, noting that its network is mainly targeted towards residential premises.

6.278 ComReg notes that, as of Q3 2023, Vodafone and Sky are the only Access Seekers with which VMI has contracted to provide wholesale services over its FTTP network, which ComReg considers is likely to be predominantly located in the footprint of the Commercial NG WLA Market. In respect of rollout plans, specific location data are unavailable on the level of VMI FTTP rollout completion necessary before Access Seekers would commence purchasing WLA services, although VMI has indicated its intention to commence the provision of **[✂** [redacted] **✂]**[875]

6.279 For the above reasons, it is ComReg's view that VMI NG WLA market entry is not likely to be sufficiently timely or at a scale such that it would potentially constrain Eircom in the Commercial NG WLA Market (bearing in mind that VMI FTTP is unlikely to have any – or a sufficiently significant – presence on the CG WLA Market or the IA NG WLA Market). However, if VMI did enter the market by commencing provision of NG WLA over its FTTP network, then such NG WLA provision would be included in the NG WLA product market. In this regard, ComReg has carried out a sensitivity analysis to consider the impact of VMI market entry (i) in the hypothetical circumstances where all VMI CATV and RFoG is deemed to be FTTP capable of providing NG WLA, and (ii) taking into account existing VMI FTTP (specifically, RFoG) rollout as of Q1 2023, which amounts to **[✂** [redacted] **✂]** premises.

[875] In a September 2022 meeting with ComReg, VMI **[✂** [redacted] **✂]**

6.280 Having assessed the available evidence – including any sufficiently reliable deployment data - as of Q2 2023, ComReg considers that VMI is unlikely to compete sufficiently effectively on the Commercial NG WLA Market at a sufficient level of scale over the period of this market review, such that it would mitigate Eircom's ability to behave, to an appreciable extent, independently of its competitors, customers and consumers.

Impact of hypothetical VMI VUA provision

6.281 As set out in detail at both Section 5 and Annex 12, ComReg has carried out a sensitivity analysis to determine what the impact would be on its findings, assuming NG WLA was offered over VMI's existing CATV and RFoG footprint (as a proxy for VMI's eventual FTTP footprint). ComReg's analysis suggests that the inclusion of VMI in this manner would lead to 18 Commercial EAs passing all three Phase 2 assessment criteria – compared to 0 Commercial EAs, assuming no provision of NG WLA by VMI. Throughout Section 6 ComReg accordingly assesses the potential competitive impact of the hypothetical inclusion of VMI VUA under two scenarios:

(a) Generally, across the entirety of the Commercial NG WLA Market, including all Commercial EAs, including those where VMI VUA would have no presence, or would have a limited presence, or would have a significant presence; and

(b) Specifically, on the 18 Commercial EAs which would pass all three Phase 2 geographic assessment criteria, such that these EAs could exhibit differences in competitive conditions if hypothetical VMI VUA were included.

6.282 VMI proxy FTTP coverage (based on its existing CATV network footprint) would have a presence at **[✂** [redacted] **✂]** Commercial EAs passing a total of **[✂** [redacted] **✂]** premises in the Commercial NG WLA Market, amounting to **[✂** [redacted] **✂]** of the market by EAs and **[✂** [redacted] **✂]** of the market by premises passed.[876]

6.283 The 18 Commercial EAs which would pass the Phase 2 geographic assessment on the inclusion of VMI proxy FTTP – predominantly located in regional towns and cities – account for **[✂** [redacted] **✂]**[877] of all Commercial EAs, and **[✂** [redacted] **✂]**[878] of all Commercial EA premises. VMI coverage at these EAs falls into the 65% to 100% range.

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[876] 10-20% of the Commercial NG WLA Market, measured by Modified EAs, and 50-60%, measured by premises passed.

[877] 0-10%.

[878] 0-10%.

6.284 ComReg assesses on a hypothetical basis competition at these EAs, assuming full VMI VUA provision. As set out elsewhere in this Section, ComReg assesses competition under three broad headings – existing competition, potential competition, and countervailing buyer power. In assessing the hypothetical competitive impact of VMI VUA, potential competition is not relevant, as VMI is deemed to have moved from a situation of potential competition to one of actual – that is, existing - competition. ComReg therefore assesses the impact of hypothetical VMI VUA under the existing competition and countervailing buyer power headings only.

SIRO WLA market expansion

6.285 As noted in paragraph 3.46, SIRO is engaged in Phase 2 of its FTTP network rollout which will, on completion, be capable of delivering VUA to 770,000 premises in the State. ComReg considers, based on SIRO rollout trends to date, that the additional rollout required to meet this 770,000 premises target will complete approximately towards the end of 2027. Given the barriers to entry outlined above, ComReg considers that, while SIRO is already present on the Commercial NG WLA Market, ComReg has limited capacity to take SIRO network expansion into account at a granular level when assessing its impact on potential competition on the Commercial NG WLA Market. This is because ComReg lacks certainty on the timing and scope of SIRO rollout. SIRO has also been unable to provide ComReg with reliable forecast data on when and where it is likely to rollout. Accordingly, ComReg has taken account of SIRO rollout to the extent possible, bearing in mind the limited location specific forecast in rollout data made available to ComReg. ComReg also notes that SIRO's Phase 1 rollout was characterised by timing uncertainty, with SIRO repeatedly missing the interim rollout targets which it had set itself. In particular, SIRO announced in 2014 that its Phase 1 rollout, consisting of 500,000 premises, would be completed by the end of 2018.[879] SIRO subsequently reduced its Phase 1 rollout target to 450,000 premises. It did not meet this reduced target until September 2022, almost four years later than originally planned.[880]

6.286 ComReg accordingly considers that SIRO is unlikely to be able to effectively constrain Eircom on the Commercial NG WLA Market from behaving independently of competitors, customers and consumers over the lifetime of this market review period, arising from market expansion.

[879] 50 towns - SIRO

[880] SIRO's website reported that it had passed over 430,000 premises in July 2022, over 440,000 premises in August 2022, over 450,000 premises in September 2022, over 460,000 premises in October 2022, 500,000 premises in June 2023, 505,000 premises in August 2023, and 515,000 premises in September 2023.

Potential competition on the IA NG WLA Market

6.287 For the reasons set out at paragraphs 6.267 to 6.269 above, ComReg considers that there is very little likelihood of potential competition on the IA NG WLA Market, given the underlying assumption that, due to diseconomies of density, commercial NG broadband rollout in the footprint of the IA is unlikely, and that state aid must be provided to incentivise network rollout on a non-commercial basis.

6.5.3 Conclusion on Potential Competition in the WLA Market

6.288 In paragraphs 6.270 to 6.287 ComReg has considered the extent to which potential competition would, over the five-year period of this market review, be likely to effectively constrain Eircom's behaviour in the Commercial NG WLA Market or the CG WLA Market. Overall, ComReg's view is that, in the Commercial NG WLA Market or the CG WLA Market, it is unlikely that Eircom is sufficiently constrained by potential competition, such that it would prevent Eircom from behaving, to an appreciable extent, independently of competitors, customers and end users.

6.289 ComReg considers that, based on geographic assessments of network overlaps and quantitative data on market shares and FTTP rollout (as set out at paragraphs 6.274 to 6.286 above), taken together, SIRO WLA market expansion and WLA market entry by VMI are unlikely to be capable, over the lifetime of this market review, of effectively constraining Eircom on the Commercial NG WLA Market. On a forward-looking basis, assuming full SIRO Phase 2 rollout and full VMI FTTP overlay of its existing CATV network, a maximum of 249,203 premises in the Commercial NG WLA Market would be passed by all three networks. In practice, this number is likely to be substantially lower, given that **[✂** [redacted] **✂]** ComReg also notes that, as of October 2023, VMI has no market share in the provision of merchant market WLA or WCA, and its CATV retail market share in the footprint of the Commercial NG WLA Market has been in continuous decline, falling in 18 of the last 20 quarters.

6.290 Similarly, in the IA NG WLA Market, it is unlikely that NBI is sufficiently constrained by potential competition, such that it would prevent NBI from behaving, to an appreciable extent, independently of competitors, customers and end users. However, as noted earlier, the requirements of the NBP Contract are likely to constrain NBI's behaviour.

6.291 ComReg notes that the threat of potential competition on the Commercial NG WLA Market (or the CG WLA Market) would most likely potentially come from VMI (by means of market entry arising from CATV overlay with FTTP) and SIRO (by means of market expansion). Neither SIRO nor VMI are likely to enter or expand in the CG WLA Market, given their likely focus on the delivery of NG rather than CG wholesale services. Similarly, neither SIRO nor VMI are likely to enter or expand in the IA NG WLA Market, given that this is an area where, by definition, there are deemed to be insufficient incentives to provide NG broadband on a commercial basis.

6.292 Having regard to the MGA, ComReg has considered in further detail the possibility of market entry or expansion by VMI or SIRO on the Commercial NG WLA Market, but considers that there is insufficient evidence to suggest that potential competition from SIRO or VMI FTTP on the Commercial NG WLA Market would exert an effective competitive constraint on Eircom's provision of NG WLA, given limited current and expected network rollout by SIRO, and insufficient data (and likely lengthy timelines) in respect of VMI NG WLA market entry.

6.293 Overall, ComReg's view is that absent regulation, it is unlikely that Eircom would be sufficiently constrained by potential competition in the Commercial NG WLA Market or the CG WLA Market, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and end users. Similarly, ComReg's view is that, absent regulation, it is unlikely that NBI would be sufficiently constrained by potential competition in the IA NG WLA Market, such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and end users (although it would likely be constrained by the terms of the NBP Contract).

6.6 Countervailing Buyer Power

6.294 In addition to the preceding analysis of barriers to entry and potential competition, it is also necessary to consider whether bargaining power on the buyer side of the Relevant WLA Markets could impose a sufficiently effective[881] competitive constraint on Eircom or NBI, such that it would credibly offset Eircom's or NBI's potential capacity to behave, to an appreciable extent, independently of competitors, customers and, ultimately, consumers.

[881] The existence of *some* level of CBP does not suffice. Rather, CBP must be sufficiently strong to prevent WLA prices from rising above a level that would be expected in a competitive market outcome.

6.295 In so doing, ComReg examines whether sufficient countervailing buyer power (‘**CBP**’) exists such that Eircom or NBI would be unable to sustain WLA prices above the competitive level, i.e. the effective exercise of CBP results in WLA prices being constrained to the levels that would arise in a competitive market.

6.296 The concept of CBP is not absolute,[882] and some degree of CBP may be present in WLA negotiations between parties. Given that WLA negotiations are usually bilateral in nature, it is reasonable to assume that the level of any CBP exercised will vary between parties, having regard to their circumstances. It should, however, be noted that WLA negotiations involving NBI are unlikely to be fully bilateral in nature, bearing in mind that NBI is constrained in its bargaining position by the terms of the NBP Contract. Absent regulation, neither Eircom nor SIRO face this constraint.

6.297 In assessing CBP, ComReg takes account of the **economic framework** and the **regulatory context** within which a market operates, as well as any other criteria relevant to the CBP assessment.

6.6.1 Overview of Framework for CBP Assessment

Necessary Conditions for Effective CBP

6.298 The effectiveness of CBP is likely to be highly contingent on the strength of the bargaining power of the purchaser in its WLA negotiations. The European Commission’s 2009 enforcement priorities in applying Article 102 of the Treaty of the Functioning of the European Union to abusive exclusionary conduct by dominant undertakings[883] (the ‘**2009 Enforcement Priorities**’) are informative on the issue of CBP in competition assessments. These state[884] that:

> *“Competitive constraints may be exerted not only by actual or potential competitors but also by customers. Even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength. Such countervailing buying power may result from the customers’ size or their commercial significance for the dominant undertaking, and their ability to switch quickly to competing suppliers, to promote new entry or to vertically integrate, and to credibly threaten to do so. If*

[882] The question to be addressed is not whether or not CBP has been exercised, but rather the strength of CBP exercised, and whether this is sufficient to constrain the exercise of SMP, in particular, by preventing a WLA supplier from pricing WLA above the competitive level.

[883] Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02). Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF.

[884] Paragraph 18 of the 2009 Enforcement Priorities.

> *countervailing power is of a sufficient magnitude, it may deter or defeat an attempt by the undertaking to profitably increase prices. Buyer power may not, however, be considered a sufficiently effective constraint if it only ensures that a particular or limited segment of customers is shielded from the market power of the dominant undertaking."*

6.299 In its Horizontal Mergers Guidelines,[885] the EC also notes that:

> *"Countervailing buyer power...... should be understood as the bargaining strength that the buyer has vis-à-vis the seller in commercial negotiations due to its size, its commercial significance to the seller and its ability to switch to alternative suppliers."*

6.300 Accordingly, effective CBP results from customers being of sufficient size or importance to the seller and having the ability to credibly switch to alternative sources of supply, such that it deters the seller from profitably increasing its prices. Effective CBP therefore arises where buyers:

(a) Account for a significant proportion of the supplier's total output;

(b) Are well-informed about credible alternative sources of supply; and

(c) Can switch to other suppliers at little cost to themselves, or to self-supply the relevant product relatively quickly and without incurring substantial sunk costs.

6.301 The above factors are considered below (noting that (b) and (c) are considered together), along with any evidence of effective CBP being exercised in negotiations between Eircom or NBI and Access Seekers. It is also of note that effective CBP is that which has a broader market impact and not that which only results in a limited segment of customers benefiting from better terms and conditions. ComReg first assesses CBP on the Commercial NG WLA Market and IA NG WLA Market before considering the CG WLA Market.

Regulatory context for CBP Assessment

6.302 In assessing CBP it is also necessary to consider the impact of existing or future potential regulation. In this regard, ComReg sets out its approach to:

(a) Existing SMP regulation in the Relevant WLA Markets, being the markets within which prospective SMP is now being assessed;

[885] European Commissions 'Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings', [Official Journal C 31, 05.02.2004](), paragraph 64, (the '**Horizontal Mergers Guidelines**').

(b) Existing SMP regulation in markets other than the Relevant WLA Markets; and

(c) Other non-SMP regulation, and the role of dispute resolution.

Existing SMP Regulation on the Relevant WLA Markets

6.303 The bargaining position of a provider of WLA will likely be weakened in negotiations with an Access Seeker if its supply of WLA is subject to SMP price regulation, or other SMP obligations governing the requirement to meet reasonable requests for access and not to discriminate.

6.304 However, insofar as existing SMP regulation in the Relevant WLA Markets is concerned, when assessing CBP ComReg applies the MGA, whereby SMP regulation in the market under consideration is discounted when considering the prospective SMP analysis. In assessing the existence of any effective CBP, ComReg considers the potential bargaining outcomes if Eircom (on the CG WLA Market or the Commercial NG WLA Market) or NBI (on the IA NG WLA Market) were not subject to SMP obligations. This is to avoid drawing conclusions regarding the competitive structure of a particular market which may be influenced by, or indeed premised on, existing or potential regulation on that market. Considering how the Relevant WLA Markets may function absent regulation helps to ensure that regulation is only applied (or withdrawn) where it is truly justified and proportionate to do so. To do otherwise could result in a circularity of argument whereby the Relevant WLA Markets are found to be effectively competitive only by virtue of constraints arising from existing or potential SMP obligations. Once found to be effectively competitive, SMP obligations would be withdrawn, thereby undermining the original finding of effective competition on that market.

SMP Regulation on markets other than the Relevant WLA Markets

6.305 ComReg has imposed SMP obligations on Eircom on other regulated markets.[886] NBI is not subject to SMP obligations on any other market although, as noted at paragraphs 6.68 to 6.71 above, the NBP Contract imposes a number of contractual obligations on NBI which largely mirror those which would be imposed under an SMP regulatory scenario.

6.306 The bargaining position of an SP with SMP obligations in markets other than the Relevant WLA Markets may potentially be weakened in any WLA negotiations.

[886] This includes Physical Infrastructure Access (PIA) and WDC services.

6.307 It is ComReg's view that the bargaining positions of Access Seekers purchasing WLA from Eircom are, in some cases, somewhat strengthened by the fact that Eircom is unable to exercise its SMP on certain other markets, but that the bargaining positions of Access Seekers purchasing WLA from NBI are not similarly strengthened. However, a number of caveats apply:

(a) First, the comparative strengthening of bargaining power is unlikely to amount to a position of 'effective' CBP; rather it may marginally increase bargaining power, but still at a low level; and

(b) Second, the capacity to leverage bargaining strength in respect of other markets applies only in the case of Access Seekers who are also active on other markets where Eircom is designated with SMP.

6.308 Overall, Access Seekers in the Relevant WLA Markets are not likely to strengthen their bargaining power in negotiations with Eircom, despite the fact that Eircom's SMP position in such other markets undermines the credibility of any threat to retaliate by, for example, imposing price increases or denying access to wholesale services provided in these markets.

ComReg's investigative and dispute resolution powers

6.309 ComReg has also considered the role of dispute resolution (and own initiative investigations) in the context of general access obligations, and how this might impact on the bargaining dynamic between parties in WLA negotiations and CBP. Regulation 67 of the EEC Regulations empowers ComReg to resolve disputes between authorised Undertakings, not only in relation to specific SMP obligations, but also with respect to general obligations, including those governing interconnection. Furthermore, Section 10 of the Communications Regulation Act 2002 (as amended) affords ComReg the power to carry out investigations into matters relating to the supply of access, either on its own initiative, or following a complaint from an Undertaking.

6.310 SMP obligations may only be imposed on an SP that is designated as holding SMP. Where ComReg exercises its dispute resolution powers or its powers to initiate investigations on its own initiative, it must do so having regard to its objectives under Section 12 of the Communication Regulation Act 2002 (as amended) and Regulation 4 of the ECC Regulations.

6.311 In the event that SPs are unable to reach a commercially negotiated arrangement regarding access, it would potentially be open to one of the parties to seek to have the matter resolved by ComReg through the dispute resolution process provided for under Regulation 67 of the ECC Regulations.

6.312 ComReg does not consider that its dispute resolution function would negate Eircom's or NBI's potential SMP positions in the provision of WLA. Dispute resolution is a regulatory function which operates in parallel to, rather than as a substitute for, market analysis functions.

6.313 ComReg does not consider that such a scenario is contemplated by the European Regulatory Framework. This has been borne out in a number of recent decisions by the EC under Article 7 of the now replaced Framework Directive concerning the imposition by NRAs of both SMP obligations following a market analysis, and the imposition of SMP-type obligations on non-SMP SPs pursuant to the exercise of dispute resolution functions. These EC decisions[887] highlight its view that regulatory intervention in the conduct of non-SMP SPs through dispute resolution, while appropriate in certain scenarios as a short-term measure, is no substitute for the conduct of a market analysis and, where appropriate, the imposition of permanent price control remedies.

6.314 Overall, ComReg considers that the actual or potential impact of dispute resolution is not a factor for consideration in terms of the bargaining dynamic between Eircom, as a supplier of WLA, and Access Seekers.

Non-SMP regulation

6.315 NBI is not currently designated with SMP by ComReg on any relevant market. Nevertheless, it is subject to restrictions on its commercial conduct arising not from SMP regulation, but rather from the terms of the NBP Contract. As set out at paragraph 6.180 above, NBI is obliged to set its pricing by reference to a BRP. Additionally, NBI is subject to obligations which replicate in various ways the types of remedies which ComReg could levy on an operator designated with SMP. These include:

(a) NBI's Reference Offers to SPs must be approved by the Minister before they are published, amended or updated;

(b) NBI's SP Terms must be *"fair and balanced and not impose any undue or disproportionate requirements on small or medium sized Service Providers"*;

(c) Conditions in the SP Terms for *"application for use of the Wholesale Products"* must be *"proportionate and justifiable"*;[888]

(d) NBI must treat SPs on a non-discriminatory basis;

[887] See, for example, Cases PL/2012/1280, PL/2012/1378 and IT/2016/1885.

[888] https://www.gov.ie/en/publication/16717-national-broadband-plan-contract/. This list is not exhaustive. A summary of the contract terms is also set out at https://nbi.ie/wp-content/uploads/2022/02/Contract-Summary..pdf

(e) NBI must apply equivalent conditions and provide equivalent Wholesale Products to all SPs in equivalent circumstances; and

(f) NBI must charge all SPs the same price for a particular Wholesale Product in all circumstances.

6.316 The bargaining position of a provider of WLA will likely be weakened in negotiations with an Access Seeker if its supply of WLA is governed by restrictions of general application on its pricing or access conduct, and this is the case in respect of NBI.

6.317 In these circumstances, NBI, in its WLA negotiations with Access Seekers, cannot credibly threaten to retaliate with an increase in WLA charges, and its bargaining power relative to Access Seekers is likely to be lessened, compared to the counterfactual in which it is not subject to contractual obligations with the State. NBI's bargaining power is therefore likely constrained in WLA negotiations with Access Seekers.

6.318 However, insofar as existing SMP regulation in the Relevant WLA Markets is concerned, ComReg applies the MGA, whereby SMP regulation in the market under consideration is discounted when considering the prospective SMP analysis. In assessing the existence of any effective CBP, ComReg considers the potential bargaining outcomes if no SP were designated with SMP on the Relevant WLA Markets, and SMP obligations accordingly did not apply. This is to avoid drawing conclusions regarding the competitive structure of a particular market which may be influenced by, or indeed premised on, existing or potential regulation on that market. Considering how the Relevant WLA Markets may function absent regulation helps to ensure that regulation is only applied (or withdrawn) where it is truly justified and proportionate to do so. To do otherwise could result in a circularity of argument whereby the Relevant WLA Markets are found to be effectively competitive only by virtue of constraints arising from existing or potential SMP obligations. Once found to be effectively competitive, SMP obligations would be withdrawn, thereby undermining the original finding of effective competition on that market.

6.6.2 CBP Assessment

6.319 ComReg examines evidence of the exercise of CBP on the Relevant WLA Markets. CBP could act as an effective competitive constraint where buyers:

(a) account for a significant proportion of the supplier's total output;

(b) are well-informed about credible alternative sources of supply; and

(c) are able to switch suppliers at little cost, or to self-supply the relevant product relatively quickly and without incurring substantial sunk costs.

6.320 These factors are considered below (noting that ((b) and ((c) are considered together), along with any evidence of effective CBP being exercised.

Size of the buyer and its relative importance to the seller

6.321 The strength of CBP can be influenced by the size of the purchasing Access Seeker, measured by its share of total purchases of WLA from a provider, relative to total purchases of WLA from that provider. The degree to which high shares of WLA purchases are concentrated amongst one or more buyers may be relevant. In particular, ComReg considers the share of:

(a) total purchases of NG WLA by an Access Seeker from Eircom on the Commercial NG WLA Market, relative to total purchases of NG WLA from Eircom;

(b) total purchases of CG WLA by an Access Seeker from Eircom on the CG WLA Market, relative to total purchases of CG WLA from Eircom; and

(c) total purchases of NG WLA by any Access Seeker from NBI on the IA NG WLA Market, relative to total purchases of NG WLA from NBI.

6.322 The size of the buyer and its relative importance to the seller may be dynamic over time, having regard to growth in the subscriber bases of the respective parties, and trends in buyers' purchases of WLA. For example, as an Access Seeker's customer base grows, it may become more difficult for a WLA provider (in an MGA scenario) to refuse or delay access to that Access Seeker.

6.323 Arising from the above, relative to an established SP, a new entrant Access Seeker would find it more important to ensure that it had obtained WLA in order to ensure service provision to its own end users. Recognising this asymmetry, the bargaining power of a provider in supplying WLA to new entrant Access Seekers could potentially be enhanced.

6.324 In determining the sizes of buyers and their relative importance to the seller, ComReg measured purchases of WLA from the potential SMP SPs (Eircom and NBI) by Access Seekers on each of the Relevant WLA Markets. The larger the share of WLA an Access Seeker purchases from a provider on each relevant market, the more likely it is that that Access Seekers may be able to exert CBP. Conversely, an Access Seeker which accounts for a small proportion of WLA purchases from a provider is unlikely to be capable of exerting effective CBP.

6.325 To identify the largest purchasers of WLA from each provider and their relative importance on the Relevant WLA Markets, ComReg considers:

(a) The share of WLA supplied by each provider purchased by individual Access Seekers, and trends over time on each Relevant WLA Market;

(b) The size of each of the Access Seekers' subscriber bases, relative to the provider's subscriber base, and trends over time, again, on each Relevant WLA Market.

6.326 ComReg carries out this assessment on an MGA basis, assuming that regulation is not present on the Relevant WLA Markets, and Eircom no longer offers merchant market NG WLA or CG WLA to Access Seekers. Since NBI is active at the wholesale level only, the absent regulation scenario would not likely lead it to withdraw merchant market supply of VUA or continue to offer it, but under comparatively different conditions, as it has no retail arm to which it can self-supply and it constrained by the NBP Contract.

6.327 ComReg also notes in this regard that, in a MGA scenario, the withdrawal of Eircom merchant market WLA or its continued sale, but under different conditions compared to regulated supply may have knock-on effects on Access Seeker demand for WLA provided by SIRO or NBI (or potentially VMI – which, as of October 2023, does not yet provide WLA services). For example, assume that, on the Commercial NG WLA Market, an Access Seeker switched some of its VUA purchases to SIRO. If that Access Seeker perceives that it must be capable of offering retail broadband on a geographically widespread basis in order to be an attractive retail proposition for end users, Eircom will remain an unavoidable trading partner for that Access Seeker outside of SIRO's (or VMI's) footprint. Thus, if the Access Seeker were unable to purchase Eircom WLA, then it would have limited incentives to continue purchasing SIRO WLA and serving a limited geographic footprint. Any Access Seeker CBP would be substantially diminished by Eircom's status as an unavoidable trading partner.

6.328 In the presence of WLA regulation, Eircom purchases c.48% of all NG WLA lines and an absolute majority of CG WLA lines, arising predominantly from its self-supply to its own retail arm (Eircom purchases NG WLA from NBI in the IA) NG WLA Market. In a MGA where it withdraws merchant market supply of CG WLA and NG WLA or continues to offer it, but under different conditions compared to regulated supply, Eircom's market share would likely increase on the CG WLA Market and the Commercial NG WLA Market, as it would be the sole purchaser of WLA from itself. On the CG WLA Market, Eircom's market share cannot increase from the 100% market share it enjoys.

6.329 Therefore, the largest purchaser of WLA on all three Relevant WLA Markets, by a significant margin and in the presence of regulation, is Eircom's own retail arm. In a MGA scenario absent regulation, ComReg considers that Eircom would be the sole purchaser of WLA from itself, assuming that it either withdrew merchant market sale of WLA or continued to offer it, but under different conditions compared to regulated supply. In the case of merchant market supply, BT and Vodafone are the two largest purchasers of Eircom VUA, and BT and Magnet are the largest purchasers of LLU. These figures suggest the possibility that either, or both, BT and Vodafone could potentially exert CBP. However, this possibility is attenuated by the fact that Vodafone, BT and Sky together account for considerably less than Eircom's own purchases on the Relevant WLA Markets and Eircom is the only supplier of LLU (there are no alternatives, other than migration to NG WLA).

6.330 A buyer is likely to be better positioned to exert CBP if it is large in absolute or relative terms, and if it is a relatively large customer of the seller, and that seller cannot serve the end user itself (for instance, if it is a wholesale-only operator). ComReg assesses whether an Access Seeker, which is an important WLA customer of Eircom (on the CG WLA Market or the Commercial NG WLA Market) or NBI (on the IA NG WLA Market) is, in principle, capable of leveraging its position to exercise CBP.

6.331 Based on the evidence available to it, ComReg's view is that most Access Seekers are unlikely to be of sufficient importance to prevent Eircom from having the incentive to withdraw merchant market WLA provision and divert merchant market supply to Access Seekers to its own (high value, high brand awareness) retail arm[889] or continue to offer WLA, but under different conditions compared to regulated supply. Eircom is the largest purchaser of its own WLA services, and the next biggest purchaser (that is, the largest purchaser of merchant market WLA) accounts for a much smaller proportion of total WLA sales on both the CG WLA Market and the Commercial NG WLA Market. ComReg carries out this analysis in respect of each individual Relevant WLA Market below.

[889] According to marketing consultancy Brandirectory, in 2023, Eir was the 16th most valuable brand Irish brand. https://brandirectory.com/rankings/ireland/table

6.332 In the absence of alternative network coverage capable of delivering WLA in the Relevant WLA Markets – at least to an appreciable extent – Access Seekers are unlikely to be able to credibly exert sufficient CBP as they only have alternatives in certain geographic areas. However, on a forward-looking basis, and as SIRO and NBI continue to rollout their FTTP networks (and VMI, although its FTTP overlay is still at a very early stage and the capacity to switch will reflect its coverage), the capacity of Access Seekers to leverage CBP may increase, as credible alternative purchasing opportunities become available across a wider geographic footprint. ComReg also notes that, to be effectively exercised, CBP would need to constrain market power at a market level, and not at simply result in benefits to individual or specific Access Seekers.

Commercial NG WLA Market

6.333 Table 67 below shows the relative size of Access Seeker purchases (including Eircom self-supply) of WLA from Eircom, as of Q1 2023 on the Commercial NG WLA Market. Eircom's self-supply to its downstream retail business, with a **[✂** [redacted] **✂]**[890] share of overall WLA purchases as of Q1 2023 in the Commercial NG WLA Market is the largest component. Eircom self-supply of WLA includes its self-supply of the relevant components of WCA, which relies on WLA inputs. Vodafone, with a **[✂** [redacted] **✂]**[891] share of Eircom WLA purchases, is the largest merchant market purchaser of Eircom WLA in the Commercial NG WLA Market. Over time, Vodafone's share of Eircom merchant market purchases from Eircom is likely to decline, under the assumption that Vodafone purchases a proportion of its WLA services from SIRO and potentially VMI, as those Network Operators rollout their FTTP networks. Vodafone purchases from SIRO have been increasing quarter on quarter. On a national basis as of Q1 2023, Vodafone purchased **[✂** [redacted] **✂]** The remaining shares of WLA purchases are split amongst a number of smaller Access Seekers. Absent regulation, Eircom would likely have incentives to refuse to supply Access Seekers, as it would still have a large downstream retail arm to which it could divert merchant market supply.

[890] Eircom's share is 40-50%.

[891] Vodafone's share is 40-50%.

Table 67: WLA purchases from Eircom in the Commercial NG WLA Market, Q1 2023[892] [✂REDACTED✂]

[redacted]

6.334 Eircom argues[893] that CBP has driven FTTP connection fees downwards, noting that it reduced its €200 connection charge to €100, in line with rates charged by other networks. In making this claim, Eircom does not identify any Access Seekers that account for a significant proportion of VUA purchases from it, and rather appears to argue that it is responding to the behaviour of its competitors, rather than of Access Seeker customers. This is not suggestive, in and of itself, of the presence, to a material degree, of CBP. A plausible scenario for this behaviour is that Eircom's FTTP network footprint has increased and it may instead be more commercially attractive to fill the network with customers and, rather than recovering the connection fee upfront, to do so through its monthly rental charges instead. ComReg also notes that these reductions are in the presence of regulation, including a non-discrimination obligation requiring it to offer the same terms to Access Seekers as it offers to itself. This scenario would not necessarily apply absent regulation.

[892] ComReg estimates that Eircom provides **[✂** [redacted] **✂]** (700,000 to 750,000) NG WLA lines including self-supply and supply used to offer downstream services in the Commercial NG WLA Market. However, ComReg is unable to provide the exact breakout of self-supply v merchant market supply within this geographic market due to the manner in which the data is reported – in particular, some of the data do not contain a geographic identifier. For this reason, ComReg uses, as a proxy, the ratio of Eircom self-supply to Eircom merchant market supply nationally and applied this ratio to Eircom's provision of WLA in the Commercial NG WLA Market.

[893] Eircom Non-confidential Submission, at paragraph 243.

6.335 Eircom argues, relying on Copenhagen Economics' reasoning, that its Access Seekers occupy a position of bargaining strength. This reasoning argues, *inter alia*,[894] that Eircom's incentives to increase its wholesale prices would be limited if **[✂** [redacted] **✂]**

6.336 ComReg is not convinced by these arguments. Eircom appears to misconstrue ComReg's CBP assessment by focussing on the share of overall FTTP purchases which certain Access Seekers buy from Eircom. The more relevant measurement for CBP purposes is the proportion of Eircom sales of VUA accounted for by specific Access Seekers, including its own downstream retail arm. In this regard, ComReg notes that Eircom continues to grow FTTx retail subscriber numbers in absolute terms, in particular driven by FTTP.

6.337 ComReg also notes, as set out in detail at paragraphs 6.194 to 6.214 above, that some of the price reductions which Eircom alluded to appear to be evidence, not of the effective exercise of CMP by Access Seekers, but rather potentially anti-competitive attempts to foreclose the market to Access Seekers. Similarly the pricing data set out at Table 62, Table 63, and Table 66 do not appear to show evidence of CBP having been reflected in Eircom's pricing conduct.

6.338 Copenhagen Economics argues that Eircom is increasingly reliant on Access Seeker revenues. However, it does not indicate that any specific Access Seekers are particularly capable of exercising CBP.

6.339 Paragraph 6.300 above sets out the conditions for the exercise of effective CBP. Neither Eircom nor Copenhagen Economics have provided evidence that these conditions are met.

[894] Copenhagen Economics Confidential Submission, at paragraphs 3.20 to 3.23.

Inclusion of hypothetical VMI NG WLA in CBP assessment

6.340 VMI has the capacity to increase the potential for Access Seekers to exercise a level of CBP – and therefore the potential competitive constraints that could be placed on Eircom – by providing a credible alternative source of supply for significant purchasers of NG WLA from Eircom (although there would be switching costs such as the need to build connectivity to handover points, systems integration etc). ComReg therefore assesses the potential effect of VMI NG WLA on CBP in (i) the 18 Commercial EAs which, as set out in Annex 12, would pass the Phase 2 geographic assessment criteria, taking into account VMI rollout and (ii) the entirety of the Commercial NG WLA Market.

6.341 As set out above, Eircom's retail arm accounts for the largest proportion of purchases of NG WLA from Eircom at **[✂** [redacted] **✂]**, exactly double the share of the second-largest purchaser, **[✂** [redacted] **✂]**. Together, **[✂** [redacted] **✂]** account for 84% of the **[✂** [redacted] **✂]** of NG WLA purchases made by SPs other than Eircom retail. Accordingly, Eircom, **[✂** [redacted] **✂]** are large purchasers capable, in principle, of exercising CBP. However, Eircom is unlikely to purchase NG WLA from VMI where Eircom has rolled out FTTx.

6.342 Vodafone and Sky are the only Access Seekers which have announced their intentions to purchase wholesale services from VMI. Accordingly, and as of October 2023, ComReg considers that VMI is likely only capable of credibly increasing Vodafone's and Sky's CBP vis-à-vis Eircom, in the absence of indications that other Access Seekers intend to purchase wholesale services from VMI. **[✂** [redacted] **✂]**

6.343 Vodafone has previously indicated to ComReg that, **[✂** [redacted] **✂]** Therefore, if it sought to exercise CBP by threatening to switch all NG WLA purchases away from Eircom where an alternative was available, switching to VMI would **[✂** [redacted] **✂]**

CBP at the 18 Commercial EAs

6.344 At the 18 Commercial EAs, hypothetical VMI and Eircom FTTx overlap at **[✂** [redacted] **✂]** of premises, split between **[✂** [redacted] **✂]** triple Eircom, SIRO and VMI overlap, and **[✂** [redacted] **✂]** double VMI and Eircom overlap.[895]

6.345 **[✂** [redacted] **✂]** would only switch to purchasing VMI VUA at a maximum of those **[✂** [redacted] **✂]** of premises in the 18 Commercial EAs overlapped by **[✂** [redacted] **✂]**[896] ComReg data indicate that **[✂** [redacted] **✂]** purchases approximately **[✂** [redacted] **✂]** NG lines from Eircom at the 18 Commercial EAs. This suggests that, on a pro rata basis, the presence of VMI would facilitate switching of approximately **[✂** [redacted] **✂]**[897] lines, compared to a counterfactual where VMI VUA were not available.

6.346 **[✂** [redacted][898] [redacted] **✂]**

[895] Between 60% and 70%, split between 50-60% Eircom/SIRO/VMI overlap and 10-20% Eircom/VMI overlap.

[896] Between 10% and 20%.

[897] Between 0 and 1,000.

[898] **[✂** [redacted] **✂]** meeting with ComReg, July 28, 2023.

6.347 Taking [✂ [redacted] ✂] ComReg considers that the presence of VMI VUA would allow for the exercise of CBP in respect of an additional [✂ [redacted] ✂][899] Eircom wholesale lines, based on Q2 2023 data, compared to the counterfactual where VMI NG WLA is not available. This amounts to approximately [✂ [redacted] ✂][900] of total Eircom wholesale lines in the 18 Commercial EAs, and [✂ [redacted] ✂][901] of total Eircom merchant market wholesale lines. This suggests that the presence of VMI is unlikely to materially increase the potential exercise of CBP in the 18 Commercial EAs, such that it would amount to a sufficiently effective competitive constraint on Eircom supply of NG WLA (having regard to the fact that it will be some years before VMI has completed its FTTP network overlay).

<u>CBP across the Commercial NG WLA Market</u>

6.348 Across the Commercial NG WLA Market, VMI overlaps Eircom FTTx at [✂ [redacted] ✂][902]

6.349 Vodafone would only switch to purchasing VMI VUA at a maximum of those [✂ [redacted] ✂][903] ComReg does not have precise data indicating wholesale purchases in the Commercial NG WLA Market and the IA NG WLA Market. As a proxy, ComReg has taken Eircom FTTx rollout in each relevant market and assigned [✂ [redacted] ✂] NG WLA purchases from Eircom across each market on a pro rata basis. [✂ [redacted] ✂][904] of Eircom FTTx lines are located in the Commercial NG WLA Market, and ComReg accordingly assigns [✂ [redacted] ✂][905] purchases of NG WLA from Eircom to the Commercial NG WLA Market. This suggests that Vodafone purchases approximately [✂ [redacted] ✂] wholesale NG lines from Eircom in the Commercial NG WLA Market. This suggests that the presence of VMI would facilitate switching of approximately [✂ [redacted] ✂][906] lines, compared to a counterfactual where VMI VUA were not available.

[899] Between 1 and 1,000.

[900] Between 0% and 10%.

[901] Between 0% and 10%.

[902] Between 30% and 40%, split between 10-20% Eircom/SIRO/VMI overlap and 20-30% Eircom/VMI overlap.

[903] Between 20% and 30%.

[904] Between 90% and 100%.

[905] Between 90% and 100%.

[906] Between 50,000 and 60,000.

6.350 ComReg data indicate that [✂ [redacted] ✂] provides retail broadband services to approximately [✂ [redacted] [redacted] ✂] subscribers in the Commercial NG WLA Market using Eircom wholesale inputs (making use of reported [✂ [redacted] ✂] figures). Assigning overlaps on a pro rata basis, this suggests that, if [✂ [redacted] ✂] were to exert its CBP by switching to the maximum extent possible, VMI VUA would allow [✂ [redacted] ✂] to migrate an additional [✂ [redacted] ✂] of its subscribers away from Eircom, compared to a situation where VMI VUA were not available.

6.351 Taking [✂ [redacted] ✂], ComReg considers that the presence of VMI VUA would allow for the exercise of CBP in respect of an additional [✂ [redacted] ✂][907] Eircom wholesale lines, based on Q2 2023 data. This amounts to [✂ [redacted] ✂][908] of total Eircom wholesale lines in the Commercial NG WLA Market, and [✂ [redacted] ✂][909] of total Eircom merchant market wholesale lines. This suggests that the presence of VMI is unlikely to materially increase the potential exercise of CBP in the Commercial NG WLA Market, such that it would amount to a sufficiently effective competitive constraint on Eircom supply of NG WLA (having regard to the fact that it will be some years before VMI has completed its FTTP network overlay).

<u>IA NG WLA Market</u>

6.352 Table 68 below shows the relative size of each Access Seeker's purchases of WLA from NBI on the IA NG WLA Market, as of Q1 2023. It illustrates that Vodafone, with a [✂ [redacted] ✂][910] share of overall WLA purchases in the IA NG WLA Market is, by a significant margin, the largest purchaser of WLA in the IA NG WLA Market. Eircom and BT are also large purchasers of WLA from NBI in the IA NG WLA Market, each with an individual share of [✂ [redacted] ✂][911] of WLA purchases. The remaining WLA purchases are split amongst a number of smaller Access Seekers.

Table 68: WLA purchases from NBI in the IA NG WLA Market, Q1 2023 [✂REDACTED✂]

Purchaser	VUA	
	n	%
[redacted]		

[907] Between 90,000 and 100,000.

[908] Between 10% and 20%.

[909] Between 10% and 20%.

[910] Vodafone's share is between 40-50%.

[911] Eircom share is 10-20%, and BT's share is 10-20%.

[redacted]

CG WLA Market

6.353 Table 69 below shows the relative size of each Access Seeker's wholesale purchases of CG WLA from Eircom, as of Q1 2023 on the CG WLA Market. It illustrates that Eircom's retail business with a **[✂ [redacted] ✂]**[912] share of overall purchases in the CG WLA Market is, by a significant margin, the largest purchaser. BT and Vodafone, each with a **[✂ [redacted] ✂]**[913] share of overall CG WLA purchases are the next biggest purchasers, with 14 Access Seekers accounting for the remaining 15% of CG WLA purchases. Eircom purchases of CG WLA from itself are larger than the combined merchant market purchases from the second, third, and fourth biggest purchasers. This suggests that Eircom is unlikely to face effective CBP in the CG WLA Market.

Table 69: National CG WLA purchases from Eircom, Q1 2023 [✂REDACTED✂]

Purchaser	CG WLA	
	n	%
[redacted]		

[912] Eircom's share is 40 – 50%.

[913] BT's share is 10-20%, and Vodafone's share is 10-20%.

Conclusion

6.354 The analysis above shows that the largest purchaser of WLA is Eircom's retail arm, on the Commercial NG WLA Market and the CG WLA Market. In an MGA scenario, the CBP of Access Seekers would be weakened in the absence of alternative FTTP networks capable of delivering WLA that is purchased from Eircom, given that Access Seekers would have no other means of retail broadband provision, were Eircom to cease its supply of merchant market CG WLA or NG WLA in the Commercial NG WLA Market or CG WLA Market as appropriate. In such a scenario, the proportion of WLA sales accounted for by Eircom self-supply would likely increase, further reducing already insufficient levels of CBP. In the IA NG WLA Market, NBI has low incentives to cease its merchant market supply of VUA, as it has no downstream arm to switch supply to (and it is in any event prevented from doing so under the NBP Contract).

6.355 ComReg's view is that Eircom's market power (including its ability to act independently of competitors, customers and, ultimately, end users) would, absent regulation, be unlikely to be constrained to an appreciable extent by CBP exerted by Access Seekers on the Commercial NG WLA Market or the CG WLA Market. While Access Seekers are a significant source of revenue for Eircom in the Commercial NG WLA Market and the CG WLA Market, ComReg considers that their relative size is not indicative of a sufficiently strengthened bargaining position regarding price or other terms of supply.

6.356 In respect of the IA NG WLA Market, **[✂** [redacted] **✂]** the largest purchaser of WLA from NBI which, absent regulation, could be indicative of the presence of sufficiently effective CBP (although other than NBI, on a forward-looking basis, ComReg has not identified any other credible and effective sources of supply). However, this conclusion is effectively rendered moot, arising from the NBP Contract, which acts to constrain NBI's freedom of commercial conduct, regardless of the actual competitive situation which NBI faces in the IA. Thus, the presence or absence of sufficiently effective CBP on NBI in the IA is immaterial to the constraints faced by NBI arising from the NBP Contract.

Evidence of bargaining power from operator negotiations

6.357 ComReg has considered whether the exercise of effective CBP is evident from bargaining in WLA negotiations between Eircom or NBI on the one hand and Access Seekers on the other. In this respect, in sub-section 6.4.3 ComReg examined Eircom's WLA pricing behaviour and set out its view that there is no firm behavioural evidence to suggest that Eircom faces effective pricing constraints in the provision of WLA, beyond the constraint imposed by SMP price regulation. This also suggests that effective CBP has not been, nor is likely to be, a relevant factor in constraining Eircom's behaviour in the Relevant WLA Markets.

6.358 In respect of NBI, ComReg notes that, even absent SMP regulation, NBI is constrained to price in accordance with the NBP Contract with the State. NBI cannot credibly refuse to provide access at prices other than the prices set by that Contract. In view of this, ComReg considers that it is a moot point whether or not NBI faces effective CBP.

6.6.3 Conclusion on CBP Assessment

6.359 Having regard to the analysis in paragraphs 6.319 to 6.358 above, ComReg's view is that it is unlikely that Eircom would be sufficiently constrained by CBP such that it would prevent it from behaving, to an appreciable extent, independently or competitors, customers and end users, on the Commercial NG WLA Market or the CG WLA Market.

6.360 The question as to whether NBI would likely be sufficiently constrained by CBP is rendered moot, given that the NBP Contract effectively prevents it from behaving, to an appreciable extent, independently or competitors, customers and end users, on the IA NG WLA Market.

6.7 Findings in respect of Significant Market Power

6.361 In paragraphs 6.17 to 6.360 above, ComReg has considered a wide range of factors to identify whether any undertaking enjoys a position of SMP in the Relevant WLA Markets identified in Section 5. These factors include:

(a) Existing competition in the Relevant WLA Markets;

(b) Potential competition in the Relevant WLA Markets; and

(c) The strength of any Countervailing Buyer Power.

6.7.1 Commercial NG WLA Market

6.362 ComReg's view is that the Commercial NG WLA Market is not effectively competitive, and that Eircom would not be sufficiently constrained by the above factors such that it would prevent it from behaving, to an appreciable extent, independently of competitors, customers and end users, on that market.

6.363 In its Submission,[914] Eircom asserts that ComReg skews in favour of regulation 'just in case' future network rollout does not occur. This line of reasoning assumes that announced rollout – at any level of detail - will occur and should form part of the direct constraints assessment. As set out above, it is clear arising from EC guidance and also from market precedents (at least in the case of SIRO and noting VMI's actual rollout to date) of actual rollout trailing announced rollout that consideration of rollout should be based on sufficiently reliable forecasts, and this is the approach which ComReg has taken.

6.364 It is also notable that, in discussing future SIRO and VMI network overlap with Eircom, Eircom's consultant, Copenhagen Economics, argues that the rollout data which Eircom pieced together are imperfect and *"not sufficient for the purpose of informing pricing decisions"*.[915] Eircom therefore appears to expect ComReg to take into account network rollout at any (or no) level of certainty, while its own consultants are at pains to point out where (existing) rollout data are unreliable. This suggests a non-trivial inconsistency in Eircom's reasoning.

6.365 Vodafone[916] and SFG[917] both argue that the Commercial NG WLA Market should have been split in two, and that Eircom should have been designated with SMP on both of those markets. Vodafone claims that Eircom currently holds a monopoly position within the 'prospectively monopoly' Commercial NG WLA Market and will likely continue to hold SMP there. SFG similarly claims that Eircom holds SMP in an Urban Commercial NG WLA Market and a Rural Commercial NG WLA Market

6.366 This is a market definition question in the first instance: there is no scope to make a finding of SMP or no SMP on markets if those markets have not first been defined. ComReg addresses Vodafone's and SFG's arguments in Section 5 in its discussion of the relevant geographic market definition.

[914] Eircom Non-confidential Submission, at paragraph 41.

[915] Copenhagen Economics Non-confidential Submission on behalf of Eircom, at paragraph 3.88.

[916] Vodafone Non-confidential Submission, at p.11.

[917] SFG Non-confidential Submission, at p.15.

6.367 Where ComReg determines, as a result of a market analysis carried out by it in accordance with Regulation 49 of the ECC Regulations, that a given market identified in accordance with Regulation 46 of the ECC Regulations is not effectively competitive, ComReg is obliged to designate an undertaking under Regulation 49(8) of the ECC Regulations as having significant market power.

6.368 Having regard to the conclusions of the above market analysis, ComReg finds that Eircom has SMP in the Commercial NG WLA Market.

6.7.2 IA NG WLA Market

6.369 ComReg's view is that no undertaking should be designated as having SMP in the IA NG WLA Market. NBI is, in ComReg's view, sufficiently constrained by the terms of the NBP Contract, such that it is prevented from behaving, to an appreciable extent, independently of competitors, customers and end users, on the IA NG WLA Market.

6.370 In its Submission, VMI noted[918] that the finding of no SMP was appropriate, provided, in its view, that the NBP Contract:

(a) Is sufficiently strong and comprehensive, and contains obligations that would otherwise exist through the imposition of SMP remedies;

(b) Contains appropriate change control mechanisms to account for changes in circumstances without any dilution of the commitments; and

(c) Procedures for alleged breaches by NBI of its commitments should be at least as efficient as those available to parties when an SMP SP has allegedly breached its SMP remedies.

6.371 Taking each of three issues identified by VMI:

(a) As the NBP Contract is sufficiently robust to assure service provision to Access Seekers under terms that render a finding of SMP inappropriate, this suggests to ComReg that additional SMP obligations would not be required;

(b) Schedule 6.2 of the NBP Contract concerns Change Control Procedures. This schedule is deemed commercially sensitive and is not publicly available. ComReg notes at this point, for the avoidance of doubt, that the finding of no SMP on the IA NG WLA Market is not made in perpetuity, and it is open to ComReg to revisit its competition assessment of that market in future, if changes in circumstances so warrant; and

[918] VMI Non-confidential Submission, at p.17.

(c) Schedule 6.3 of the NBP Contract describes the Dispute Resolution Procedure to be invoked by either party under the contract. The presence or absence of such a procedure, however, is not material to whether or not a finding of SMP is appropriate. ComReg also notes that, as a wholesale-only operator, NBI has limited incentives, in the presence of the NBP Contract, to engage in anti-competitive conduct.

6.372 VMI notes[919] in its Submission that ComReg's finding of no SMP on the IA NG WLA Market is appropriate from a competition perspective. VMI also contends at p.37 of its Submission that that finding *"appears odd"* given NBI's market share, and therefore, in order to avoid infringing VMI's due process rights, requires further justification. These statements appear to be contradictory. Nevertheless, ComReg notes that the 50%+ presumption of SMP is a rebuttable presumption and the circumstances justify a finding of no SMP, which is allowed for by the SMP Guidelines.

6.373 Paragraph 56 of the SMP Guidelines notes that, *"(…..)even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength." Additionally, Point 11 of the EC's Guidance on exclusionary conduct makes clear that, "an undertaking which is capable of profitably increasing prices above the competitive level for a significant period of time does not face sufficiently effective competitive constraints and can thus generally be regarded as dominant."* The NBP Contract manages this possibility.

6.374 VMI additionally queried[920] whether ComReg had considered designating NBI with SMP, but only applying limited SMP remedies tailored to wholesale-only undertakings (per Article 80 EECC) or resulting from voluntary commitments by SMP SPs (per Article 79 EECC).

6.375 Based on current market circumstances on the IA NG WLA Market, however, ComReg considers that no finding of SMP is warranted.

6.376 SIRO also argued in its Submission that NBI should be designated with SMP, and that the NBP Contract should be the remedy, to allow for forward-looking circumstances where the NBP Contract fell away, but the SMP designation on NBI remained in place.[921]

[919] Ibid.

[920] Ibid.

[921] SIRO Non-confidential Submission, at p.14.

6.377 ComReg cannot rely for SMP remedy purposes on a contract to which it is not a party, and therefore could not designate the NBP Contract as a remedy (even though many of the contractual obligations mirror the remedies set out in Chapter 4 of the ECC Regulations).

6.378 A finding of no SMP applies for so long as market circumstances so warrant. If there were a material change to those circumstances, such as the removal of restrictions in the NBP Contract on NBI's freedom of commercial manoeuvre, it would be open to ComReg to revisit its findings and, if appropriate, make a finding of SMP. Additionally, even where no finding of SMP is made, NBI remains subject to competition law obligations.

6.7.3 CG WLA Market

6.379 In the 2023 Consultation, ComReg proposed to make no finding of SMP on the CG WLA Market. A number of Respondents expressed reservations about this proposal.

(a) NBI suggested[922] that, while the CG WLA Market is in decline, Eircom could potentially gain significant CG WLA market share in the footprint of the IA, absent regulation. ComReg considers that the provision of CG WLA will likely be constrained by asymmetric substitution arising from NG WLA, and also notes that, since Eircom already holds 100% market share in the provision of CG WLA, it cannot accrue additional market share.

(b) VMI suggested that deregulation of CG WLA pursuant to a finding of no SMP should be made conditional on a number of caveats:

i. ComReg's proposals to encourage the take up of NG services are effective,

ii. Migration from copper to fibre is ensured in a non-discriminatory manner, and

iii. Islands of CG are not left which could be subject to exploitation by Eircom.

Taking each of the issues identified by VMI:

i. CG WLA is likely to be predominantly provided in the IA. NG take-up is therefore likely to be a function of NBI rollout. The attractiveness of NBI to Access Seekers and end users is governed in the first instance by the NBP Contract , rather than ComReg proposals to encourage NG take-up,

[922] NBI Non-confidential Submission, at p.3.

ii. The process for migration from copper to fibre is outlined in the Framework for the Migration from Legacy Infrastructure to Modern Infrastructure Decision[923] which sets out the conditions which Eircom shall have to meet to proceed with copper switch-off noting that transparency and non-discrimination are key elements of the framework, and

iii. The framework for a finding of SMP is whether an operator could operate independently of competitors / customers, not whether every single end user has a choice of providers available. Vulnerable end users should, in those circumstances, be protected by retail level consumer protection measures such as the affordability obligations in respect of adequate broadband set out in the ECC Regulations.

6.380 ComReg continues to consider that, based on the evidence available, no undertaking should be designated as having SMP in the CG WLA Market. Although it is the sole provider of CG WLA, Eircom is constrained in its ability to behave, to an appreciable extent, independently of competitors, customers and end users, on the CG WLA Market. The CG WLA Market is in persistent decline, and CG WLA numbers are likely to continue to decline over the lifetime of this market review. Additionally, where Eircom continues to offer CG WLA, this is likely to be concentrated in the footprint of the IA where, on a forward-looking basis, NBI FTTP capable of delivering NG WLA will likely constrain Eircom CG WLA by means of asymmetric substitution. Accordingly, even if Eircom CG WLA were not effectively constrained in the short term, arising from technological shifts towards NG broadband, in the medium term Eircom is unlikely to be able to act independently of competitors, customers and end users in the provision of CG WLA.

6.381 Having regard to the conclusions of the market analysis, ComReg is of the view that no operator should be designated with SMP in the CG WLA Market.

[923] "Framework for the Migration from Legacy Infrastructure to Modern Infrastructure - Response to Consultation and Decision." Reference: ComReg 23/102 Decision: D09/23 Date: 01/11/2023.

7 Assessment of the Modified Retail Broadband Market in the absence of WCA regulation

7.1 Framework for Assessing Modified Retail Broadband Market

7.1 In Section 4 above, ComReg set out its view on the definition of the retail broadband markets absent upstream WLA or WCA regulation.

7.2 In this section, on the basis of the findings in Section 6 that Eircom has SMP in the Commercial NG WLA Market (and on the basis of the remedies imposed in Section 9 which enable downstream competition) and that no operator has SMP in the IA NG WLA Market or the CG WLA Market, consistent with the MGA, ComReg now re-examines the retail broadband markets assuming the presence or absence of regulation, as appropriate, in the Relevant WLA Markets, and absent regulation in the Relevant WCA Markets (the '**Modified Retail Broadband Market**'). As was the case with the Relevant WLA Markets, ComReg's assessment takes place on a forward-looking basis.

7.2 Modified Retail Broadband Market - product scope

7.3 From a product perspective, the Modified Retail Broadband Market is the same as that defined in Section 4, having regard to the presence of SMP regulation on the Commercial NG WLA Market, and the absence of regulation on the IA NG WLA Market, CG WLA Market or the Revised Regional WCA Market (which is currently regulated pursuant to the 2021 MTA Decision, while the Revised Urban WCA Market has been deregulated). ComReg's assessment in Section 4 suggests that there are several ways in which SPs can enter, and compete on, the retail broadband market:

(a) On a vertically-integrated self-supply basis over a CATV or FTTx network owned and operated by an SP (e.g. Eircom, VMI); or

(b) On the basis of the purchase of wholesale services offered by other SPs, including WLA sold on a regulated or commercial basis, and WCA sold on a commercial basis.

7.4 The 2021 MTA Decision retained the WCA product market definition set out in the 2018 Decision, as follows:

(a) WCA-based Bitstream products provided over copper and FTTx networks, including Bitstream provided using upstream WLA inputs;

(b) Self-supply of WCA-based Bitstream by Eircom and BT;

(c) WCA-based Bitstream products hypothetically offered by SIRO;

(d) Self-supply of CATV retail broadband products offered by VMI in areas where its network is present; and

(e) Self-supply of retail broadband products offered by SPs using WLA upstream inputs and having widespread coverage (such as Vodafone).

7.5 The WCA product market definition set out in the 2021 MTA Decision did not include NBI, due to extremely limited rollout, and the lack of reliable rollout forecast data at that time. WCA is currently only regulated in the Revised Regional WCA Market and has been deregulated in the footprint of the Revised Urban WCA Market, which accounted for 20% of EAs, but 57% of premises, and 69% of retail broadband subscriptions, as at the Mid-term Assessment (Q1 2021).[924] The Revised Urban Market now accounts for 20% of EAs, 58% of premises and 69% of retail broadband subscriptions, as of Q2 2023.

7.6 In an absent WCA regulation scenario, Eircom would be entitled to withdraw merchant market provision of WCA in the Revised Regional WCA Market (or continue to offer it, but under different conditions compared to regulated supply), and Access Seekers providing retail broadband to end users on that basis would, in those circumstances, be unable to retain their end users unless alternative wholesale inputs were available.

7.7 Absent WCA regulation (noting that the Revised Urban WCA Market has been deregulated), an end user could retain retail broadband by relying on the following providers, where available, at their premises:

(a) VMI retail broadband self-supplied over CATV (and, potentially, over its FTTP network on completion of rollout);

(b) Eircom retail broadband using:

a. self-supplied and regulated WLA inputs in the footprint of the Commercial NG WLA Market;

b. self-supplied WCA;

c. state-aided NBI WLA or WCA in the IA NG WLA Market; and

d. commercial WLA inputs in the footprints of the IA NG WLA Market and the CG WLA Market.

(c) Access Seeker retail broadband supplied on the basis of merchant market WLA inputs:

a. Over regulated Eircom WLA in the Commercial NG WLA Market;

[924] As set out at Table 15 of the 2021 MTA Decision.

b. Over state-aided NBI WLA in the IA NG WLA Market;

c. Over SIRO WLA on a commercial basis, where it has rolled out;

d. On a forward-looking basis, over VMI WLA on a commercial basis, once this rollout occurs.[925]

(d) Access Seeker retail broadband supplied on the basis of merchant market WCA inputs:

a. On a commercial basis, from SPs using WLA inputs to offer commercial WCA (BT, Enet),

b. On a commercial basis (and on a forward-looking basis with timing and presence uncertainty), from VMI WCA delivered over its FTTP network which is to be rolled out; and

c. Over state-aided NBI WCA in the footprint of the IA.

7.8 While, at the product level, retail broadband can, in principle, be delivered using a variety of upstream and/or self-supplied inputs, in practice, the ability to do so will depend on which networks pass a premises.

7.3 Modified Retail Broadband Market – geographic scope

7.9 In determining the geographic scope of the Modified Retail Broadband Market(s), ComReg assesses whether or not conditions of competition across the State are likely to be sufficiently homogenous. If this is the case, it is likely that a national market exists. However, where there are sufficiently stable differences in competitive conditions across different geographic areas of the State, this warrants defining sub-national geographic Modified Retail Broadband Markets.

7.10 Below, ComReg assesses the geographic features of the Modified Retail Broadband Market(s) having regard to the following issues:

(a) Geographic differences in entry conditions over time (paragraphs 7.11 to 7.18);

(b) Evolution and distribution of SP market shares (paragraphs 7.19 to 7.28);

(c) Geographic differences in product functionality and demand characteristics (paragraphs 7.29 to 7.34); and

(d) Evidence of differentiated pricing strategies or marketing (paragraphs 7.35 to 7.41).

[925] VMI indicated to ComReg that [✂ [redacted] ✂]

7.3.1 Geographic differences in entry conditions over time

7.11 In considering the geographic scope of the Modified Retail Broadband Market, ComReg assesses the extent to which differences in competitive conditions may evolve in particular areas over the lifetime of this market review, given the presence of multiple Relevant WLA Markets. In doing so, ComReg assesses the coverage and market share evolution of NG broadband networks over time as a means of identifying any existing or potential variances in entry and competitive conditions across geographic different areas.

7.12 As set out in detail at Section 5 above, the presence or absence at a Modified EA of NG broadband networks, at an appreciable level of both unique and overlapping coverage, is a key determinant in distinguishing differences in competitive conditions between Modified EAs at wholesale level. ComReg assesses the network coverage distributions of SPs from a retail perspective.

7.13 As set out in detail in Section 5 and Annex 12, ComReg considers that the presence and coverage levels of broadband capable of delivering NG WLA and NG WCA vary across Modified EAs. The NG broadband options available to a retail end user will depend on that end user's location. Thus, NBI is present in the IA NG WLA Market, but is not present outside it, where NG broadband is delivered on a commercial basis. In general, NG broadband availability is likely to be greater in areas of greater premises density, although NBI rollout on a state-aided basis facilitates NG broadband delivery to less commercially-attractive areas of lower premises density.

7.14 A number of SPs have rolled out NG broadband infrastructure to varying degrees across the State, including SIRO (FTTP), Eircom (FTTx), NBI (FTTP), and VMI (CATV and, on a forward-looking basis, FTTP, although noting location and timing uncertainty).[926] Access Seekers offer both wholesale and retail broadband services over Eircom's, SIRO's and NBI's networks. Access Seekers can directly supply broadband to retail customers or offer WCA services to other Access Seekers by aggregating access to multiple upstream networks (for example, Enet and BT at the wholesale level, and Vodafone and Sky at the retail level).

[926] As VMI's FTTP rollout will effectively overlay its existing CATV network, it does not provide it with incremental network coverage at the retail level (other than the capability to offer broadband products with higher download speeds and other product features).

7.15 The presence of different Network Operators in different parts of the State – as reflected in the WLA geographic market definition – does not appear to reflect differences in entry conditions over time at the retail level. In particular, retail broadband SPs appear to be willing and able to purchase wholesale inputs from multiple Network Operators (where those operators have sufficient scale/coverage), such that the absence or presence of a particular Network Operator in a particular EA, in the presence of WLA regulation, is likely to have less of an impact on the capacity of a retail SP to be present.

7.16 For example,[927] at least seven retail SPs actively purchase wholesale inputs (including WLA on a regulated or commercial basis, and WCA on a regulated or commercial basis) from each of Open Eir, SIRO, and NBI (Blackknight Solutions, Fastcom, Pure Telecom, Telcom, Viatel, Vodafone, and Westnet); two retail SP purchase wholesale inputs from both SIRO and Open Eir (Airwire and VMI); nine retail SPs purchase wholesale inputs from both Open Eir and NBI (Atlantek Computers, BBnet, Eircom, IFA Telecom, Ivertec, Lightnet, Magnet Networks, Net1, and Regional Broadband); and three retail SPs purchase wholesale inputs from NBI and SIRO (Carnsore Broadband, Digiweb and Sky). Thus, at least 21 retail SPs purchase wholesale inputs from multiple Network Operators.

7.17 Additionally, BT and Enet offer WCA services on a commercial basis to Access Seekers by acting as aggregators and offering WCA making use of Eircom, NBI and SIRO WLA network inputs – although neither has made public its downstream Access Seeker partners. ComReg also notes that Eircom buys services from NBI and may resell these at the wholesale level, alongside its own on-network wholesale services, to other Access Seekers. Thus, Access Seekers can procure wholesale inputs from Eircom, SIRO, or NBI directly, or purchase WCA from aggregators such as BT or Enet which affords indirect access to networks operated by Eircom, SIRO, or NBI.

7.18 This suggests that, assuming the presence of upstream regulation of the Commercial NG WLA Market, there are likely to be limited differences in geographic entry conditions over time, as retail SPs have a proven capacity to purchase from multiple Network Operators, thus serving retail customers across the footprints of different Network Operators.

[927] Based on data set out at https://siro.ie/, https://www.openeir.ie/our-customers/, and https://nbi.ie/where-can-i-buy/, accessed on 27 September 2023.

7.3.2 Evolution and distribution of SP market shares

7.19 ComReg's view is that, absent WCA regulation, there is likely to be limited variation in retail broadband SP market shares in the footprints of the IA NG WLA Market, the Commercial NG WLA Market, and the CG WLA Market, driven by fact that, despite the differing availability of CG and NG broadband in these geographic markets, Access Seekers tend to purchase wholesale inputs from multiple sources. The retail broadband market at present is characterised by a small number of SPs with national reach (as of Q2 2023, Eircom, VMI, Vodafone and Sky make up 86% of all fixed broadband subscriptions) and a large number of smaller, regional SPs, such that there is limited variation in market shares of SPs with national reach and whichever regional SPs are active in a given area.

7.20 As set out at paragraph 7.16, retail SPs have a proven willingness and ability to purchase wholesale inputs from multiple operators in order to provide retail broadband services to end users. This means that retail SP market shares are not necessarily constrained by the presence or absence of a particular Network Operator. A number of SPs have invested in providing retail broadband either using their own networks (e.g. Eircom, VMI) or through access to multiple upstream wholesale broadband inputs at Modified EAs where those inputs are available (e.g. Vodafone, Sky).

7.21 WCA is provided by NBI where it has rolled out (or intends to do so), subject to the NBP Contract, by Enet and BT on the basis of upstream WLA purchases, and by Eircom on a commercial basis in the Revised Urban WCA Market. In a MGA scenario, ComReg assumes that Eircom withdraws merchant market WCA in the footprint of the Revised Regional WCA Market, or continues to offer it, but potentially under different conditions compared to regulated supply. However, as set out at paragraph 7.16 above, this does not necessarily suggest the presence of differences in the conditions of competition in the provision of retail broadband at EAs arising from the presence or absence of networks capable of delivering wholesale NG broadband inputs (on a regulated and/or commercial basis) to retail broadband.

7.22 Table 70 below sets out national fixed retail broadband market shares in the presence, in the Revised Regional WCA Market only, of WCA regulation. Eircom has a retail broadband market share of 20-60% in 88% of EAs. This suggests that Eircom retail market share is heavily concentrated within a certain range in the majority of EAs in the presence of regulation. This suggests the presence of a national geographic market in the presence of (partial) WCA regulation. The fact that Eircom has a market share of 40% or less in 66% of EAs (with such EAs having approximately 77% of all lines) and more than 60% in only 1% of EAs suggests the comparative absence of substantial differences in competitive conditions.

Table 70: Fixed Broadband Retail SP market shares in the presence of regulation, Q2 2023 [✂REDACTED✂]

Eircom market share range	Average market share				EAs[928]	Lines
	VMI	Vodafone	Sky	OAOs		
[redacted]						

[928] There are some EAs where there are no premises.

7.23 Figure 32 outlines retail market shares in an absent WCA regulation scenario (but assuming the presence of upstream WLA regulation as set out in this Decision), where all subscriptions (as measured by lines) provided over regulated merchant market Eircom WCA inputs in the Revised Regional WCA Market revert back to Eircom retail. The total active lines used to calculate market share in this graph consists of NG retail broadband products sold using VUA, Bitstream or CATV inputs. This is an extreme scenario which assumes that, absent WCA regulation, every single subscription served on the basis of regulated Eircom merchant market WCA would revert back to Eircom retail. This assumption, which maximises Eircom retail market share, is unlikely to be realistic, as it does not account for the ability of Access Seekers to procure alternative wholesale inputs (where competing networks exist). Depending on FTTx rollout at individual premises, Access Seekers may have the options to purchase WCA provided by other SPs (NBI), or WLA provided by Eircom (on the basis of regulation of the upstream Commercial NG WLA Market), SIRO, or NBI (or, on a forward-looking basis, VMI, but noting location and timing uncertainty) to provide retail services to end users.

Figure 32: Hypothetical Modified Retail Broadband market shares, absent WCA regulation, Q1 2019 – Q2 2023 [✂REDACTED✂]

[redacted]

7.24 Table 71 below shows that, even in a worst-case scenario where all Revised Regional WCA Market subscriptions provided for on the basis of Eircom WCA inputs reverted back to Eircom retail (thus maximising the increase in Eircom retail market share), Eircom's market share would, for Q2 2023, increase to **[✂ [redacted] ✂]**[929] absent WCA regulation, still falling below an indicative 50% threshold for SMP set out in the SMP Guidelines.[930] While Vodafone and Sky see the biggest drops in market shares absent Eircom WCA inputs, both Access Seekers already purchase wholesale inputs from Eircom, NBI and SIRO and, depending on network coverage, may be in a position to switch their purchases of wholesale inputs to maintain market shares.

Table 71: Change in Modified Retail Broadband market shares absent WCA regulation, Q2 2023 [✂PARTIALLY REDACTED✂]

	WCA regulation		
Eircom	28%	[✂ [redacted]	[redacted] ✂][931]
VMI	27%	[✂ [redacted]	[redacted] ✂][932]
Vodafone	22%	[✂ [redacted]	[redacted] ✂][933]
Sky	16%	[✂ [redacted]	[redacted] ✂][934]
Pure Telecom	2.4%	[✂ [redacted]	[redacted] ✂][935]
OAOs	5%	[✂ [redacted]	[redacted] ✂][936]

[929] 31-40%.

[930] As set out at paragraph 55 thereof: *"According to established case-law, very large market share held by an undertaking for some time — in excess of 50% — is in itself, save in exceptional circumstances, evidence of the existence of a dominant position. Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP".*

[931] 31-40%, changing by 0-10%.

[932] 21-30%, changing by 0-10%.

[933] 11-20%, changing by 0-10%

[934] 11-20%, changing by 0-10%.

[935] 1-10%, changing by 0-10%.

[936] 1-10%, changing by 0-10%.

7.25 ComReg considers it unlikely that Eircom would completely cease provision of merchant market WCA in the footprint of the Revised Regional WCA Market. In the deregulated Revised Urban WCA Market Eircom still provides WCA inputs to Access Seekers and so, absent all WCA regulation, it is likely Eircom will still provide WCA inputs to Access Seekers. This suggests that, assessing retail broadband market shares nationally absent WCA regulation, even in the most extreme scenario, Eircom's market share would increase, but given the availability of WLA from other SPs, including Eircom, ComReg does not consider this to be at a sufficient level to give rise to competitive concerns.

7.26 In its Submission[937] SFG noted that, in the Revised Urban WCA Market, less than 10% of subscriptions rely on Eircom merchant market WCA inputs, with substantial differences between the Revised Urban and Revised Regional WCA Markets. SFG argued that deregulating the Revised Regional WCA Market could lead to distortions in competition outside the Revised Regional WCA Market. This would occur where Eircom ceases merchant market sales on the Revised Regional WCA Market, and where Access Seekers require national coverage, SFG would lose those Access Seekers across both the Revised Regional and Revised Urban WCA Markets.

7.27 Eircom has not ceased merchant market WCA sales following the deregulation of the Revised Urban WCA Market. CG Subscriptions in the Revised Regional WCA Market are likely to be predominantly located in the IA and Access Seekers will have the choice of purchasing WCA from NBI on a forward-looking basis. Similarly, those premises in the Revised Regional WCA Market but outside of the IA can alternatively still be served on the basis of upstream regulated WLA inputs from Eircom or SIRO, where available, and on a forward-looking basis, potentially VMI.

[937] SFG Non-confidential Submission, pages 16-20.

7.28 Of the 1,031,922 fixed broadband subscriptions in the Revised Urban WCA Market, approximately 7% are provided on the basis of Eircom merchant market NG WCA inputs, while, of the 499,987 fixed broadband subscriptions in the Revised Regional WCA Market, 23% are provided on the basis of regulated Eircom merchant market NG WCA inputs. While the proportion of subscriptions provided on the basis of merchant market NG WCA inputs is higher in the Revised Regional WCA Market, this does not take away from the conclusion that, on a national basis, the downstream Modified Retail Broadband Market would remain sufficiently competitive absent regulation on the WCA market (but in the presence of WLA regulation). Of NBI's rollout to date, **[✂ [redacted] ✂]**[938] premises are in the footprint of the Revised Regional WCA Market, with SIRO passing **[✂ [redacted] ✂]**[939] premises and VMI's network passing **[✂ [redacted] ✂]**.[940] Access Seekers have already shown their willingness to purchase wholesale inputs from multiple Network Operators where they are present and given Eircom's market share in an absent regulation scenario would not increase by a sufficient amount to designate SMP, it is unlikely Eircom could increase prices above competitive levels as Access Seekers will switch to other Network Operators.

7.3.3 Geographic differences in product functionality and demand characteristics

7.29 A further indicator of potential geographic variation in competitive conditions is differences in the functionalities or types of products being offered by retail SPs, or in the marketing strategies being pursued.

7.30 Retail broadband products and quality of service tend to be similar, regardless of the geographic area of provision. Variance arises not on the basis of geography, but the underlying technology available. ComReg is unaware of any retail SP offering functionally distinct retail broadband in different geographic areas based on the same underlying access network.

[938] 110,000-120,000 premises.

[939] 40,000-50,000 premises.

[940] 50,000-60,000 premises.

7.31 While differences might arise in the mix of underlying wholesale and/or self-supplied network inputs used to deliver retail broadband (as set out at paragraph 7.16), this does not appear to have led to any material differences across geographic areas in the functionality of the retail broadband offered over such inputs. On a forward-looking basis, FTTP is likely to become the prevalent technology capable of delivering retail broadband in the State. The growth of FTTP would likely further reduce any technological differences across different geographic locales, further increasing the geographic homogeneity of product offerings, as FTTP rolls out across both higher premises density urban areas (generally on a commercial basis), and lower premises density rural areas (generally on a state-aided basis).

7.32 Eircom's commercial strategy to date in the presence of WCA regulation in the Revised Regional WCA Market has not led it to vary the functionality of its (retail or wholesale) broadband by geography. Hence, Access Seekers relying on Eircom WLA or WCA inputs have also not, as far as ComReg is aware, varied the functionality of their retail broadband offerings on a sub-national basis. Absent regulation, Eircom would be entitled to alter its commercial strategy, including WCA product functionalities, on a geographic basis. However, ComReg notes that, absent regulation in the Revised Urban WCA Market, Eircom does not appear to have done so.

7.33 Demand for retail broadband is unlikely to vary geographically, assuming similar underlying usage cases for residential and business end users, regardless of location. However, the extent to which user demand can be satisfied will be constrained by network availability at a given premises. Over time, and as set out at paragraph 7.31, FTTP is likely to become more geographically widespread. Therefore, ComReg considers that, on a product functionality basis, demand for retail broadband is likely to be national in nature, but that there are geographic differences in access networks capable of meeting that demand. On a forward-looking basis, ongoing FTTP rollout will facilitate greater geographic uniformity in the provision of retail broadband.

7.34 As such, while there may be some variation in demand for retail broadband, ComReg is of the view that, on a forward-looking basis, there are insufficient differences in product functionalities or demand characteristics to warrant defining sub-geographic markets for retail broadband.

7.3.4 Evidence of differentiated pricing strategies or marketing

7.35 ComReg has assessed whether there is evidence of differentiated pricing or marketing that could indicate the presence of different regional and/or local competitive conditions, in particular, geographically de-averaged or differentiated retail pricing across different geographic areas. Furthermore, variation in product quality between geographic areas (which may infer effective price differences), or variation in marketing retail broadband products, may also be suggestive of localised competitive pressures within a market.

7.36 Retail broadband is provided on a national basis by a small number of large operators (e.g. Eircom, Vodafone, Sky, VMI[941]) and on a regional or local basis by a large number of smaller operators. Operators offering retail broadband on a widespread or national basis appear to price retail broadband uniformly across the State, even where they purchase wholesale inputs from multiple operators. For example, Vodafone appears to charge the same price for retail broadband, whether it is delivered using SIRO or Eircom wholesale inputs.

7.37 The only geographic difference in pricing which typically arises tends to be based on the underlying access networks and the products offered over these. For example, where FTTP is available, retail broadband may be offered at a higher price point commensurate with the higher speeds and specifications available over FTTP retail broadband, compared to retail broadband delivered over other access networks.

7.38 ComReg's review of SPs' retail broadband packages does not indicate any variation in prices by geographic region, e.g. a retail broadband package with material geographic price differentials (see Annex 8).

7.39 Based on the data available, retail SPs appear to pursue a commercial policy of pricing uniformly on a national basis, suggesting that, from a pricing perspective, competitive conditions for retail broadband are sufficiently homogenous nationwide. In areas where the competitive dynamic is enhanced by the existence of multiple suppliers of retail broadband, there has, to date, been no discernible variance in the pricing or marketing of these products, compared to areas where fewer retail SPs are present. Any variance in retail broadband pricing appears to be driven by the availability of products offered over different access networks/technologies.

[941] In August 2022, VMI announced a network deal with SIRO which will allow it to expand its retail broadband reach beyond its own CATV network footprint. VMI has since started providing retail broadband subscribers on the basis of these inputs. See https://siro.ie/news-and-insights/virgin-media-expands-market-reach-on-the-siro-network/.

7.40 Eircom is the largest supplier of WLA and WCA products to support the provision of retail broadband by Access Seekers which do not operate their own networks. Eircom currently prices its WLA products on a national basis arising from its regulatory obligations. Eircom WCA pricing varies across the Revised Urban WCA Market and the Revised Regional WCA Market. Generally, the regulated price tends to be more expensive than the commercial price for CG WCA and NG WCA delivered over FTTC, while regulated and commercial charges for NG WCA delivered over FTTP tend to be the same, as set out below. This provides a natural experiment for testing the possibility of Eircom engaging in differentiated pricing strategies, absent WCA regulation, and suggests that pricing could be differentiated not by geography, but by underlying network technology.

Table 72: Eircom WCA monthly rental charges, September 2023[942]

CG	Regional €	Urban €	Difference
Bitstream Connect	8.61	9.48	0.87
Bitstream Expand IP	8.61	11.55	2.94
Bitstream Rapid IP	8.61	14.00	5.39
Bitstream Zoom IP	8.61	15.00	6.39
Bitstream Swift IP	8.61	16.50	7.89
Bitstream Sprint IP	8.61	21.50	12.89
Bitstream Turbo IP Plus	8.61	24.50	15.89
8 Mb Bitstream BMB	8.36	8.92	0.56
24 Mb Bitstream BMB	8.36	9.92	1.56
Standalone 8 Mb Bitstream BMB	25.69	21.97	-3.72
Standalone 24 Mb Bitstream BMB	25.69	22.97	-2.72
NGA Bitstream Plus Standalone	23.24	28.84	5.6
NGA Bitstream Plus POTS-based	9.68	14.16	4.48

942 These rates have been taken from the Eircom Broadband Service Price List (v.36.0) in respect of Regional WCA, and in the Open Eir Commercial Interconnection Services Price List (CISPL) (v.56.0) respect of Urban WCA.

NGA Bitstream Plus Standalone 150	29.72	29.72	0
NGA Bitstream Plus Standalone 300	29.72	29.72	0
NGA Bitstream Plus Standalone 500	29.72	29.72	0
NGA Bitstream Plus Standalone 500/100	33.22	n/a	
NGA Bitstream Plus Standalone 1000	34.72	34.72	0
NGA Bitstream Plus Standalone 1000/150	38.22	n/a	
NGA Bitstream Plus Standalone 2000	39.72	n/a	
NGA Bitstream Plus POTS-based 150	15.31	15.31	0
NGA Bitstream Plus POTS-based 300	15.31	15.31	0
NGA Bitstream Plus POTS-based 500	15.31	15.31	0
NGA Bitstream Plus POTS-based 500/100	18.81	n/a	
NGA Bitstream Plus POTS-based 1000	20.31	20.31	0
NGA Bitstream Plus POTS-based 1000/150	23.81	n/a	
NGA Bitstream Plus POTS-based 2000	25.31	n/a	

7.41 Absent WCA regulation, Access Seekers would still be able to avail of a range of upstream regulated and commercial wholesale products, as identified at paragraph 7.7 above, but subject to geographic availability. Insofar as potential differences in prices across different geographic areas are concerned, there is some evidence to suggest that sufficiently different competitive conditions exist arising from differences in WCA pricing. However, as set out in the 2021 MTA Decision,[943] pricing differences between different WCA products may arise specifically in the provision of retail broadband between different areas.

[943] At paragraphs 4.234-4.239 thereof.

7.42 In particular, the FTTC VUA tariff is set at a cost-oriented price level nationally so any FTTC Bitstream premium is likely to encourage migration to FTTC VUA. Additionally, the Revised Regional WCA Market has a sizeable overlap within the footprint of the IA, such that NBI Bitstream will, on a forward-looking basis, be available to Access Seekers. NBI currently passes **[✂** [redacted] **✂]**[944] premises in the footprint of the Revised Regional WCA Market and **[✂** [redacted] **✂]**[945] in the Revised Urban WCA Market. Table 73 outlines NBI's coverage in the Revised Regional WCA Market, with over half the EAs having NBI coverage of between 30% and 60% of premises. The higher prices for CG WCA and FTTC-based NG WCA in the Revised Regional WCA Market may incentivise migration to NBI Bitstream or VUA when it becomes available.

Table 73: NBI Coverage in the Revised Regional WCA Market Exchange Areas, Q1 2023 [✂REDACTED✂]

NBI Coverage in an EA	Number of EAs	% of EAs
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

7.43 In their respective Submissions, both SFG[946] and Vodafone[947] commented on the pricing differences between the Revised Urban and Revised Regional WCA Markets. Vodafone noted that wholesale access for FTTC is more expensive in deregulated areas.

[944] 110,000-120,000 premises.

[945] 40,000-50,000 premises.

[946] SFG Non-confidential Submission, pages 16-20.

[947] Vodafone Confidential Submission, page 12.

7.44 SFG notes that standalone and POTS-based FTTC Bitstream products are more expensive in the Revised Urban WCA Market than the Revised Regional WCA Market. SFG mentions that the only Bitstream product which is cheaper in urban areas is Standalone ADSL and the lower price is to meet MSTs where Eircom's own customers are availing of the service. SFG asserts that ComReg wrongly states that price increases on CG technology were to encourage migration to FTTx and argues that this ignores that after deregulation, FTTC Bitstream prices increased by multiples of the increase in many of the CG Bitstream services.

7.45 In the Revised Urban WCA Market, while NGA Bitstream Plus Standalone has had the same monthly rental charge since July 2019 at €28.84, NGA Bitstream Plus POTS Based increased from €13.93 to €14.16 in July 2020.[948] This is not a substantial increase and while SFG notes that 'other factors' appear to be in play, it does not explain what these might be.

7.46 SFG noted that, with no cost orientation obligation on Eircom FTTP VUA or Bitstream and no transparency obligations in the Revised Urban WCA Market, it cannot be determined if FTTP Bitstream is charged at the same level between the Revised Regional WCA Market and Revised Urban WCA Market (i.e., Eircom could charge lower prices in the urban area while regulated regional WCA prices may be above cost). However, in previously deregulated EAs, SFG asserts that Eircom has increased prices, counter to a competitive market, especially on FTTC Bitstream.

7.47 ComReg notes that Open Eir publishes both service prices for the Revised Regional WCA Market in its Broadband Service Price List and the Revised Urban WCA prices in the Commercial Interconnection Services Price List, which are compared in Table 72 above. The output shows no price differences in WCA FTTP services between the Revised Regional and Revised Urban WCA Markets. While SFG argues that there have been price increases on FTTC and FTTP Bitstream products, where these price increases exist, they are not substantially large enough to warrant changes to the conclusion of the geographic scope of the WCA market.

[948] Open Eir Commercial Interconnection Services Price List (CISPL), version 56.0.

7.48 Additionally, and more importantly, the ultimate assessment of the need for regulation in the WCA market (as assessed below) is if, in an absent regulation scenario, the downstream Modified Retail Broadband Market would remain competitive (by failing to meet the Three Criteria Test set out below) and ComReg has concluded that it would. An increase in pricing in those deregulated EAs is not in and of itself an indicator of SMP and Eircom's merchant market share has increased from **[✂ [redacted] ✂]**[949] subscriptions in Q1 2019 to **[✂ [redacted] ✂]**[950] in Q2 2023, an increase of **[✂ [redacted] ✂]**.[951] However, it is important to note than the Revised Urban WCA market contained only 154 EAs in Q1 2019, but in Q2 2023, it contains 235 EAs. If you were to look at Eircom's merchant market NG WCA sales in the same 235 EAs from the Revised Urban WCA Market outlined in the MTA, as at Q1 2019, Eircom's merchant market NG WCA sales would have been **[✂ [redacted] ✂]**.[952] ComReg also notes that the presence of regulation in the upstream Commercial NG WLA Market should also improve competitive conditions downstream.

7.3.5 Conclusion on geographic market

7.49 Having considered the above, some factors suggest that it may be appropriate to define sub-national geographic Modified Retail Broadband Markets, including the presence or absence at an EA of NG broadband, the competing number of SPs and market share differences between different geographic areas. However, other evidence such as uniformity of retail pricing and product functionalities and the capacity of retail SPs to purchase from multiple wholesale operators is not indicative of sub-national geographic markets.

7.50 Overall, ComReg does not discount the possibility that there may be separate geographic markets for the Modified Retail Broadband Market on the basis of sub-national Relevant WLA Markets, absent WCA regulation. However, ComReg leaves this question open as it would not have a bearing on the regulatory outcome with respect to the retail market assessment, for the reasons set out at subsection 7.4 below, which suggest that any such distinction is, ultimately, rendered moot.

[949] Between 40,000 to 50,000.

[950] Between 60,000 to 70,000.

[951] Between 20,000 to 30,000.

[952] Between 70,000 to 80,000.

7.4 Modified Retail Broadband Market 3CT and Competition assessment

7.51 ComReg assesses competition on the Modified Retail Broadband Market by assessing indicators to determine whether, absent WCA regulation, the market would likely pass or fail a Three Criteria Test ('**3CT**'). Since neither the WCA market nor the retail broadband market are included in the 2020 Recommendation as markets deemed susceptible to *ex ante* regulation, there is no presumption in favour of regulation of these markets, and a 3CT must first be carried out to assess whether, in light of national circumstances, regulation continues to be warranted.

7.52 The 3CT set out in Article 67(1) of the EECC (mirrored in Regulation 49(4) of the ECC Regulations) and described in the 2020 Explanatory Note is the mechanism which allows for this assessment to be carried out in a structured and objective way. The 3CT sets out the criteria that must be cumulatively satisfied in order to determine that a relevant market should be, or should continue to be, subject to *ex ante* regulation. The three criteria are:

(a) the presence of high and non-transitory barriers to entry;

(b) a market structure which does not tend towards effective competition within the relevant time horizon; and

(c) the insufficiency of competition law alone to adequately address the market failure(s) concerned.

7.53 In doing so, ComReg assesses, *inter alia*, the number of networks available for the supply of retail broadband, and the availability of wholesale inputs capable of facilitating Access Seeker provision of retail broadband. If any of the criteria above fail, the 3CT as a whole fails, and the presumption in favour of regulation is not met.

7.54 Having concluded that Eircom has SMP in the Commercial NG WLA Market and that no operator has SMP in the IA NG WLA Market or the CG WLA Market, consistent with the MGA, ComReg now carries out a 3CT of the Modified Retail Broadband Market assuming the presence of regulation, as appropriate, in the Commercial NG WLA Market, but absent regulation in the Revised Regional WCA Market.

7.55 In its Submission Vodafone[953] noted its disagreement with the geographic approach in the 2018 Decision and the 2021 MTA. The approaches taken by ComReg in these Decisions were taken for the reasons set out therein, based on prevailing and expected market conditions at the time. ComReg's reasoning for its approach in this review is set out in this Decision.

7.56 In its Submission, VMI[954] claimed that there are still areas in the Revised Regional WCA Market where Eircom holds a dominant position and that, absent regulation, Eircom could take advantage of this position. VMI also noted that, in the 2021 MTA, the Revised Regional WCA Market passed the 3CT and warranted *ex ante* regulation. In the 2023 Consultation the position has changed and VMI suggested more evidence is needed to support this change, outlining specific developments in the last two years.

7.57 NBI, VMI and Eircom have all planned to roll out to some premises in the Revised Regional WCA Market footprint. In particular, NBI plans to pass an additional **[✂** [redacted] **✂]** premises with FTTP and VMI, **[✂** [redacted] **✂]** premises in the footprint of the Revised Regional WCA Market. Accordingly, and on a forward-looking basis, Access Seekers will have a degree of choice for wholesale inputs from a number of different Network Operators. In those areas where Eircom is the only wholesale operator, Access Seekers will still be able to purchase upstream regulated WLA inputs or potentially commercial WCA from resellers offered on the basis of Eircom's regulated WLA services. ComReg also notes that since the adoption of the 2020 Recommendation, the WCA market is no longer identified as being susceptible to *ex ante* regulation, and in view of this a 3CT must be carried out. ComReg's analysis is also as forward looking as possible. The evidence set out above suggests that barriers to entry in the Modified Retail Broadband Market are not likely to be high and non-transitory.

[953] Vodafone Confidential Submission, page 12.

[954] VMI Non-confidential Submission, pages 17-18.

7.58 In its Submission SFG[955] commented that the geographic definition is too broad and that ComReg is not starting from existing WCA regulation. SFG considered that the Revised Regional WCA Market remains a valid geographic definition and concluded that the Revised Regional WCA Market continues to be characterized by ‘high and non-transitory barriers to entry’ and does not tend towards effective competition *‘having regard to the state of the infrastructure-based competition’*. SFG noted that in the 2018 Decision ComReg identified that sub-geographic markets could potentially be defined on the basis that certain rural areas were characterised by ‘little or no presence of alternative networks’. SFG noted that when the ‘Rural Commercial Area’ (the area SFG identifies within the Commercial NG WLA Market in which it considers premises are served by Eircom FTTP only, generally on the basis of GPON technology, but which has not been defined by ComReg) is considered for the 3CT, *ex ante* regulation may be justified and when starting from a national perspective the 3CT will be satisfied but inappropriately diluted. SFG comments that the analysis in the 2023 Consultation is ‘unduly wide’ and should have been examined based on existing definitions and geographic scope should have only been broadened thereafter.

7.59 While taking an existing market as a starting point may be informative, ComReg’s analysis must have regard to prevailing and forward-looking conditions. As set out in Section 5.3 above, ComReg has not identified a ‘Rural Commercial Area’ and for similar reasons does not consider this to apply with respect to the Modified Retail Broadband Market including, in addition, on the basis of upstream regulation of the Commercial NG WLA Market.

7.60 SFG argued that separate Modified Retail Broadband Markets may be justified *“where there are differences between geographic areas in the number of competing SPs and market share differences”*. However, ComReg is of the view that this argument does not hold, given that the provision of retail broadband is likely to be sufficiently competitive in both the footprint of the upstream Commercial NG WLA Market and IA NG WLA Market, absent the provision of WCA on a regulated basis.

[955] SFG Non-confidential Submission, pages 16-20.

Criterion 1: Are entry barriers high and non-transitory?

7.61 ComReg's view is that, over the five-year market review period, barriers to entry to the Modified Retail Broadband Market are likely to be low in the presence of regulation of the Commercial NG WLA Market (and the absence of regulation in the Revised Regional WCA Market, the CG WLA Market, and the IA NG WLA Market). Even, applying the Modified Greenfield Approach, in the total absence of WCA regulation (noting that the Revised Urban WCA Market has been deregulated), ComReg considers that retail broadband would continue to be widely available, both on a self-supply basis, and making use of merchant market wholesale inputs, as set out at paragraph 7.7 above.

7.62 In their Submissions, ALTO[956] and BT[957] both expressed concerns with the replacement of a three-year market review period with a five-year review period. The EECC and the associated ECC Regulations,[958] however, provide for a five-year market review period.

7.63 The absence of barriers to entry is confirmed by the large number of retail SPs offering retail broadband on the basis of wholesale inputs. ComReg research indicates that 85 retail SPs currently offer retail broadband services on the basis of wholesale inputs delivered by NBI, SIRO and Eircom (with these SPs differing in their size and scale).

7.64 The provision of merchant market WCA on a regulated basis has, since the 2021 MTA Decision, been confined to the Revised Regional WCA Market. Accordingly, the absent WCA regulation assumption required under the MGA considers the implications for downstream retail broadband of the removal of regulation from the Revised Regional WCA Market only.

[956] ALTO Non-confidential Submission, pages 7-8.

[957] BT Confidential Submission, pages 7-8.

[958] See Regulation 49(9)(a).

7.65 In the footprint of the Revised Urban WCA Market, regulatory obligations on Eircom have been withdrawn by means of the 2021 MTA Decision, and Eircom is therefore entitled, should it so wish, to withdraw merchant market provision of WCA. Nevertheless, Eircom continues to make WCA available, although under varying commercial terms, depending on the specific WCA product in question. Eircom charges the same prices for NG WCA delivered over FTTP in the (currently regulated) Revised Regional WCA Market and the (deregulated) Revised Urban WCA Market. In most, but not all, cases, Eircom charges higher prices for CG WCA and NG WCA delivered over FTTC on the Revised Urban WCA Market, than on the Revised Regional WCA Market, as set out at Table 72 above. For the reasons set out at paragraphs 7.41 to 7.42, ComReg considers that the increased prices for CG WLA in the footprint of the (deregulated) Revised Urban WCA Market reflect Eircom's intention to encourage Access Seekers to migrate from CG to NG technology, in circumstances where CG technology is in terminal decline. In this regard, ComReg notes that there is no price differential in the provision of FTTP NG WCA on the Revised Urban WCA Market and the Revised Regional WCA Market.

7.66 Additionally, regardless of WCA pricing differentials, alternative (WLA and WCA) wholesale inputs are available to Access Seekers. Subject to geographic availability, an Access Seeker providing retail broadband on the basis of regulated merchant market Eircom WCA will, absent regulation, be able to retain its retail broadband end users at a given premises if it purchases WLA delivered by Eircom, NBI or SIRO, or WCA delivered by NBI, BT or Enet instead. In the former case, an Access Seeker would incur the cost of providing backhaul to allow it to purchase WLA instead of WCA, as discussed earlier.

7.67 Despite the absence of WCA regulation in the Revised Urban WCA Market, barriers to entry to the Modified Retail Broadband Market in the footprint of the Revised Urban WCA Market do not appear to be high. This is measured by the continued presence of retail SPs on the basis of wholesale inputs including WLA and WCA offered by Eircom, SIRO, NBI, BT, and Enet. On that basis, ComReg considers that a similar outcome could arise in the footprint of the Revised Regional WCA Market over the expected five-year lifetime of this market review. ComReg therefore considers that the complete removal of WCA regulation is, on balance, unlikely to result in the presence of high and non-transitory barriers to entry to the Modified Retail Broadband Market.

7.68 ComReg assesses what, if any, alternative wholesale options are available to Access Seekers which do not operate their own networks in the footprint of the Revised Regional WCA Market, absent WCA regulation (and therefore absent Eircom merchant market WCA provision).

7.69 Retail broadband may be provided by Access Seekers who do not operate their own network on the basis of upstream WLA or WCA inputs. In that regard and noting ComReg's conclusions in Section 6, Eircom will be required to provide WLA to Access Seekers in the Commercial NG WLA Market. NBI VUA is made available in accordance with the NBP Contract and SIRO VUA is made available on a commercial basis. Similarly, in an absent regulation scenario, WCA is made available on a commercial basis by Eircom (in the footprint of the Revised Urban WCA Market),[959] NBI, Enet and BT.

7.70 Accordingly, and in principle, Access Seekers may procure upstream inputs either on a regulated basis, or on a commercial basis, which suggests that barriers to entry on the Modified Retail Broadband Market are not likely to be high and non-transitory. If, absent regulation, Eircom withdrew regulated merchant market WCA supply in the footprint of the Revised Regional WCA Market (or continued to offer it, but under comparatively disadvantageous conditions compared to regulated supply), ComReg assesses how many premises would potentially be impacted and what, if any, alternatives would be available at those premises.

[959] The parameters (measured by EA) of the Revised Urban WCA Market and the Revised Regional WCA Market are set out in Annex 3 of the 2021 MTA Decision.

7.71 Based on Q2 2023 data, [✂ [redacted] ✂][960] end users are provided with retail broadband on the basis of Eircom merchant market NG WCA inputs, split between [✂ [redacted] ✂][961] in the footprint of the Revised Urban WCA Market, and [✂ [redacted] ✂][962] in the footprint of the Revised Regional WCA Market. [✂ [redacted] ✂][963] end users are provided with retail broadband on the basis of merchant market Eircom CG WCA inputs, of which [✂ [redacted] ✂][964] are in the footprint of the Revised Regional WCA Market and [✂ [redacted] ✂][965] are in the Revised Urban WCA Market. A total of [✂ [redacted] ✂][966] retail broadband subscriptions are therefore provided over Eircom's CG and NG WCA merchant market inputs, [✂ [redacted] ✂][967] of which are provided for on a regulated basis in the footprint of the Revised Regional WCA Market. Thus, of 1,622,165 fixed retail broadband subscriptions in the State, [✂ [redacted] ✂][968] are provided on the basis of Eircom merchant market WCA, and [✂ [redacted] ✂][969] are provided on the basis of regulated merchant market Eircom WCA in the Revised Regional WCA Market.

7.72 In an absent regulation scenario, regulated Eircom merchant market WCA may no longer be offered to those [✂ [redacted] ✂][970] NG broadband and [✂ [redacted] ✂][971] CG broadband end users in the Revised Regional WCA Market. Nevertheless, over the scheduled five-year time horizon of this market review, barriers to entry are not likely to be sufficiently high and non-transitory for Access Seekers in the Modified Retail Broadband Market to warrant Criterion 1 passing, due to the current and expected presence of alternative wholesale broadband inputs (subject to geographic availability) which would allow Access Seekers to offer retail broadband, even absent Eircom merchant market WCA:

[960] Between 180,000 and 190,000.

[961] Between 60,000 and 70,000.

[962] Between 110,000 and 120,000.

[963] Between 40,000 and 50,000.

[964] Between 30,000 and 40,000.

[965] Between 10,000 and 20,000.

[966] Between 230,000 and 240,000.

[967] Between 140,000 and 150,000.

[968] Between 10% and 20%.

[969] Between 0% and 10%.

[970] Between 110,000 and 120,000.

[971] Between 30,000 and 40,000.

(a) Where the premises is passed by Eircom FTTx only, that premises is likely to fall in the Commercial NG WLA Market, in which ComReg designates Eircom with SMP. Accordingly, the Access Seeker can continue to provide retail broadband to end users at that premises by switching to VUA provided by Eircom on a regulated basis, if it was willing to incur the costs of procuring backhaul (or to WCA provided by BT or Enet, which itself relies on Eircom VUA inputs);

(b) Where the premises is also passed by a wholesale-only FTTP network (e.g. SIRO[972] or NBI), the Access Seeker can continue to provide retail broadband by switching to purchases of wholesale inputs from NBI or SIRO, or from an aggregator such as BT or Enet which provides, or is capable of providing, access to those networks. VMI may, in the future also have a presence at some of these premises; or

(c) Where the premises is passed by Eircom copper only – that is to say, CG broadband - it is likely to fall within the IA and, on a forward-looking basis, the Access Seeker can provide retail broadband by switching to VUA or NG Bitstream provided by NBI.

7.73 In its Submission BT[973] argues that ComReg overstates the number of alternative NOs. Its view is that EAs falling within the Revised Regional WCA Market are only served by one upstream operator, which has SMP in WLA provision in the Commercial NG WLA Market. ComReg disagrees with BT for the reasons set out above.

[972] For the avoidance of doubt, SIRO is considered here, assuming regulation of the Commercial NG WLA Market.

[973] BT Confidential Submission, pages 7-8.

7.74 In the currently regulated Revised Regional WCA Market, while Eircom holds a large portion of retail broadband subscriptions, migration of customers to alternative Network Operators is already occurring, as outlined in Table 74 below. If a premises is currently only served by Eircom CG WCA, it is likely in the footprint of the IA and will be served by NBI on a forward-looking basis. NBI already passes **[✂ [redacted] ✂]** premises as of Q2 2023 in the footprint of the Revised Regional WCA Market and is set to pass an additional **[✂ [redacted] ✂]** premises on completion, amounting to a total of **[✂ [redacted] ✂]** premises passed in the footprint of the Revised Regional WCA Market (NBI itself reports passing 182,250 premises across the State).[974] If a premises is served by Eircom NG WCA it is likely a sizeable portion will fall into the footprint of the Commercial NG WLA Market and Eircom will be obliged to provide upstream regulated WLA inputs for Access Seekers. ComReg also notes that in paragraph 7.78 of the 2023 Consultation which BT references in its Submission, ComReg had already caveated that having five upstream operators in the provision of WLA or WCA services is 'dependent on location'.

Table 74: Change in fixed retail broadband subscriptions for Network Operators in the Revised Regional WCA Market [✂REDACTED✂]

	NBI	Change	SIRO	Change	VMI	Change	Eircom	Change
Q2 2023	[redacted]							
Q1 2023								
Q4 2022								
Q3 2022								
Q2 2022								
Q1 2022								
Q4 2021								
Q3 2021								
Q2 2021								
Q1 2021								
Q4 2020								
Q3 2020								
Q2 2020								

[974] www.nbi.ie, as at 29 September 2023.

Q1 2020	[redacted]
Q4 2019	[redacted]
Q3 2019	[redacted]
Q2 2019	[redacted]
Q1 2019	[redacted]

7.75 In its Submission NBI[975] also argues that ComReg overstates the number of alternative wholesale operators and choices available to SPs in respect of any given premises. NBI notes that, inside the IA, NBI will provide WCA and WLA services, but outside the IA WLA could only be provided by Eircom, SIRO and potentially VMI, with WCA being provided by Eircom, BT and Enet (as resellers) and potentially VMI. For smaller SPs, providing backhaul to purchase WLA services may be less economical than purchasing Bitstream services, with variation between operators.

7.76 ComReg considers that, where NBI is the only Network Operator within the IA, it will be constrained by the NBP Contract and, given that NBI is a wholesale only operator, it has neither the capacity nor the incentive to foreclose/restrict access to Access Seekers. Concerning backhaul investments, one of ComReg's guiding principles is to encourage investment in telecommunications infrastructure so Access Seekers who currently purchase WCA will invest in their own backhaul to facilitate the purchase of upstream WLA. However, even if this is less economical for smaller SPs, they will still have the option to purchase WCA from resellers who offer this on the basis of upstream regulated WLA inputs from Eircom and, potentially on a forward-looking basis, Access Seekers will also be able to purchase WCA from VMI.

[975] NBI Non-confidential Submission, page 9.

7.77 In its Submission, Vodafone[976] stated that, pending NBI rollout, Access Seekers will have little alternative supply in the IA. ComReg notes that NBI rollout is continuing in the IA and in recognition of the timing of NBI's remaining rollout, ComReg has provided for a reasonable sunset period in Section 10 of this Decision. As noted earlier, ComReg is obliged to be forward-looking over the course of the market review period, as network rollout potentially has implications for both the market and geographic assessment. In the case of NBI, which has provided detailed forecast information, ComReg has taken this into account. ComReg has also noted above that Eircom's CG and NG WCA merchant market supply in the Revised Regional WCA Market amounts to **[✂** [redacted] **✂]**[977] with alternative potential sources of supply identified in paragraph 7.72.

7.78 The aim of the MGA is to assess the competitive conditions in the downstream retail broadband market absent any regulation of the WCA market. ComReg's conclusion is that the downstream Modified Retail Broadband Market would likely remain competitive in an absent WCA regulation scenario. Even if all subscriptions reverted to Eircom's retail arm, Eircom's retail market share would not increase by enough to warrant continued regulation.

7.79 Table 75 below sets out the network coverage of alternative Network Operators providing wholesale inputs to Access Seekers in the footprint of the Revised Regional WCA Market (which would potentially be impacted in an absent regulation scenario). This includes SIRO and NBI's current network rollout and NBI's planned network rollout on a forward-looking basis.

[976] Vodafone Non-confidential Submission, page 12.

[977] Between 140,000 and 150,000.

Table 75: Revised Regional WCA Market – SIRO & NBI FTTP network coverage, Q1 2023 [✂REDACTED✂]

Network Coverage[978]	Number of EAs	Premises	% of EAs
[redacted]			

7.80 Table 75 above shows there is sizeable alternative Network Operator coverage in the Revised Regional WCA Market. The majority of EAs and premises fall within the 40-60% network coverage range.

7.81 ComReg therefore concludes that, absent regulation, over the five-year market review period, the Modified Retail Broadband Market would be unlikely to be characterised by the presence of high and non-transitory barriers to entry. The impact of Eircom merchant market WCA withdrawal absent regulation would be small, since, as of Q2 2023, only [✂ [redacted] ✂][979] (7%) of retail broadband subscriptions are delivered using regulated Eircom NG WCA and only [✂ [redacted] ✂][980] (2%) of retail broadband subscriptions are delivered using regulated Eircom CG WCA.

7.82 Additionally, some Access Seekers would be able to continue to offer retail broadband using non-Eircom wholesale inputs where they are passed by SIRO or NBI (or, on a forward-looking basis, VMI FTTP). Access Seekers served only by Eircom could rely on regulated Eircom VUA inputs in the Commercial NG WLA Market, and, on a forward-looking basis, on NBI inputs in the case of Eircom copper or FTTx in the IA.

[978] Currently passed or reasonably forecast to pass, as defined at paragraph A 12.62(a) below. Overlapped premises have been taken into account.

[979] Between 110,000 and 120,000.

[980] Between 30,000 and 40,000.

Criterion 2: Tendency towards effective competition

7.83 In this subsection, ComReg considers the relative strength of any existing or potential competitors over the lifetime of the market review period, market shares, and pricing, in assessing levels of existing competition. ComReg considers that, absent WCA regulation, the Modified Retail Broadband Market would be likely to tend towards effective competition over the lifetime of this market review.[981]

7.84 In the footprint of the Commercial NG WLA Market, Access Seekers are likely to be able to offer retail broadband to end users using alternative wholesale inputs, as set out at paragraph 7.72 above, even in an MGA where Eircom no longer supplies merchant market WCA. In the footprint of the IA NG WLA Market, Eircom merchant market WCA provision is, on a forward-looking basis, likely to be less widespread, and NBI will offer Access Seekers wholesale products in accordance with the NBP Contract.

Market shares

7.85 A number of SPs provide retail broadband. While some SPs provide retail broadband on their own networks (Eircom, VMI), others do so on the basis of wholesale inputs purchased from Network Operators (Vodafone, Sky etc.). Eircom operates the only CG network in the State and the largest NG network, which, as of Q2 2023, extends to approximately 90% of premises.[982]

7.86 ComReg has identified 85 retail SPs which – entirely or partially – offer retail broadband on the basis of Eircom, SIRO or NBI WLA or WCA.[983] QKDR data indicate that, as of Q2 2023, and in the presence of WCA regulation, Eircom is the largest retail SP in the State, followed by VMI, Vodafone and Sky. Collectively, these four SPs account for 86% of all fixed retail broadband subscriptions in the State. Eircom and VMI operate independent networks, while Sky and Vodafone purchase wholesale inputs from Eircom, SIRO, and NBI. As set out at paragraph 4.229 above, at least 21 other retail SPs purchase wholesale inputs from two or more of Eircom, SIRO, and NBI, without taking account also of Enet and BT WCA provision. Many of these operators are active only in local service provision. For example, Carnsore Broadband is only available in Wexford, while Tipp Broadband is only available in Tipperary.

[981] A market may tend towards effective competition not only by means of new entry into the Modified Retail Broadband Market, but also by the deployment of alternative infrastructures by Access Seekers that would allow them to offer retail broadband.

[982] Eir Group Results for Q2 2023.

[983] Based on data set out at https://siro.ie/, https://www.openeir.ie/our-customers/, and https://nbi.ie/where-can-i-buy/, accessed September 2023.

7.87 Absent WCA regulation, some retail SPs may no longer be able to provide retail broadband on the basis of regulated Eircom merchant market WCA inputs on the Revised Regional WCA Market. Unless alternative means of providing retail broadband are available, end users at those premises may need to switch to Eircom retail. ComReg therefore calculates market shares in the Modified Retail Broadband Market, absent WCA regulation in the Revised Regional WCA Market.

7.88 The market shares presented in Figure 32 above are in the presence of upstream WLA regulation, but absent WCA regulation. ComReg takes all NG fixed retail broadband subscriptions, and then isolates those subscriptions which are reliant on regulated Eircom merchant market WCA inputs in the footprint of the Revised Regional WCA Market. These subscriptions are then reassigned to Eircom retail. This gives a hypothetical maximum Eircom retail market share, assuming no alternative retail broadband service provision option is available. WCA in the footprint of the Revised Urban WCA Market has already been deregulated, such that the market share delta arising from the absent regulation assumption occurs only in the footprint of the Revised Regional WCA Market.

7.89 As described in Section 3 above, there has been significant migration from the delivery of retail broadband over CG networks, to retail broadband delivered over NG networks, since the publication of the 2018 Decision. In Q4 2018, DSL retail broadband delivered over copper accounted for 21% of total fixed retail broadband subscriptions, a number which has declined to 6%, as of Q2 2023. Over the same time period, NG retail broadband subscriptions (over FTTC, FTTP, or CATV) have increased from 76% to 88% of all fixed broadband subscriptions. Accordingly, the vast majority of retail broadband subscriptions are now delivered over NG access technology. It is likely that a high proportion of CG retail broadband subscriptions fall within the footprint of the IA, on the assumption that, for the vast majority of premises, CG retail broadband is provided because FTTx networks capable of delivering NG retail broadband do not pass the premises.

7.90 Table 76 below outlines market shares in the retail broadband market (in the presence of WCA regulation) measured by subscriptions over time. While, as of Q2 2023, Eircom holds the highest market share at **[✂ [redacted] ✂]**,[984] this is followed by VMI, Vodafone and Sky, as well as a number of smaller SPs.

[984] Between 20% and 30%.

7.91 [✂ [redacted] ✂][985] retail broadband subscriptions are provided in the footprint of the Revised Regional WCA Market on the basis of regulated Eircom merchant market WCA, [✂ [redacted] ✂][986] of which are provided over NG technology and [✂ [redacted] ✂][987] of which are provided over CG technology. If, in a MGA scenario, Eircom merchant market WCA were withdrawn and every one of those retail broadband end users reverted to Eircom retail, this would increase Eircom's retail market share on the (national) Modified Retail Broadband Market from 28% to [✂ [redacted] ✂][988] in the NG broadband market and from 48% to [✂ [redacted] ✂][989] in the CG broadband market. However, CG broadband numbers have been in decline since Q2 2013.

[985] Between 140,000 and 150,000.

[986] Between 110,000 and 120,000.

[987] Between 30,000 and 40,000.

[988] Between 30% and 40%.

[989] Between 80% and 90%.

Table 76: NG retail broadband market shares, Q4 2018 – Q2 2023[990] [✂REDACTED✂]

	Q1 2019	Q2 2023	
SP	**% of Total**	**% of Total**	**% change**
[redacted]			
Total	**100%**	**100%**	

7.92 The MGA requires ComReg to assume that Eircom merchant market WCA would no longer be available in the footprint of the Revised Regional WCA Market, absent regulation. Eircom continues to provide WCA in the footprint of the Revised Urban WCA Market despite deregulation and may well continue to do so in the Revised Regional WCA Market. Table 71 above already set out retail broadband market shares as of Q2 2023, measured by subscriber lines, absent WCA regulation, and in the presence of partial WLA regulation. Market shares in that scenario are calculated by migrating all regulated Eircom merchant market WCA lines to Eircom's retail arm, thus maximising Eircom's hypothetical market share by assuming that no Access Seeker migrates to alternative wholesale service provision.

7.93 As set out above, absent regulation in the Revised Regional WCA Market, there may be implications for downstream Modified Retail Broadband Market shares, depending on whether SPs can self-supply retail broadband, or end users can switch to alternative SPs. Eircom's market share is estimated at (**[✂** [redacted] **✂]**), absent regulation.

7.94 Thus, in an absent WCA regulation scenario, it is unlikely that Eircom would have SMP and the WCA market would likely remain competitive. This is due to other Network Operators being present in the market (SIRO, NBI and, potentially on a forward-looking basis, VMI). It may also be that, in an absent regulation scenario, Eircom will not remove provision of WCA inputs entirely, as is already evident in the Revised Urban WCA Market.

[990] ComReg QKDR data.

Pricing behaviour

Retail prices

7.95 The development and extent of competition in a market over time may be evident in the pricing of retail broadband products. Four SPs (Eircom, VMI, Vodafone, and Sky) account for 86% of fixed retail broadband subscriptions. Table 77 below outlines a sample of retail broadband packages offered by these SPs. Prices of each of the SPs for residential/business broadband largely overlap, and prices advertised by Eircom fall within the range of prices advertised by other SPs in the market.

Table 77: Residential and Business broadband packages, Q2 2023

Residential retail broadband packages			
SP	**Product**	**No. of Plans**	**Price Range inc. VAT p/m**
VMI	Standalone Broadband	2	€44 - €54
	Broadband & TV Bundle	2	€59 - €69
Vodafone	Standalone Broadband	3	€40 - €70
Eircom	RFTS & Broadband Bundle	2	€40 - €45
Sky	Standalone Broadband	3	€30 - €40
	Broadband & TV Bundle	6	€45 – €74.50
Business retail broadband packages			
SP	**Product**	**No. of Plans**	**Price Range excl. VAT**
VMI	Standalone Broadband	2	NA
Eircom	RFTS & Broadband Bundle	5	€30 - €99
Vodafone	Standalone Broadband	3	€35 - €60

7.96 In assessing retail broadband prices, ComReg has been unable to find instances of retail SPs charging different prices for retail broadband delivered over a particular network infrastructure, depending on the provider of the upstream wholesale input. Thus, for example, Sky charges the same price for its ‘Sky Broadband Ultrafast’ product, regardless of whether the upstream wholesale input is purchased from Eircom, BT, SIRO, or NBI, and regardless of whether that input is WLA or WCA.

7.97 Additionally, ComReg has not observed any price differentials at retail broadband level in the footprints of the Revised Urban WCA Market and the Revised Regional WCA Market since the 2018 Decision, or the 2021 MTA Decision, despite some differences in WCA prices charged by Eircom on those markets. Accordingly, and based on observations to date, ComReg considers it unlikely that the withdrawal of regulated Eircom merchant market WCA would, in and of itself, have a material impact on retail prices.

Conclusions on observable trends towards effective competition

7.98 Having regard to the assessment above, absent WCA regulation in the Modified Retail Broadband Market, ComReg's view is that all retail SPs and, in particular, Eircom, would likely be sufficiently constrained by existing and potential competition, suggesting a tendency towards effective competition over the five-year time horizon of this market review.

7.99 This includes competition from vertically-integrated retail SPs (e.g. VMI), competition from other SPs providing WCA, and competition from SPs offering WLA, together with the obligations placed on Eircom (by virtue of its SMP position on the Commercial NG WLA Market) and NBI (by virtue of the NBP Contract) to offer WLA to Access Seekers.

7.100 ComReg's view is that the Modified Retail Broadband Market would likely tend towards effective competition on the basis, *inter alia*, of the presence of a high number of competing retail SPs which will continue to be able to deliver retail broadband on a national, regional, or local basis on the basis of access to wholesale inputs, even absent WCA regulation. ComReg has additionally identified, as set out at paragraph 7.7 above, that Access Seekers (dependent on location) can access WLA or WCA inputs from at least five upstream SPs (Eircom, NBI, SIRO, BT, and Enet). Accordingly, if, in an absent WCA regulation scenario, Eircom withdrew merchant market WCA (or continued to offer it, but under different conditions compared to regulated supply), ComReg is of the view that retail SPs would still have sufficient capacity to source alternative wholesale inputs to continue supplying their own end users. ComReg also notes that Eircom's market share in the fixed retail broadband market (in the presence of regulation) has declined since Q4 2018, increasing marginally in the last few quarters (from Q3 2022 to Q2 2023), and its share of FTTP retail broadband has been stable since 2021. Access Seekers are capable of procuring wholesale inputs from various Network Operators (including regulated Eircom NG WLA), and network rollout programmes are likely to increase the availability of products for Access Seekers.

7.101 Accordingly, ComReg's view is that, within the relevant time horizon for this market review, the Modified Retail Broadband Market would likely tend towards effective competition. Given ComReg's view that Criterion 1 and Criterion 2 fail on the basis of lower barriers to entry and a general tendency towards effective competition, Criterion 3 (the insufficiency of competition law alone to adequately address the market failure(s) concerned) is therefore moot, as the outcome of that assessment cannot alter the overall 3CT findings. It is therefore not necessary to assess Criterion 3, as it cannot alter the overall findings on the Modified Retail Broadband Markets 3CT.

7.5 Overall Conclusions on the Modified Retail Broadband Market

7.102 Having concluded in Section 6 that it is appropriate to impose SMP remedies on the Commercial NG WLA Market, but that a finding of SMP is not warranted on the IA NG WLA Market or the CG WLA Market, ComReg has further considered how this may impact the Modified Retail Broadband Market in the absence of WCA market regulation, per the MGA.

7.103 VMI[991] notes that regulation of upstream markets (PIA and WLA) should not necessarily mean the downstream markets are ready to be deregulated. In assessing competitive conditions in the provision of WCA, ComReg takes account of EC guidance, which requires that upstream markets should only be subject to regulation where downstream markets require upstream regulation to function effectively. The Modified Greenfield Approach requires ComReg to consider whether downstream retail broadband markets would function effectively, absent WCA regulation, but in the presence of regulation, as appropriate, of markets upstream of WCA – in this case, WLA and PIA. Accordingly, as VMI recognises, it is not sufficient to assume the presence of WLA and PIA regulation to deregulate downstream markets, and ComReg must also demonstrate – as it has done – that retail broadband markets would function effectively, even absent WCA regulation.

Changes to wholesale supply arrangements

7.104 SIRO argued that[992] recent changes to the WCA landscape would be likely to lead to Eircom having the capacity to increase its position of strength on certain markets and that, as a consequence, ComReg should reconsider its proposals in respect of WCA deregulation. ComReg disagrees with SIRO's assessment for the reasons set out below.

[991] VMI Non-confidential Submission, pages 17-18.

[992] SIRO letter to ComReg dated October 27, 2023.

7.105 In the **first** instance, SIRO argues that Eircom occupies a position of dominance on a notional Wholesale Broadband Aggregation Services (‘**WBAS**’) market which SIRO defines as including:

(a) WCA offered by Eircom;

(b) The offering by Eircom of a bundled WLA service together with a separate deregulated leased line product; and

(c) The offering of access to a bundled WLA service of NBI, SIRO and Virgin Media together with a separate deregulated Eircom leased line product.

7.106 ComReg does not consider that there are grounds to define such a WBAS market, and has defined relevant markets as set out throughout this Decision. Since ComReg does not agree that a WBAS product market should be defined, ComReg does not have grounds to assess claims that any operator holds SMP on such a market.

7.107 In the **second** instance, SIRO argues that **[✂** [redacted]

7.108 [redacted]

7.109 [redacted] **✂]**

7.110 In the **third** instance, SIRO suggested that, if ComReg deregulates the provision of WCA, Eircom could engage in cross-subsidisation between the WCA and WLA markets, to arbitrage its pricing flexibility in the backhaul element of the bundle to the disadvantage of its competitors. SIRO considered that the use of a bundled WLA and commercial backhaul product is equivalent to regulated WCA, and that Eircom could, by offering such a product, evade price regulation, and offer preferred pricing to select retail operators in a targeted fashion.

7.111 The implication here appears to be that Eircom could engage in below-cost selling on the WCA market but recoup any losses on the WLA market. ComReg considers that this is unlikely to be the case arising from the price control obligations placed on Eircom in the Commercial NG WLA Market (this issue is addressed at paragraphs 9.830 to 9.851), and it is also important to note that Eircom must respect price floor rules when pricing its FTTP services (see paragraphs 9.487 to 9.494 in particular).

7.112 Overall, ComReg considers that it is only appropriate to retain regulation of the Revised Regional WCA Market if the retail broadband market would likely be uncompetitive absent WCA regulation (but in the presence of WLA regulation). ComReg considers that **[✂** [redacted] **✂]** is unlikely to have this effect. This is because **[✂** [redacted] **✂]** Accordingly, there appear to be limited grounds to suggest that retail competition would be substantially impaired by **[✂** [redacted] **✂]**, even if WCA were deregulated.

7.113 ComReg first notes that there are some grounds to support defining sub-national Modified Retail Broadband markets, given the presence of the separate Commercial NG WLA Market and the IA NG WLA Market. However, having carried out an assessment of competition on the Modified Retail Broadband Market, ComReg has formed the view that this conclusion is rendered moot, given that competition in the provision of retail broadband is likely to be sufficiently effective, both in the footprint of the Commercial NG WLA Market, and the footprint of the IA NG WLA Market, even absent provision of WCA on a regulated basis.

7.114 ComReg has formed the view that, over the lifetime of the market review, the Modified Retail Broadband Market is likely to be characterised by low barriers to entry and will exhibit a tendency towards effective competition, even in the absence of upstream WCA market regulation. It follows from this finding that the 3CT fails and that WCA market regulation does not appear to be necessary to safeguard effective competition on the Modified Retail Broadband Market.

7.6 Withdrawal of SMP finding on the Revised Regional WCA Market

7.115 ComReg concludes that the 3CT is failed on the Modified Retail Broadband Market, even in the absence of upstream WCA market regulation. This suggests that competition is likely to be sufficiently effective on the Modified Retail Broadband Market, even without the protections afforded by upstream WCA market regulation. The 2020 Explanatory Note indicates that SMP regulation of wholesale markets should only be applied to address a lack of effective competition at the retail level on downstream markets. It follows that, where a retail market is shown to be effectively competitive absent wholesale market regulation, then wholesale market regulation becomes unnecessary. Accordingly, and as set out at pages 8 and 9 of the 2020 Explanatory Note, since ComReg concludes that the Modified Retail Broadband Market is likely to be effectively competitive absent WCA market regulation (but assuming the presence of upstream WLA market regulation), it then follows that WCA regulation is no longer required, since it is no longer necessary to prevent the emergence and exercise of competition problems at retail level.

7.116 ComReg finds that the downstream Modified Retail Broadband Market would likely be effectively competitive in the absence of WCA regulation (but in the presence of WLA regulation). Accordingly, ComReg withdraws existing SMP obligations imposed on Eircom in the Revised Regional WCA Market by means of the 2018 Decision and the 2021 MTA Decision, in accordance with the sunset periods discussed in Section 10.

7.117 While SFG[993] argued that a RIA should be carried out on the Revised Regional and Revised Urban WCA Markets, this is not necessary as the Revised Urban WCA Market was deregulated by the 2021 MTA Decision and this Decision finds insufficient evidence of SMP in the Revised Regional WCA Market.

[993] SFG Non-confidential Submission, pages 16-20.

8 Commercial NG WLA Market Competition Problems and Impacts

8.1 Overview

8.1 In this Section, ComReg identifies competition problems which, absent regulation,[994] could potentially arise in the Commercial NG WLA Market, noting that ComReg designates Eircom with SMP in this market. In Section 9 ComReg considers the imposition of appropriate remedies in order to address the identified competition problems.

8.2 In Section 5, ComReg defined the Commercial NG WLA Market and, as discussed in paragraph 6.362, considers that the Commercial NG WLA Market is not effectively competitive. In accordance with Regulation 49(8) of the ECC Regulations, Eircom is designated with SMP, since it has the ability to act independently of its competitors, customers, and ultimately, end users.

8.3 In accordance with Regulation 49(8) of the ECC Regulations, where an undertaking is designated as having a position of SMP on a relevant market, ComReg is required to impose on that undertaking each of the remedies (or obligations) set out in Regulations 51 to 56 of the ECC Regulations as it considers appropriate to address identified competition problems.

8.4 It is ComReg's position that the underlying ability and incentive for Eircom to potentially engage in anti-competitive behaviour absent regulation is due to the lack of effective competition in the Commercial NG WLA Market, coupled with Eircom's position as a vertically-integrated supplier competing with its wholesale customers in downstream markets.

8.5 ComReg notes that it is neither necessary to catalogue examples of actual abuse, nor to provide exhaustive examples of potential abuse. Rather, *ex ante* regulation should prevent the possibility of such abuses arising, given that Eircom, as a vertically-integrated SP (that competes with SPs in downstream market(s)) with, *inter alia*, control over infrastructure not easily duplicated, has been identified as having SMP in the Commercial NG WLA Market. ComReg considers that Eircom thus has both the ability and incentive to engage in specific anti-competitive practices, to the detriment of competition and, ultimately, end users.

[994] WLA has, to date, been provided by Eircom pursuant to the regulatory obligations imposed under the 2018 Decision. The assessment carried out in this Section applies the MGA to determine what competition problems could potentially arise, assuming that such regulatory (SMP) obligations were not in place in the WLA Market and the downstream WCA markets.

8.6 In order to determine what form(s) of *ex ante* regulatory remedies are warranted in the Commercial NG WLA Market, ComReg carries out an assessment of a range of potential competition problems which are likely to arise in the absence of regulation, given the structure and characteristics of the Commercial NG WLA Market.

8.7 ComReg has identified three categories of competition problems which are likely to occur, absent regulation in the Commercial NG WLA Market:

(a) **Exclusionary practices:** where an SMP SP acts in a manner which could prevent potential competitors from entering the market, restrain actual competitors from further growth in the market, or induce them to exit the market;

(b) **Leveraging:** where a vertically-integrated SP with SMP in one market leverages its SMP in order to exert undue influence in other adjacent markets, either at the same level (horizontal), or at a different level (vertical) in the distribution chain; and

(c) **Exploitative practices:** where an SP with SMP engages in exploitative behaviours, such as excessive pricing or practices leading to inefficiency and/or inertia, to the detriment of both competition and end users.

8.8 Each of the competition problems set out above is discussed in detail below with regard to the specificities of the Commercial NG WLA Market.

8.9 In advance of doing so, in its Submission, Eircom contends that, at a principled level, ComReg has erred in a number for material ways in its assessment of competition problems and impacts. One such reason would be that ComReg's competition problems assessment is incorrect because the underlying market definition exercise is flawed,[995] another that it may not have either the incentive to undertake anti-competitive behaviour over time, or the ability to do so. In particular, on balance, the facts would not support a finding of SMP on the Commercial NG WLA Market and where market behaviours are unclear or uncertain, ComReg ought to err on the side of regulatory forbearance.[996] These issues are addressed in full respectively in Section 5 above dealing with market definition, and in Section 6 which provides the justification for the finding that Eircom is being designated with SMP on the Commercial NG WLA Market only.

[995] Eircom Non-confidential Submission, at paragraph 80.

[996] Eircom Non-confidential Submission, at paragraph 88.

8.10 Eircom also contends that, in the absence of any concrete evidence that the examples of anti-competitive conduct ComReg gives are actually likely to occur on the Commercial NG WLA Market, ComReg would over-rely on the theoretical economic abuse of foreclosure. While Eircom accepts that ComReg is not required to *“catalogue examples of actual abuse, nor to provide exhaustive examples of potential abuse”*,[997] it states that ComReg cannot just simply have regard to an extensive hypothetical list of abusive conduct.[998] In this regard Eircom further contends that the purpose of *ex ante* regulation is not to prevent the possibility of abuses, and ComReg’s approach is inconsistent with the objective of the EECC[999] as set out in Recital 28 EECC, namely to *“…progressively reduce ex ante sector-specific rules as competition in the markets develops and, ultimately to ensure that electronic communications are governed only by competition law.”* According to Eircom, ComReg’s logic means that *ex ante* regulation can never be lifted as there will always remain a residual possibility that abuse might arise.[1000]

8.11 Eircom also notes that, if it were determined not to have SMP in a particular market, it would still be subject to *ex post* competition law and in that context, takes issue with the proposition that certain competition problems – such as Eircom’s ability to margin squeeze – could not be adequately addressed by relying on *ex post* competition law.[1001] According to Eircom, the implication is that all markets should have *ex ante* regulatory obligations including competitive ones. This would be at odds with the development of competitive markets generally, ComReg’s statutory obligation to deregulate competitive markets without delay and the role of competition authorities including the CCPC or ComReg. Eircom also suggests that ComReg’s approach is inconsistent with the 2020 Explanatory Note, which states that *“ex post competition law safeguards are more suitable to address potential (individual) market problems than ex ante regulatory intervention”*.[1002]

[997] 2023 Consultation, at paragraph 8.5.

[998] Eircom Non-confidential Submission, at paragraphs 81-82.

[999] Recital 28 EECC states *“This Directive aims to progressively reduce ex ante sector-specific rules as competition in the markets develops and, ultimately to ensure that electronic communications are governed only by competition law.”*

[1000] Eircom Non-confidential Submission, at paragraph 82.

[1001] Referring to Oxera Part 3 Report, at paragraph 1.22.

[1002] 2020 Explanatory Note, at p.56.

8.12 Finally, Eircom argues that ComReg has failed to consider the asymmetric downside risk of regulation whereby Eircom is prevented from competing on the merits with other Network Operators. Eircom suggests that regulatory intervention will unduly restrict Eircom's incentive to invest, compete and further rollout its FTTP network, leading to a high risk of regulatory failure.[1003]

8.13 ComReg does not accept that there is any basis for Eircom's contentions. Although, as Eircom accepts, ComReg is not obliged to produce concrete actual examples that anti-competitive conduct would be likely to occur, ComReg does set out examples of the types of anti-competitive conduct which would be likely to eventuate, absent regulation, bearing in mind the ability and incentive of Eircom to do so, having regard to current and expected market circumstances. Moreover, in the context of the discussion on remedies in Section 9 below, ComReg either refers to the competition problems set out in this Section, or further elaborates on the justification for those remedies.

8.14 Furthermore, it appears to ComReg that it is Eircom's rationale that is flawed and at odds with the fundamental principles which underpin regulatory intervention under the EECC. Under the EECC, *ex ante* regulation is designed to prevent abuses in respect of those markets which are susceptible to *ex ante* regulation *and* which are not effectively effective, namely where an operator has been found to have SMP. This is precisely the position of the Commercial NG WLA Market. In that market, regulation is necessary, and indeed required under the Code rules, because Eircom has the ability and incentive to engage in anti-competitive behaviour. ComReg's approach is fully consistent with the objectives of the EECC which include, at recital 161 the following:

> *"There is a need for ex ante obligations in certain circumstances in order to ensure the development of a competitive market, the conditions of which favour the deployment and take-up of very high capacity networks and services, and the maximisation of end-user benefits. The definition of significant market power used in this Directive is equivalent to the concept of dominance as defined in the case-law of the Court of Justice."*

[1003] Eircom Non-confidential Submission, at paragraph 92.

8.15 Nothing in ComReg's approach (or Oxera statements) mean that for ComReg, even competitive markets should have *ex ante* regulatory obligations. Contrary to what Eircom suggests, it is not the case that under EU rules, including the 2020 Explanatory Note, in general, competition law would be preferable to regulation in addressing potential individual market problems. In fact where a market is susceptible to *ex ante* regulation, this is because it meets the three criteria test, including that competition law is not sufficient to deal with competition problems. (In contrast where competition law is sufficient then regulatory intervention is not justified).

8.16 The WLA market is included on the 2020 Recommendation, which means that the 3CT is deemed to pass. In fact, the 2020 Recommendation finds that, in respect of WLA,

> *"Ex post competition rules seem unlikely to be able to effectively address the observed market failures, requiring frequent intervention, persistent monitoring and price setting remedies.*
>
> *Given the crucial importance to guarantee effective and timely network access, ex post competition law alone is not yet able to address such entrenched access bottlenecks. As a result, the use of ex ante regulation appears indispensable, at least for the time being."*[1004]

8.17 On the basis of its analysis of the evidence available to it as set out at Section 6, ComReg considers that regulatory intervention is both warranted and justified. ComReg has set out - in detail - its justification for the imposition of specific obligations at both Sections 9 and 11 below. In particular ComReg considers that the risk of a margin squeeze is more appropriately addressed by means of *ex ante* regulation, than by means of *ex post* competition law, as set out in detail at Section 9.3.5 below.

[1004] 2020 Explanatory Note, at p.51.

8.18 In selecting appropriate remedies to address the competition problems arising on the Commercial NG WLA Market, ComReg has had due regard to, *inter alia,* the proportionality and justification for the relevant obligations, including, for example, implications for investment. More broadly, ComReg notes that the more significant risk is not the cost to the SMP SP of regulation, but rather the failure, where an operator has SMP, to impose appropriate regulation to prevent the emergence of anti-competitive practices. While Eircom suggests that regulation restricts its FTTP rollout incentives, ComReg notes that Eircom reports having passed just over 1 million premises with FTTP as of Q2 2023 in the presence of WLA regulation.[1005] This suggests that WLA regulation does not appear to be disincentivising FTTP rollout. ComReg also notes that **[✂** [redacted] **✂]**[1006] which does not appear to be consistent with being disincentivised from further FTTP rollout.

8.19 In this respect, ComReg notes that the continuation of pricing flexibility for FTTP as set out at Section 9 below is less onerous on Eircom than cost orientation, and changes in other remedies affords it greater freedom of manoeuvre, for example, the relaxation of an outright ban on promotions and discounts. ComReg also notes that, in its assessment, it takes into account the investment incentives of all Network Operators, and not just Eircom.

8.2 Exclusionary practices

8.20 Exclusionary practices refers to a specific set of actions carried out by an SMP SP in an attempt to defend or consolidate its position in a relevant market, by constructively or actively blocking potential competitors from entering (or expanding in) the market, or by inducing or forcing competitors to exit the market, where they are already present.

8.21 In ComReg's view, the exclusionary practices which could occur in the Commercial NG WLA Market include, but are not limited to:

(a) Imposing a margin squeeze between WLA and downstream services which would reinforce entry/expansion barriers in the Commercial NG WLA Market and related markets and potentially foreclose entry or investment by other SPs, including having regard to the fact that, ultimately, retail SPs look to compete on a national basis;

[1005] Eir Group Results, Q2 2023, at slide 7.

[1006] 'Wholesale Workshop', Open Eir PowerPoint presentation (undated), slides 4 and 11.

(b) Refusing to supply access to WLA products, services and associated facilities, applying unreasonable or discriminatory terms and conditions of access, and/or creating or exploiting information asymmetries;

(c) Concluding exclusivity contracts with certain Access Seekers, and engaging in exclusionary conduct generally aimed at raising Access Seekers' or end users' switching costs, impacting on potential competition; and/or

(d) Raising the costs of downstream competitors that rely on Eircom WLA inputs to provide downstream, wholesale and/or retail broadband services, making it more difficult for those SPs to expand their customer base and attain the economies of scale/scope necessary for deeper infrastructural investment.

8.22 In its Submission,[1007] VMI was concerned that ComReg construes the risk of Eircom using exclusivity arrangements to damage the emergence of competition (as set out at paragraph (c) above) too narrowly. According to VMI, ComReg should carry out a wider examination of exclusivity-type arrangements including loyalty-inducing offers or promotions that would have the effect of reducing the scope of business that would otherwise be prospectively available to network-based competitors such as VMI. This would be a particularly pertinent risk, given that ComReg is proposing to loosen regulation on Eircom in relation to wholesale discounts and promotions for FTTP-based VUA, and indicated that the recent price change notification by Eircom (CRD-967, described in detail at paragraphs 6.200 to 6.202 above) highlighted that this concern is credible. ComReg considers Eircom's capacity to engage in loyalty-inducing conduct at paragraphs 9.498 to 9.568 below.

8.3 Leveraging

8.23 Leveraging describes conduct in which a vertically-integrated SP with SMP in one market leverages its power to exert influence in other vertically or horizontally related markets, thereby enabling it to strengthen its position in these markets, and/or further consolidate its position in the current market in which it has SMP. Where a vertically-integrated SP which has SMP in one market also has close links with other adjacent markets, either at a similar (horizontal leverage), or different (vertical leverage) level in the production or distribution chain, the SMP SP may attempt to leverage its SMP into those related markets. This could enable the SMP SP to strengthen its position in those related markets and/or potentially reinforce its existing SMP on the market in question.

[1007] VMI Non-confidential Submission, at p.22.

8.24 Given the close relationship between the Commercial NG WLA Market and other vertically-related markets (including the downstream WCA Market and the retail broadband market), absent regulation, there is likely potential for both means of leveraging to occur. Each type of behaviour has the ability to:

(a) Raise Access Seekers' costs;

(b) Introduce barriers to accessing downstream products, services and associated facilities (which could lead to the creation of, or raising of, barriers to entry/expansion in related markets);

(c) Reduce competitive pressures on related wholesale and retail services; and

(d) Enable the SMP SP to extract additional revenues from its competitors, customers, and end users.

8.25 The leveraging described above could also have the effect of delaying entry through the use of upstream inputs (for instance, through SPs climbing the ladder of investment and using PIA to build their own networks and compete more independently in the WLA and/or downstream markets) and protecting or reinforcing Eircom's existing SMP in the Commercial NG WLA Market in an instance of 'defensive leveraging'.[1008]

Vertical Leveraging

8.26 Vertical leveraging arises where a vertically-integrated SP has the ability to leverage its SMP position at one level in the production or distribution chain into downstream markets, in which it is also active. Vertical leveraging can be non-price-based or price-based, as outlined below.

8.27 ComReg is of the view that vertical leveraging could occur on the Commercial NG WLA Market, given that Eircom, as a vertically-integrated SP with SMP, likely has both the ability and the incentive to use its market power to influence competitive conditions in downstream wholesale and/or retail markets, in particular, through its ability to control key inputs used by Access Seekers which compete against Eircom in those markets. This could result in the distortion of, or a reduction in, competition in these downstream markets, ultimately resulting in harm to end users, potentially in the form of higher prices, lower output or sales, and reduced quality or consumer choice.

[1008] Defensive leveraging refers to the possibility that Eircom uses leveraging to prevent the erosion of its current SMP in the NG WLA market, and not only for accruing additional SMP in a related market.

8.28 In its Submission,[1009] NBI suggested that Eircom could potentially leverage its SMP in the Commercial NG WLA Market into the IA NG WLA market and, as a result, capture a significant share of customers within that market. NBI provided no detail or evidence in support of this contention.

8.29 While it is possible that there may be some overbuild by Network Operators (including Eircom) into the IA (for instance, at the fringes of rollout in the Commercial NG WLA Market), ComReg notes that the cost of such rollout to the IA would, in general, not be commercially viable – noting that the NBP requires State Aid in order to build an FTTP network there. ComReg also notes that Eircom is purchasing wholesale services from NBI, which suggests that it does not have the intention to roll out its network in the IA.

Non-Price-based Vertical Leveraging Behaviour

8.30 Absent regulation in the Commercial NG WLA Market Eircom could carry out vertical leveraging by way of the following:

(a) **Restrictions on, or denial of, access:** where vertical leveraging manifests in an outright refusal to provide WLA inputs (by the SMP SP) to competitors providing services in related downstream markets which rely on those inputs. In the less extreme case, the SMP SP applies disproportionate entry criteria or attaches unreasonable terms and conditions to access;

(b) **Delaying tactics:** this includes conduct such as protracted negotiations in respect of the supply of new (or amendments to existing) WLA products, services or associated facilities to downstream competitors, whilst also encompassing actions which seek to impair the smooth transition of Access Seekers, or end users, to a competitor's product, service, or associated facilities;

(c) **Quality discrimination:** providing downstream competitors with WLA at a lower QoS (or inferior information) to that which Eircom provides to its own downstream arm (or to certain other favoured competitors);

(d) **Creating or exploiting information asymmetries, and the withholding of relevant information:** where downstream competitors are dependent on Eircom to provide WLA and require certain (quality or technical) information in order to effectively compete in the retail broadband market, a lack of transparency, or asymmetry in the provision of relevant information, can impede effective competition on the downstream retail broadband market;

[1009] NBI Non-confidential Submission, at p.9.

(e) **Unwarranted withdrawal of access already granted:** Eircom could seek to unreasonably withdraw access to facilities already granted; and

(f) **Unreasonable product bundling/tying:** this could include the bundling/tying of WLA products in such a manner that impedes the ability of Access Seekers to compete in downstream markets.

Restrictions on or denial of Access

8.31 A restriction on access may involve an SMP SP restricting the use of a WLA product to specific downstream retail or wholesale services. For instance, Eircom could restrict Access Seekers' use of its WLA products, services or associated facilities to the provision of only certain services by Access Seekers (while Eircom's own self-supply is not subject to any such restrictions). This could have the effect of limiting Access Seeker investment, as they cannot benefit from the economies of scale and scope that would result from the ability to use WLA inputs across a range of downstream markets, such as retail and wholesale broadband access, RFTS or retail TV services.

8.32 Similarly, an SMP SP could impose capacity constraints[1010] on an Access Seeker, hindering the Access Seeker's ability to provide a timely and quality service to its downstream customers. Such behaviour would serve to enhance the position of the SMP SP in the Commercial NG WLA Market and downstream markets by undermining an Access Seekers' ability to have reasonable access to wholesale services and thereby compete effectively downstream.

[1010] Such as order limits or limits on Access Seekers' use of wholesale products (and services that can be offered over them) through restrictive contractual terms and conditions.

Delaying tactics

8.33 A vertically-integrated SMP SP could be incentivised to frustrate the retail or wholesale switching process, by means of which end users can switch to an alternative product, or an alternative SP. Access Seekers may wish to migrate to alternative wholesale products to provide WLA to their downstream customers and may need to carry out a single or bulk migration of their customer base in order to do so. This should involve minimal disruption or delay from the end user's perspective, but the SMP SP may be incentivised to either delay or inhibit the switching and migration process. An SMP SP has the ability and incentive to engage in a 'first mover advantage' by offering a retail offering before an equivalent wholesale product is made available (either at all or effectively) to potential Access Seekers. This first mover advantage has the potential to raise Access Seekers' costs relative to the SMP SP and restrict Access Seekers' potential future retail sales. Other examples of conduct amounting to delaying tactics include:

(a) The use of retail contract terms to effectively dissuade an end user from moving to a competing SP in a timely manner, thereby undermining the effectiveness of access to WLA products, services and associated facilities; and

(b) Only agreeing certain contractual terms and conditions while prolonging negotiations on others, for example, agreeing to provide access to WLA services, but delaying negotiations on other terms and conditions such as SLAs.

Quality discrimination

8.34 Given that Eircom is vertically integrated, it may be difficult to compare the WLA products supplied to its own downstream arm with those offered to Access Seekers on a merchant market basis (to downstream competitors). A lack of transparency surrounding any differences between those products might facilitate an environment where Eircom has both the ability and incentive to engage in a number of non-price-based means of leveraging its SMP. For instance, the SMP SP could give priority to its own retail customers when connecting customers, repairing faults or upgrading network assets, which, given that Eircom is currently rolling out its FTTP network, is an important factor for consideration as it would give it an unfair first mover advantage.

8.35 In terms of product development, absent regulation in the Commercial NG WLA Market, Eircom, as a vertically-integrated SMP SP, could launch new downstream retail and/or wholesale products using WLA inputs, with which Access Seekers could not compete because no wholesale equivalent has been made available to them for purchase as an input. In terms of product implementation, if Access Seekers are not aware of all the features of the wholesale products which are available to Eircom's own downstream arm, they will be unable to request these features themselves, and, ultimately, may find themselves offering a product of inferior quality to end users. Eircom could also give preference to its downstream retail arm when designing products or associated features.

8.36 Absent regulation in the Commercial NG WLA Market, Eircom, as the SMP SP, has the ability and incentive to make more cost-efficient NG WLA products (or associated facilities) available to its own downstream retail arm, while either refusing access (whether actually or constructively) to, or charging higher prices for, the same products to other Access Seekers in the market. Regardless of whether equivalent products remained available to Access Seekers, this type of discriminatory conduct would still likely create a barrier to entry/expansion to downstream markets, by deterring investment from Access Seekers due to the competitive advantage gained by Eircom through raising its rivals' costs.

Creating or exploiting information asymmetries and withholding relevant information

8.37 A vertically integrated SMP SP may also create or exploit information asymmetries to impede downstream competition arising, for instance, from variations in IT system access rights for the SMP SP's downstream arm, compared to other Access Seekers. As these IT systems support the infrastructure associated with Operational Support Systems ('**OSS**') and Business Support Systems ('**BSS**'), and are likely to evolve over time, Access Seekers who do not have visibility of (or input into) these systems are unlikely to be in a position to effectively contribute, make a request for service, or make the informed decisions necessary for future planning and investment. Furthermore, an issue could arise where operational changes are not implemented simultaneously, or to the same standard, for Eircom's downstream arm on the one hand, and Access Seekers, on the other hand.

8.38 A lack of transparency in the respective terms and conditions of supply of WLA on a self-supply basis, and on a merchant market basis, could also make it difficult for Access Seekers to make effective commercial or operational decisions, where those decisions involve the use of WLA inputs in the provision of their own downstream services. In this context, such a lack of transparency could fail to give Access Seekers any reasonable confidence and certainty that WLA is provided on a non-discriminatory basis.

8.39 Information asymmetries may also apply to future planning by the SMP SP. For example, changes by Eircom to its network topography, such as its FTTP rollout, or to points of interconnect,[1011] may have implications for SPs using WLA inputs. Insufficient notice of network or process changes relevant to the delivery of downstream services could significantly impede the ability of SPs to launch equivalent retail or wholesale products which would enable them to compete with Eircom in downstream markets.

8.40 Another example of information asymmetries could include situations where Access Seekers require metrics on order processing, service delivery and fault repair to view the overall performance of Eircom's WLA products from a provisioning and service assurance perspective. Failure by Eircom to provide such data to Access Seekers would likely impair their ability to compare the performance of Eircom's supply of wholesale products (including to itself). Uncertainty for Access Seekers (and their retail and/or wholesale customers) as to the performance and quality of their purchased WLA inputs relative to the services and information made available internally to Eircom's retail arm could potentially discourage investments in markets dependent upon Eircom's wholesale products (for example, through a lack of visibility of average WLA service fault repair time between Eircom retail and wholesale customer faults).

8.41 A lack of information, and associated uncertainty, could potentially discourage Access Seekers from investing in, or expanding upon, their downstream footprint. Furthermore, such information asymmetries may lead to delayed consideration of Access Seekers' wholesale requirements, as part of such network developments, which is likely to delay or impede their ability to respond to any new retail offerings by the SMP SP.

[1011] Access Seekers' use of WLA products depends on the extent of their backhaul network. Investing in backhaul depends on the location of Eircom's points of interconnection.

8.42 In this regard, in its Submission, SFG argues[1012] that all order handling and in-life management of Eircom VUA and Bitstream should be managed through the Eircom Unified Gateway ('**UG**'), which reduces the risk of Eircom being able to act in a discriminatory manner. SFG is concerned that certain activity around provisioning (through the 'enhanced provisioning process' ('**EPP**')) now sits outside the UG process. SFG argues that, once processes are taken outside the UG environment, Access Seekers are effectively operating in the dark in relation to their own customers and often are unable to clearly communicate on an order status with them.

8.43 In its Submission, SFG alludes to a number of matters with respect to Eircom's order handling and in-life management of VUA. Having considered SFG's comments, ComReg considers that such allegations are more appropriately addressed through the raising of a dispute or complaint through the normal processes.

Unwarranted withdrawal of access already granted

8.44 Absent regulation of the Commercial NG WLA Market, ComReg is of the view that Eircom could potentially withdraw access to current product offerings, including VUA, which it is currently obliged to make available to Access Seekers, pursuant to the 2018 Decision. If Eircom were to withdraw access to VUA, this would likely have a detrimental impact on the retail broadband markets, as Access Seekers could no longer offer broadband to end users on the basis of upstream VUA inputs.

8.45 ComReg is also of the view that the uncertainty alone, caused by the possibility of the withdrawal of access, is enough to negatively impact the investment incentives of Access Seekers, therefore potentially impeding the competitiveness of the market.

8.46 In its Submission, SFG alludes to a number of matters with respect to Eircom's handling of non-FTTP scenarios.[1013] ComReg considers that SFG's comments would be more appropriately addressed outside of the market review process, potentially through the raising of a dispute or complaint, through the normal processes.

[1012] SFG Non-confidential Submission, at p.20.

[1013] SFG Non-confidential Submission, at p.21.

8.3.1 Price-based Vertical Leveraging Behaviour

8.47 Vertical leveraging may also be evident in the pricing behaviour of vertically-integrated SMP SPs. In the context of the Commercial NG WLA Market, absent regulation, ComReg is of the view that Eircom could engage in this type of behaviour and utilise its SMP position to foreclose competition in downstream markets, by offering WLA at a price that would prevent an efficient Access Seeker from earning a sufficient margin to recover its incurred costs, resulting in the foreclosure of competition through a margin squeeze.

8.48 Price discrimination could be used by a vertically-integrated SP with SMP in the Commercial NG WLA Market to raise an Access Seekers' costs downstream and induce a margin squeeze. By charging a higher price to downstream competitors than to its own retail arm, a margin squeeze between WLA prices and downstream prices for services provided on a standalone or bundled basis could undermine the effectiveness of a WLA product offering and harm competition in downstream retail and/or wholesale markets by eliminating competing SPs, distorting competition or discouraging the entry of new SPs (or expansion by existing SPs).

8.49 Any form of margin squeeze is likely capable of distorting competition across the supply chain, including at the wholesale and retail levels, to the detriment of end users, and reinforce Eircom's SMP position in the Commercial NG WLA Market. A margin squeeze could distort competition and have an adverse effect on end users in a number of ways:

(a) Foreclosure of competitors, leading to higher prices;

(b) Setting higher prices for WLA products to mitigate rivals' competitive advantages;

(c) Raising the prices of WLA products to absorb the benefits of rivals' investments in the WLA and related downstream markets; and

(d) Raising rivals' uncertainty, through the threat of a margin squeeze to deter competition and/or investment.

8.50 A vertically-integrated SMP SP is likely to be better able to sustain a margin squeeze than its downstream retail competitors. This is because the wholesale charge the SMP SP's retail arm pays is simply an internal transfer price. Even where wholesale inputs are cost oriented, a vertically-integrated SMP SP has a degree of operational latitude available to it. For example, it may make asset investment decisions, such that the cost it incurs in the short run may be lower than the cost oriented price charged to its retail competitors. An SMP SP could use such savings to fund a retail margin squeeze in the short run, prior to the cost oriented price being adjusted.

8.51 A number of Respondents commented on ComReg's assessment of Eircom's ability to engage in a margin squeeze.

8.52 SFG[1014] argued that the 2023 Consultation did not acknowledge that margin squeeze behaviour can have implications for Eircom's downstream wholesale competitors, as it did in the 2018 Decision (at paragraph 6.97). SFG was concerned by this omission in light of the proposed removal of the existing VUA-Bitstream MST, and suggested that ComReg has failed to recognise the potential competition problem arising from withdrawing this obligation.

8.53 VMI (together with its consultant, SPC Network)[1015] expressed concerns that it could be exposed to business risks if Eircom implemented a margin squeeze between VUA FTTP and Bitstream FTTP. VMI does not support the removal of the VUA FTTP to Bitstream FTTP MST as, in its view, doing so would provide unwarranted flexibility that would allow Eircom to damage VMI market entry (which is initially based solely on a Bitstream offering).

8.54 SPC Network is concerned with Eircom's ability to leverage its SMP from the WLA market into the (unregulated) WCA market, where VMI will be active when it first enters the wholesale market. It therefore argues that the obligation not to impose a margin squeeze between WLA and WCA should be retained.

8.55 Sky[1016] also expressed concern with the proposal to remove the FTTC margin squeeze, when FTTP is still not ubiquitous. Sky argues that, if FTTP rollout is not completed at the pace that Eircom suggests, Eircom may be able to operate a FTTC margin squeeze to retail services.

8.56 ComReg addresses the concerns raised about price leveraging from the WLA market to the WCA market at Section 9 below.

[1014] SFG Non-confidential Submission, at p.19.

[1015] VMI Non-confidential Submission, at pp.22-23 and SPC Network Non-confidential Submission, at paragraph 34.

[1016] Sky Non-confidential Submission, at pp.4-5.

8.57 Eircom[1017] argued that ComReg's margin squeeze assessment and the potential competition problems arising from a margin squeeze was speculative and theoretical in nature. Eircom suggested that competition in the Commercial NG WLA market is not exclusively dependent on Eircom's network, given competition from alternative SIRO and VMI network presence. On that basis, it argued that the only margin squeeze Eircom could theoretically undertake is in respect of its own wholesale customers purchasing WLA inputs from it. Eircom also quoted the ComReg Oxera Part 3 Report to suggest that Oxera recognises that Eircom has limited incentives to margin squeeze and drew attention to Copenhagen Economics' conclusion that Eircom did not engage in a margin squeeze under the 2018 market review and that Eircom's headroom is *"above the level that would indicate a desire to squeeze margins to the minimum allowed amount."* This would suggest a low risk of margin squeeze, undermining the case for an MST.[1018]

8.58 Eircom also suggested that Oxera's conclusion that Eircom's incentive could change *"and may become stronger over time"* is an abstract hypothesis, and is not supported by evidence. Such a speculative statement would imply that any market (irrespective of competitive characteristics) would require *ex ante* regulation — despite it not being warranted, justified or proportionate. Eircom recommended that ComReg take a forward-looking approach to its assessment.[1019] Finally, CE submitted that,

> *"From an economic perspective, an incumbent would be expected to engage in foreclosure (e.g., through margin squeeze) at the early stages of market development. The incentive to foreclose competitors and grow a customer base are expectedly strongest when the market (or in this case the FTTH segment) is growing, less so (as Oxera claims) when the market has already matured. This – in our view more plausible – theory of harm does not appear to hold in the Irish FTTH segment with no evidence of attempts to foreclose competitors."*[1020]

[1017] Eircom Non-confidential Submission, at paragraphs 83 to 88.

[1018] Copenhagen Economics Non-confidential Submission on behalf of Eircom, paragraphs 4.54-4.55.

[1019] See, for example, paragraphs 5, 14, 21, 24, 41, 76, 100 and 105 of Eircom Non-confidential Submission.

[1020] Copenhagen Economics Non-confidential Submission on behalf of Eircom, at paragraph 4.60.

8.59 As set out in detail in Section 5, ComReg considers that neither SIRO nor VMI has sufficient capacity to exert a sufficiently effective competitive constraint on Eircom in the Commercial NG WLA Market. The Oxera Part 3 Report is forward-looking and argues that Eircom's incentives to engage in an FTTP margin squeeze are likely to increase over time, once it has sufficient volumes on its network and a clear path towards payback on its investment.[1021]

8.60 The fact that according to Copenhagen Economics, Eircom's margins have been *'comfortably clear of anti-competitive pricing'* is not evidence that Eircom has no incentive or would not engage in margin squeeze absent regulation. As mentioned above, given that regulatory intervention is subject to demonstrating that a market is susceptible to *ex ante* regulation and that competition is not effective in the presence of SMP of an operator, it does not follow from ComReg's view that Eircom has incentives to engage in margin squeeze that this would be so in any market.

8.61 In this regard, ComReg is satisfied, having considered Copenhagen Economics' contrary position that margin squeezes are more likely at early stages of market development is not convincing. ComReg notes that the academic paper of Inderst & Valletti upon which Copenhagen Economics relies in support of its reasoning[1022] posits a number of outcomes but Copenhagen Economics relies on just one of these outcomes, which appears to concern pre-and post-merger incentives, rather than foreclosure incentives at early or late stages of market development. ComReg notes that Inderst & Valletti also posit that various outcomes are possible, depending on the levels of upstream and downstream competition. Inderst & Valletti's paper does not accordingly provide a robust justification for Copenhagen Economics' contention that margin squeezes are more likely at early stages of market development. ComReg further addresses the concerns raised about margin squeeze at Section 9 below.

[1021] Oxera Part 3 Report, paragraph 5.3.

[1022] Inderst, R., & Valletti, T. (2011). Incentives for input foreclosure. European Economic Review.

8.62 Another example of anti-competitive pricing behaviour is predatory pricing, whereby a vertically-integrated SP with SMP sells a WLA product below its costs of production for a sustained period of time, with the intention of deterring market entry or expansion, or forcing a rival SP to exit the market, enabling the SMP SP to further increase its market power and raise prices at a later date. While end users may benefit in the short term from low prices, end user welfare is reduced in the long term due to the elimination of competition and choice in the market. For example, Eircom and SIRO are both present in certain geographic areas in the Commercial NG WLA Market. By engaging in predatory pricing, Eircom could distort/restrict competition from SIRO or VMI with the effect of deterring SIRO or VMI market expansion and potentially inducing exit, and also deterring entry by signalling to potential entrants that it will respond aggressively to market entry efforts. In this regard, VMI expressed concern in its Submission[1023] that Eircom could damage its wholesale market entry (initially in the provision of WCA) by unfairly lowering the price of its WCA service below the costs of an efficient competitor.

8.63 VMI also expressed concerns about the relaxation of restrictions on Eircom's capacity to offer wholesale promotions and discounts on FTTP.[1024] VMI argues that this is a premature step given that competition is still nascent, and suggested that, if ComReg does implement the proposals, the process for evaluating requests needs to be improved by requiring a public consultation.

8.64 VMI also suggested[1025] that the action of an SMP SP discussing potential discount schemes with potential customers (whether or not they come to fruition) can have a chilling effect on competition, as potential customers may be unwilling to commit to an alternative SP until the commercial terms offered by the SMP SP are clear. In this regard, VMI noted that Eircom had already sought to commence a discussion with industry on offering rental discounts for its FTTP VUA and Bitstream, notwithstanding that, at the time of doing so, Eircom was banned under regulation from offering discounts to FTTP VUA.

8.65 Following this Decision Eircom is permitted to offer wholesale promotions and discounts for FTTP service in the Commercial NG WLA Market subject to prior ComReg approval on a case-by-case basis, and taking into account, as set out at paragraph 9.558 below, certain key requirements.

[1023] VMI Non-confidential Submission, at pp.22-23.

[1024] VMI Non-confidential Submission, at p.20.

[1025] Ibid.

8.66 As set out at paragraph 9.569 below, Eircom must notify Access Seekers in advance of any price amendments. Paragraph 9.376 of the 2023 Consultation sought stakeholder views on whether industry consultation should form part of ComReg's assessment of any wholesale promotion or discount request. VMI advocates in favour of stakeholder consultation. This issue is accordingly addressed at Section 9 below.

8.67 ComReg notes VMI's comments about wholesale discounts and agrees that this 'chilling' potential exists. A tangible example of that occurred in early 2023 when Eircom disclosed its intention to launch a wholesale discount scheme before notifying ComReg. This scheme was not put into effect after ComReg noted its very significant concerns.[1026] ComReg regards the uncertainty that was thereby created as being unfairly disruptive to competitors' investment plans. ComReg's proposals for the regulation of wholesale promotions and discounts are set out in Section 9.

8.4 Exploitative Practices

8.68 Economic theory suggests that, where a firm possesses market power, it is in a position to increase prices above, and/or reduce output below, competitive levels, thereby enabling the accumulation of higher than normal profits. These higher profits effectively create a wealth transfer from the end user to the firm with market power. It is ComReg's view that Eircom, as an SP with SMP in the Commercial NG WLA Market, and, given its presence in a number of adjacent markets, would potentially have the ability and incentive to engage in exploitative practices, such as excessive pricing and some degree of inefficiency or inertia, to the detriment of end users.

8.4.1 Excessive pricing

8.69 Excessive pricing occurs where the price which a firm with SMP charges for a product or service is not closely related to its value to the end user and/or the cost of producing or providing the relevant service.[1027] Concerns about excessive pricing arise where, absent regulation, price levels would likely be persistently high with no effective pressure (e.g. from new entry or innovation) to bring them down to competitive levels over the duration of the review period.

[1026] ComReg Information Notice CRD-967 FTTH Tariff Structure Review, ComReg 23/24.

[1027] Case C 27/76 United Brands v. Commission, [1978] ECR 207, [1978] 1 CMLR 429, paragraph 250. In United Brands the Court of Justice of the European Union held that: *"…charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied would be… an abuse"*.

8.70 The Commercial NG WLA Market is characterised by a high and relatively stable incumbent market share, the absence of effective existing competition, high and non-transitory barriers to entry (associated with control over infrastructure not easily replicated), limited scope for potential competition, high sunk costs and insufficient CBP. Thus, there is insufficient pressure to constrain Eircom from behaving, *"to an appreciable extent, independently of its customers, competitors or consumers"*,[1028] including its ability and incentive to engage in excessive pricing in the Commercial NG WLA Market.[1029]

8.71 For example, raising the costs of WLA inputs above the competitive level would, in turn, raise input costs for those Access Seekers that purchase Eircom WLA (assuming Eircom were to continue supplying WLA inputs, absent regulation) in order to compete in the retail broadband market. Given that the extra costs incurred by Access Seekers, due to increased input prices, may then be passed on to their retail customers via higher broadband prices, this has the potential to harm the development of effective competition in the retail broadband market, as end users pay higher broadband prices, due to Access Seeker pass-through of increased WLA input costs. Thus, the exploitative conduct engaged in by the SMP SP at the wholesale level may ultimately be experienced at the retail level by end users, as Access Seekers attempt to avoid incurring the additional expenses arising from increased WLA prices by passing these cost increases through to their customers.

8.72 Excessive prices can also distort competition amongst SPs in a market, as the higher charges could create a cross-subsidy to the SMP SP, while simultaneously reducing other SPs' investment incentives. Absent regulation in the Commercial NG WLA Market, Eircom, as the SMP SP, is likely to have the ability to increase prices at the wholesale level, in order to extract supernormal profits from Access Seekers. If Access Seekers attempt to absorb these higher WLA costs but are restricted in raising their own prices due to competitive pressure in the retail broadband market, Access Seekers could be subjected to a margin squeeze, thereby reducing their own profit margins and restricting their ability to compete with the incumbent. Excessive pricing can also distort the investment signals for new entrants, leading to an inefficient level of network deployment.

[1028] Judgment of the Court of 13 February 1979. Hoffmann-La Roche & Co. AG v Commission of the European Communities. Dominant position. Case 85/76. European Court Reports 1979 -00461. ECLI identifier: ECLI:EU:C:1979:36 Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:61976CJ0085&from=EN

[1029] Eircom's wholesale prices in the WLA Market is currently regulated under the 2018 Decision.

8.73 ComReg has formed the view that Eircom, as the SMP SP, has both the ability and incentive to engage in excessive pricing behaviour as, absent regulation, both Access Seekers and end users are restricted by the absence of effective demand-side substitutes or indirect retail constraints, enabling the SMP SP to act independently of competitive pressure.

8.74 Pursuant to the 2018 Decision, Eircom's WLA products are subject to a range of regulatory obligations, including price control obligations, on a national basis. Absent regulation in the Commercial NG WLA Market, ComReg considers that prices for such services may rise above the competitive level.

8.4.2 Inefficiency and inertia

8.75 An SMP SP in a relevant market may, arising from the absence of effective[1030] competitive pressure in that market, be insulated from the need to innovate and improve efficiency and QoS to stay ahead of rivals. This may limit the development of new technology or processes and/or lead to more costly and less efficient methods of supply[1031] and, consequently, higher prices for end users than would likely otherwise exist under competitive market conditions. The SMP SP may also decide to withhold investment in related markets to delay or impede the development of competition in those markets. For example, where the SMP SP has control over certain key inputs necessary for Access Seekers to compete in adjacent markets, it could delay upgrading those inputs or providing newer, potentially more cost-effective inputs in line with technological developments.

[1030] As noted in Section 5, regulated access to wholesale products in other upstream markets or indirect constraints from the retail market are likely insufficient to effectively constrain Eircom's behaviour in the Commercial NG WLA Market. However, Eircom's decision to invest and innovate may be at least partially influenced by the presence of independent retail competitors in the downstream retail broadband market.

[1031] Such inefficiency could potentially be considered an abuse under competition law, specifically, Article 102(2)(b) of the TFEU.

8.76 ComReg has formed the view that Eircom has SMP in the Commercial NG WLA Market. Accordingly, absent regulation, Eircom would likely face limited competitive pressure to innovate and provide an efficient NG WLA service, enabling it to delay the implementation of new technology and systems, without being subject to sufficient competitive pressures. Eircom NG WLA Access Seekers are dependent on timely investment in technology and systems by Eircom and low levels of innovation and investment (resulting from a lack of effective competition in the Commercial NG WLA Market) would likely ultimately be to the detriment of end users. However, potentially mitigating a portion of this risk is Eircom's ongoing rollout of FTTP and recent upgrade in many areas from GPON[1032] to XGS-PON[1033] technologies.

8.77 ComReg recognises that Eircom's incentives to innovate may not be uniform throughout the State, with Eircom more likely to innovate where it faces a degree of competition, including in downstream markets, and in particular more likely to innovate in geographic areas in which SIRO (or taking a forward-looking approach, VMI FTTP) are present.

8.78 Overall, ComReg is of the view that Eircom, as an SMP SP, has the ability and incentive to delay its network upgrade in those parts of the Commercial NG WLA Market where it faces a lower or no degree of competition.

8.5 Summary of Conclusions on Competition Problems

8.79 ComReg is of the view that, absent regulation, Eircom, as the vertically integrated SMP SP in the Commercial NG WLA Market, has the ability and incentive to engage in the categories of exclusionary practices, leveraging behaviour, and exploitative practices identified and outlined above, which is likely to negatively impact on competition and end users in related retail and/or wholesale markets, as well as having the potential to reinforce its SMP in the WLA market over time.

8.80 On the basis of the foregoing, ComReg considers that it is justified and proportionate to impose appropriate and proportionate obligations on Eircom in the Commercial NG WLA Market relating to access, non-discrimination, transparency, price control, cost accounting, accounting separation, and regulatory governance obligations.

[1032] Gigabit-capable Passive Optical Network ('**GPON**').

[1033] 10 Gigabit Symmetrical Passive Optical Network ('**XGS-PON**').

9 Remedies in the Commercial NG WLA Market

9.1 Introduction

9.1 Section 6 sets out ComReg's finding that Eircom has SMP in the Commercial NG WLA Market and Section 8 describes the competition problems that, absent regulation, could arise in the Commercial NG WLA Market and related downstream markets. For example, Eircom could potentially:

(a) refuse to supply access to WLA products and thus restrict competition in the provision of products and services in downstream markets;

(b) provide access on less favourable terms compared to those obtained by its own downstream businesses; and

(c) set excessive wholesale charges for access to WLA or engage in price or margin squeeze behaviour.

9.2 Under Regulation 50(1) of the ECC Regulations, where an undertaking is designated as having SMP in a relevant market, ComReg is required to impose at least one obligation by way of remedy addressing the competition problems that have been identified, as set out in Regulations 51-56, 58 and 62 of the ECC Regulations.

9.3 Regulation 50(5) of the ECC Regulations requires that obligation(s) must:

(a) be based on the nature of the problem identified;

(b) be proportionate and justified in light of the objectives laid down in Section 12 of the Communications Regulation Act 2002-2023 and Regulation 4 of the ECC Regulations;[1034] and

(c) only be imposed following public consultation.

[1034] Pursuant to Section 12 of the Communications Regulation Act 2002 (as amended), ComReg's relevant objectives in relation to the provision of electronic communications networks and services are: (i) to promote competition; (ii) to contribute to the development of the internal market; and (iii) to promote the interests of users within the Community. Regulation 4 of the ECC Regulations further specifies ComReg's objectives and sets out a number of obligations in relation to the pursuit of its objectives.

9.2 Existing Remedies

9.4 Before considering the remedies which would best address the competition problems arising in the Commercial NG WLA Market, ComReg explains briefly the remedies imposed in the 2018 Decision in respect of WLA. They include obligations of access, non-discrimination, transparency, accounting separation, price control and cost accounting.

9.2.1 Access

9.5 The 2018 Decision required Eircom to provide access to products, services and associated facilities in respect of Current Generation and Next Generation WLA including VUA, VUA combined with Geographic Number Portability ('**GNP**') where required, Interconnection services, Co-location services, Associated Facilities related to VUA, and Migrations.[1035]

9.6 The 2018 Decision also required Eircom to meet certain conditions in respect of the provision of access, including requirements governing fairness, reasonableness and timeliness of access, including Service Level Agreements ('**SLAs**') and product development timelines.

9.2.2 Non-Discrimination

9.7 The 2018 Decision imposed on Eircom a non-discrimination obligation in respect of WLA, which applies regardless of whether a specific request for products, services, associated facilities or information has been made by an Access Seeker to it. The requirement for non-discrimination applies as regards the treatment of Access Seekers by Eircom, so that Eircom must apply equivalent conditions in equivalent circumstances. It also applies as regards the treatment of Access Seekers and Eircom itself (including its subsidiaries, affiliates and partners).

9.8 The applicable standard of non-discrimination as regards pre-ordering, ordering, provisioning, fault reporting and repair for VUA and the Associated Facilities to VUA is the Equivalence of Inputs ('**EoI**') standard. In summary, products, services and information are provided to Access Seekers by means of the same systems and processes as Eircom provides to itself.

9.9 Finally, the 2018 Decision required Eircom to offer and provide Migrations on at least an Equivalence of Outputs ('**EoO**') basis. Where the standard of equivalence applicable to the destination product, service or facility is EoI, Eircom must provide the Migration on an EoI basis.

[1035] See 2018 Decision, Appendix 20 - WLA Decision Instrument.

9.2.3 Transparency

9.10 The 2018 Decision imposed on Eircom a general obligation of transparency in respect of the access that it is required to provide. In addition, the 2018 Decision specifies a number of requirements which Eircom must meet in respect of the information that must be made available to Access Seekers, including, in particular, an Access Reference Offer ('**ARO**') setting out the terms and conditions applicable to access, including prices and a detailed description of the products and services available from Eircom, and SLAs. Specific timelines apply in respect of the provision of advance notification to Access Seekers and to ComReg of proposed changes to the ARO, prices and the introduction of products, services and associated facilities.

9.11 Other specific transparency requirements include requirements regarding clarity of billing, the publication of Key Performance Indicators ('**KPIs**') and reporting on actual performance achieved on an aggregate basis compared to the committed service levels contained in relevant SLAs and the publication of information with respect to the progress of Access requests through the Eircom product development process as well as information on that process.

9.12 Finally, the 2018 Decision required Eircom to publish in advance of implementation, information regarding its Next Generation Access ('**NGA**') rollout plans, and information relating to wholesale products, services and associated facilities, such as the expected time for service availability.

9.2.4 Price Control

9.13 Under the 2018 Decision the provision of access to WLA services and associated facilities (e.g. FTTC VUA, co-location, fault repair, etc.) is subject to a cost orientation obligation with the exception of FTTP rental, for which pricing flexibility was permitted. Eircom is also subject to an obligation not to margin squeeze. The 2018 Pricing Decision and the 2018 Bundles Decision further specified this obligation into three Margin Squeeze Tests, namely the Wholesale FTTP Bitstream to Wholesale FTTP VUA MST, the bundles MST, and the standalone FTTPH MST. The cost orientation of FTTC prices is currently determined by reference to the Access Network Model (the '**ANM**') which calculates costs based on both Top-Down HCA and BU-LRAIC+ cost methodologies, as described in the 2021 ANM Decision.

9.2.5 Other obligations

9.14 The 2018 Decision also required Eircom to produce a Statement of Compliance. Under this obligation, Eircom is required to set out the measures and policies that it has in place in order to ensure regulatory compliance (regulatory governance) and to identify and mitigate compliance risks.

9.3 Remedies for the Commercial NG WLA Market

9.15 In the sections below ComReg sets out the remedies that it deems necessary to address the competition problems identified in Section 8, bearing in mind the requirement set out in Regulation 50 of the ECC Regulations to act proportionately and in the least intrusive way possible.

9.16 As explained in detail below, in light of the competition problems arising or likely to arise in the Commercial NG WLA Market, ComReg imposes on Eircom the full set of remedies (including obligations of access, transparency, non-discrimination, price control and cost accounting and accounting separation) so that obligations imposed in the 2018 Decision are in practice maintained. Eircom stated in its Submission that ComReg should not re-impose obligations on Eircom simply because they have been imposed in the past.[1036] The obligations detailed below, however, are not simply reconducted or maintained. Rather their imposition in this Decision is warranted given the competition problems identified in the Commercial NG WLA Market.

9.3.1 Access Remedies

Statutory requirements and criteria

9.17 Regulation 55(1) of the ECC Regulations provides that ComReg may impose on an operator, obligations to meet reasonable requests for access to, and use of, specific network elements and associated facilities where ComReg considers that the denial of such access, or the imposition on Access Seekers of unreasonable terms and conditions having a similar effect, would:

(a) hinder the emergence of a sustainable competitive retail market;

(b) not be in the interests of end users; or

(c) otherwise hinder the objectives set out in Section 12 of the Communications Regulation Acts 2002 - 2023 and Regulation 4 of the ECC Regulations.

9.18 According to Regulation 55(6) of the ECC Regulations, when imposing access obligations, ComReg may lay down technical or operational conditions to be met by the provider or the beneficiary of the access where necessary to ensure normal operation of the network. Conditions covering fairness, reasonableness and timeliness may also be attached to access obligations under Regulation 55(3) of the ECC Regulations.

[1036] Eircom Non-confidential Submission, paragraph 121.

9.19 In determining whether access obligations imposed under Regulation 55 of the ECC Regulations are appropriate and proportionate, ComReg must also have regard to the following:

(a) the technical and economic viability of using or installing competing facilities, in light of the rate of market development, taking into account the nature and type of interconnection and access involved;

(b) the expected technological evolution affecting network design and management;

(c) the need to ensure technology neutrality, enabling the parties to design and manage their own networks;

(d) the feasibility of providing the access proposed, in relation to the capacity available;

(e) the initial investment by the facility owner, bearing in mind the risks involved in making the investment;

(f) the need to safeguard competition in the long term, the requirement to give attention not only to economically efficient infrastructure-based competition but also to innovative business models that support sustainable competition, such as those based on co-investment in networks;

(g) where appropriate, any relevant intellectual property rights; and

(h) the provision of pan-European services.

9.20 For the reasons set out below and in respect of each of the specified access remedies, ComReg notes that only an access obligation is capable of addressing the competition problems identified in the market analysis and, in ComReg's view, there is no other less intrusive obligation available capable of achieving the same outcome.

9.21 As noted in Section 6, ComReg does not consider that existing or potential competition would effectively constrain Eircom's market power within the next five years. On the contrary, access to WLA will continue to be necessary to allow RSPs to purchase upstream inputs in the Commercial NG WLA Market and provide products to their customers in the downstream retail market(s). As set out in Section 8, as a vertically-integrated SP with SMP in the Commercial NG WLA Market, Eircom has the ability and incentive to refuse to supply WLA to Access Seekers, either actively or constructively, and to delay and prevent the development of sustainable infrastructure-based competition. Differences in bargaining power between Eircom and Access Seekers are likely to persist, particularly given the absence of widely available and appropriate alternative sources of supply within the timeframe of this review period. In this respect, imposing an access obligation on Eircom in respect of WLA products, services and associated facilities is necessary to ensure the development of sustainable and effective downstream competition and to minimise exploitation and/or foreclosure concerns that could arise absent regulation, and no other obligation would achieve the same outcome.

9.22 Against this background, ComReg maintains (subject to amendments and clarifications as discussed below) Eircom's existing obligations of access to WLA, and notes the following as regards the criteria listed in Regulation 55 of the ECC Regulations:

(a) In terms of the **technical and economic viability of using or installing competing facilities**, given the barriers to entry in the Commercial NG WLA Market (related to control of infrastructure/resources not easily duplicated, economies of scale and scope), using or installing competing facilities to avail of WLA throughout the Commercial NG WLA Market is not likely to be feasible within the period of this review. This is evidenced by Eircom's high and persistent market share on the Commercial NG WLA Market, and ComReg does not consider that Eircom's competitive position is likely to materially alter on the Commercial NG WLA Market over this market review period. Eircom has, to date, been providing WLA products, services and associated facilities. Furthermore, no issue arises with access to WLA, as regards expected technological evolution affecting network design and management. Eircom continues its rollout of FTTP XGS-PON technology with the handover of FTTP-based VUA traffic on the Access Seeker's Wholesale Ethernet Interconnect Link ('**WEIL**'), which is entirely consistent with handover of FTTC-based VUA[1037] (including exchange-launched VUA)[1038] traffic and the need to ensure technological neutrality enabling parties to design and manage their networks;

(b) There is also no question as regards the feasibility of providing access in relation to **capacity available**. WLA products, services and associated facilities are currently provided by Eircom, and ComReg is not aware that there would be any material capacity constraints that would give rise to Eircom facing difficulties in meeting access obligations in future. Eircom has signalled that it may proceed over the forthcoming years with switching off its copper network,[1039] which will result in a migration from FTTC-based VUA to FTTP-based VUA;

(c) ComReg does not see that Eircom's (and its predecessors') **initial investment** in WLA constitutes a reason not to impose an access obligation and notes that Eircom benefitted for many years from protection from competition and that the price control allows for a reasonable return on Eircom's investment;

[1037] Active VDSL equipment required to provide broadband service is housed in an Eircom street cabinet.

[1038] Active VDSL equipment required to provide broadband is housed in an Eircom exchange building or equivalent.

[1039] https://www.openeir.ie/wp-content/uploads/2021/03/White-paper_Leaving-a-Legacy.pdf

(d) By contrast, ComReg considers that an access obligation is required having regard to the **need to safeguard competition** in the long term. Of particular concern is the risk of actual or constructive denial of access which could impede the development of sustainable retail competition;

(e) Intellectual property rights are not a concern in the context of the provision of WLA products, services and associated facilities and ComReg cannot see that they constitute a reason not to oblige Eircom to provide such access;

(f) ComReg considers that WLA access obligations should facilitate the provision of pan-European services on the basis that ComReg's approach is consistent with the policies of the EC and other NRAs. Consistent regulation of WLA across the EU will help to support seamless provision of pan-European services by allowing SPs in other Member States to provide electronic communications services in Ireland (for example, by using Eircom's WLA products, services and associated facilities, potentially combined with other wholesale services, to compete in the State); and

(g) Finally, for the purposes of Regulation 55 of the ECC Regulations specifically, no issue of relevance arises in terms of the expected technological evolution affecting network design and management from a WLA perspective.

9.23 Accordingly, it is necessary, proportionate and justified to impose on Eircom an access obligation pursuant to Regulation 55 of the ECC Regulations.

9.24 In addition to an obligation to meet reasonable requests for access under Regulation 55(1) of the ECC Regulations, Eircom is subject to an obligation to provide specified forms of access under Regulation 55(2)(a) of the ECC Regulations. These include obligations to:

(a) negotiate in good faith under Regulation 55(2)(c) of the ECC Regulations,

(b) not to withdraw access to facilities already granted under Regulation 55(2)(d) of the ECC Regulations,

(c) provide co-location and other forms of associated facilities sharing under Regulation 55(2)(g) of the ECC Regulations; and

(d) provide access to operational support systems ('**OSS**') or similar software systems under Regulation 55(2)(f) of the ECC Regulations.

9.25 ComReg also attaches conditions to those obligations in order to ensure fairness, reasonableness and timeliness of access. Details of the obligation are set out below.

Obligation to meet reasonable requests for access

9.26 On the basis that access to Eircom WLA is necessary to ensure the development of sustainable and effective downstream competition and to minimise exploitative and/or foreclosure concerns arising from Eircom's position of SMP, Eircom is required to meet reasonable requests for access, as provided for under Regulation 55 of the ECC Regulations.

9.27 There are a number of corollaries to the obligation to meet reasonable requests for access:

(a) Any refusal must be objectively justified;

(b) Access granted ought not to be withdrawn; and

(c) Negotiations for access must be conducted in good faith.

Justification for refusal to grant of access limited to objective criteria

9.28 The obligation on Eircom to meet reasonable requests for access means that Eircom may only deny requests that are not reasonable. In practice, ComReg expects that circumstances giving rise to a legitimate denial of access would be exceptional and limited to those situations where the request is denied for objective reasons, such as that it is not technically feasible to meet the request for access, or there are concerns regarding the protection of Eircom's network integrity which are not capable of being mitigated otherwise than through denying access. This is consistent with the Code which states at Recital 191:

> *"… such requests should be refused only on the basis of objective criteria such as technical feasibility or the need to maintain network integrity".*

9.29 ComReg notes in this regard that, in considering whether requests for access are reasonable, in addition to ascertaining (where necessary) the technical feasibility of the requests, Eircom may, negotiating in good faith (see paragraphs 9.44 to 9.48), set out those terms and conditions that it proposes to attach to the product or features required to meet the access request. It may do so having regard to the applicable requirements in respect of fairness, reasonableness and timeliness of access (see paragraphs 9.123 to 9.125). Conversely, requests for new forms of access (new products/variations on existing products) may only be refused where Eircom's reasonable concerns cannot be addressed by way of reasonable terms and conditions.

9.30 Once a form of access is reasonable and a product is made available, there is no basis to decline or refuse orders for access which meet the reasonable terms and conditions associated with the product concerned.

9.31 In its Submission Eircom contends that ComReg has incorrectly summarised and unduly limited the meaning of Recital 191 EECC when considering the grounds upon which Eircom can reject access requests. Recital 191 EECC states that:

> *"such requests should be refused only on the basis of objective criteria* ***such as*** *technical feasibility or the need to maintain network integrity".*[1040] [emphasis added]

9.32 Eircom further contends that the wording of Recital 191 EECC does not provide ComReg with such legal power to limit Eircom's consideration only to technical feasibility and network integrity, and that according to Regulation 12 of the Access Regulations (now Regulation 55 of the ECC Regulations) (and the Code) states that ComReg must also have regard, for example, to *"economic viability"* and the *"initial investment by the facility owner, bearing in mind the risks involved in making the investment"* in imposing remedies.

9.33 According to Eircom, the key requirement in assessing reasonableness is the use of objective criteria which can then be applied in respect of any reasons why an Access request may be unreasonable, including, for example, on the basis that it is economically infeasible based on market trends and/or market needs. The fact that ComReg accepts (as discussed below) that it would not be proportionate to force Eircom to maintain access to facilities once granted in all cases and regardless of circumstances would support Eircom's contention that there are additional considerations which would allow the refusal of an access request. According to Eircom, if there are proportionate circumstances that allow the withdrawal of access to facilities already granted, it logically follows that there are also similar circumstances, using objective criteria, to refuse access based on similar considerations that would make an access request unreasonable.[1041]

9.34 However, it appears to ComReg that Eircom is conflating the considerations which ComReg <u>must</u> take into account when imposing access obligations with the considerations which Eircom <u>may</u> take into account when considering an Access request. In its Submission, Eircom refers to Regulation 12 of the Access Regulations (now Regulation 55 of the ECC Regulations), which states that ComReg shall take account of

[1040] Eircom Non-confidential Submission, paragraph 116.

[1041] Eircom Non-confidential Submission, paragraph 116.

> *"technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of access or interconnection involved, including the viability of other upstream access products such as access to ducts".*

9.35 This clearly relates to what ComReg must take into account when considering imposing access obligations and the proportionality of same. In contrast, Recital 191 of the Code is concerned with the circumstances where an operator subject to an obligation to meet reasonable requests for access may refuse access. Recital 191 states that requests for access should only be refused on the basis of objective criteria such as technical feasibility or the need to maintain network integrity. This is very similar to the wording adopted in the Decision Instrument for this Decision and, in both Recital 191 and the Decision Instrument, network integrity and technical feasibility are simply examples of objective criteria which Eircom may rely on to refuse access. To note, there is no reference in Recital 191 to economic viability.

9.36 While Recital 191 does not limit the objective criteria which may be relied on by an operator to refuse access to technical feasibility and network integrity, it does indicate that only objective criteria should be permissible. In this regard, a refusal of access based on Eircom's commercial strategy or its assessment of Access Seeker needs does not constitute an 'objective criterion' as it involves the subjective intentions of Eircom.

Reasons to be given

9.37 In order to ensure clarity as regards the scope of Eircom's obligation to meet reasonable requests for access, new products, or amendments to existing products, and to limit the possibility of misunderstandings and disputes between Eircom and Access Seekers, the reasons on which Eircom relies in refusing access (whether partial or in full) must be communicated in writing to the Access Seeker concerned at the same time as the refusal, in sufficient detail to allow the Access Seeker to understand the reasoning for the refusal

9.38 Furthermore, with a view to facilitating monitoring by ComReg of compliance by Eircom with its obligation of access, Eircom shall provide ComReg on a monthly basis with the list of all Access requests by way of new products or amendments to existing products received from any Access Seeker which have been accepted or rejected, refused or otherwise declined within the month, in each case giving the reasons for not meeting the request for access.

Requirement not to withdraw access to facilities already granted

9.39 Given that access to Eircom's WLA products, services and associated facilities is necessary to address the competition problems which, absent regulation, would likely arise from Eircom's position of SMP, once granted, there ought to be no reason for withdrawal. However, ComReg does not necessarily consider it proportionate to force Eircom to maintain access to facilities once granted in all cases and regardless of circumstances. Rather, Eircom may apply for ComReg's prior approval before any withdrawal of access. ComReg considers that this approach will promote regulatory certainty for all parties without unduly restricting investment incentives.

9.40 In its Submission, VMI sought assurances that ComReg will take into account the views of all interested industry stakeholders as part of its decision-making process for product withdrawals[1042] and Vodafone submitted that ComReg should always consult with impacted relevant parties as a matter of process.[1043] Where Eircom proposes to withdraw access, ComReg may consult with relevant parties prior to making a decision on whether to grant or to withhold approval for any such request, in which case any submissions made in response to consultation will be taken into account by ComReg. More generally, any decision to approve or refuse a request for withdrawal will have regard to the reasons for the withdrawal and the impact on third parties, including affected operators.

9.41 Where ComReg decides to approve a request for withdrawal, it may impose terms and conditions including for the purpose of protecting users of the product being withdrawn, such as requiring that sufficient notice is provided.

9.42 In arriving at the decision to approve or refuse Eircom's request, Eircom is required to notify ComReg, in writing, of any proposal to withdraw Access to facilities already granted, giving reasons borne out of a detailed analysis of the proposed Access withdrawal, including the impact that the withdrawal of Access is likely to have on existing WLA customers and end-users. ComReg will provide a predicted decision date to Eircom as its request advances through the withdrawal request process.

[1042] VMI Non-confidential Submission, p.25.

[1043] Vodafone Non-confidential Submission, p.13.

9.43 In its Submission Eircom addressed, as part of the withdrawal of access to facilities already granted, the issue of migration from copper services to fibre services, submitting in particular that ComReg approval should not be unduly withheld or subject to lengthy migration/copper switch-off periods. ComReg notes that migration from legacy infrastructure is dealt with in the CSO Decision.[1044] Under that decision, Eircom has an obligation to provide its Switch-off Proposal to ComReg for approval. Where Eircom complies with the requirements of the Framework, ComReg will provide its approval.

Requirement to negotiate in good faith

9.44 Absent regulation, Eircom has the ability and incentive to expressly or constructively refuse to provide access to WLA. An obligation to negotiate in good faith regarding requests for access (including for improvements, variations or other amendments to an existing product) makes it more difficult for Eircom to do so. The obligation will also somewhat address imbalances between the bargaining powers of the respective parties in the negotiation process by reducing incentives to unnecessarily prolong negotiations. Negotiating in good faith includes in this regard Eircom assisting Access Seekers in formulating, for instance, technical aspects and specifications of their requests for access, in light of its knowledge and expertise of its own network and systems.

9.45 In its Submission, Eircom sought to draw a distinction between *"'assisting' access seekers and requiring eir to reformulate access seekers requirement"*, noting that *"it is not the responsibility of its staff to reformulate Access Seeker's requests, be it from a technical, regulatory or network integrity perspective". "Ultimately, Eircom argues, the Access Seeker is responsible for their own access request"*.[1045]

9.46 ComReg agrees that the obligation to negotiate in good faith does not involve a requirement on the part of Eircom to assist Access Seekers in formulating their Access requests. However, the requirement to negotiate in good faith, given that Eircom has knowledge and expertise of its own network and systems which is not readily available to Access Seekers means that Eircom staff ought to provide meaningful guidance to Access Seekers as to how their Access requests could be best formulated, having regard to the purpose which the access would be put to. This obligation seeks to address the technical knowledge imbalances between the respective parties by reducing incentives to unnecessarily prolong product development timelines.

[1044] Framework for the Migration from Legacy Infrastructure to Modern Infrastructure, Response to Consultation and Decision, Decision D09/23, ComReg 23/102, dated 1 November 2023.

[1045] Eircom Non-confidential Submission, paragraph 119.

9.47 The obligation to negotiate in good faith encompasses the way in which Eircom conducts negotiations, as well as the positions that it takes in them. In investigating an allegation of a failure to negotiate in good faith, ComReg may draw inferences from Eircom's behaviour and from the adequacy of the processes and controls it has put in place to assure compliance with this obligation. For example, ComReg may draw adverse inferences from:

(a) a failure on the part of Eircom to behave in the way that a willing seller would behave when negotiating with a willing buyer;

(b) a failure by Eircom to respond to proposals made by Access Seekers in a timely and constructive manner;

(c) a failure by Eircom to deploy participants in the negotiations who have the appropriate knowledge and authority, so that negotiations can proceed in a timely manner;

(d) the absence of effective controls to assure that decision-making processes within Eircom in relation to the negotiations cannot be influenced by concerns about the commercial impact on Eircom's downstream business; and

(e) the presence of incentives for individuals within Eircom who participated in or influenced the negotiations that might lead them to receive greater financial or other benefits if the negotiations were to be delayed, or to result in an outcome other than that which might have been freely negotiated between a willing buyer and a willing seller.

9.48 The precise nature of any investigation and the degree to which inferences might be drawn from behaviour would need to be assessed in the context of the actual circumstances of any particular case.

Access to Eircom's Operational Support Systems

9.49 Access to Eircom OSS (or similar software systems) plays an important role in Eircom's provisioning of wholesale services to Access Seekers and its own downstream arm. This includes access to OSS for the purposes of pre-ordering, ordering, provisioning, repair (including service assurance) and in-service management.

9.50 In its Submission, Sky contended that Eircom's Unified Gateway ('**UG**') system used by Access Seekers to place an order or log a fault is not fit for purpose and is a consistent source of problems for Access Seekers and, ultimately, consumers and end users. Sky stated that it recorded **[✂** [redacted] **✂]** where the system was performing poorly and there were delays to the system's functionality. Sky proposed that ComReg should consider how it can ensure that the UG works effectively.[1046]

9.51 Sky's concerns show that an obligation to provide access to its OSS is needed because Eircom has the ability and incentive to impede access to its OSS (in order to leverage its market power into downstream and adjacent markets). Without effective and efficient access to Eircom's OSS, Access Seekers are at a significant competitive disadvantage relative to Eircom's downstream arm. Requiring Eircom to provide access to its OSS is essential to the effectiveness and efficiency of the operational aspects of the supply of WLA products, services and associated facilities that are used as inputs to the supply of service(s) to end users.

9.52 As for all Access obligations, Eircom is required to provide Access in a timely, reasonable and transparent manner and this gives Access Seekers the basis for requiring of Eircom that it addresses issues with an OSS, such as the UG, including issues with the UG SLA, where the manner in which access is provided does not meet their operational/business needs.

9.53 SFG argued in its Submission[1047] that it has **[✂** [redacted] **✂]**. It indicated that Access Seekers have no recourse in such situations but to go through the rescheduling process again.

9.54 SFG recommended the removal of Eircom's missed appointment penalties which, it claims, has resulted in a significant administrative burden to Access Seekers and is a process that is open to abuse. SFG is also concerned that the penalty creates the wrong incentives for Eircom's subcontractors – it is financially and reputationally optimal to blame customers than to bear the responsibility themselves.

[1046] Sky Non-confidential Submission, p.6.

[1047] SFG Submission, p.20-21.

9.55 SFG argued that [✂ [redacted] ✂]. By contrast, SFG argues that there are insufficient service credit penalties under current SLAs to incentivise Eircom in the same way.[1048]

9.56 SFG sought guidance on whether Eircom, as the SMP SP, can continue to enforce missed appointments charges [✂ [redacted] ✂][1049]

9.57 As regards the broader issue of the levying of a missed appointments penalty, Eircom incurs costs associated with appointments on behalf of Access Seekers and the principle of a missed appointments penalty does not appear to be, in itself, unreasonable. No-show or missed appointment fees are charged across numerous industries where the failure by a customer to attend at a nominated time results in a revenue loss to the service provider because resources which could be gainfully employed are not used. ComReg therefore considers that Eircom – like any other SP - is entitled to charge a missed appointments penalty where there is a genuine missed appointment.

9.58 However, as Eircom is levying a charge on the Access Seeker, there is an onus on Eircom to be able to provide proof that the customer was at fault for the missed appointment. In this regard, in 2022 an Access Seeker raised CRD ID 919 with Eircom seeking:[1050]

> [✂ [redacted] ✂]

9.59 Eircom declined this CRD request due, in its view, to the technical infeasibility of providing the requested OSS information in real time. However, in its response to the request, Eircom indicated that:

(a) Relevant information is already made available in the event of missed appointments; and,

[1048] SFG Submission, p.2 and p.20.

[1049] SFG Submission, p.21.

[1050] A Customer Requirements Document ('**CRD**') is a request made by an Access Seeker to Eircom for a specific form of Access which is detailed in the CRD.

(b) In cases where there is a dispute over a missed appointment Open Eir can investigate further information from its supplier to clarify the dispute but cannot pass specific details on due to the risk of breaching GDPR (either in respect of the end user or the technician).

9.60 ComReg's position is that an Access Seeker should be able to obtain evidence/clarification from Eircom on disputed missed appointments. Where an Access Seeker is not satisfied with such evidence/clarification and the matter cannot be resolved, it may raise the matter with ComReg by submitting a dispute for resolution in accordance with Regulation 67 ECC.

Specified forms of access

Overview

9.61 In addition to the general obligation to meet reasonable requests for access to WLA products, services and associated facilities, ComReg imposes access requirements upon Eircom to provide a specific range of WLA products, services and associated facilities. The details of those access remedies are described below.

9.62 For the avoidance of doubt the access obligations do not preclude Eircom from developing, or Access Seekers requesting, additional functionality or features, in accordance with Eircom's obligation to meet reasonable requests for access, as set out above. In doing so, Eircom must act in a non-discriminatory manner consistent with the obligations set out in Section 9.3.2 of this Decision.

9.63 ComReg imposes the following access requirements on Eircom to provide access to a specific range of WLA products, services and associated facilities:

(a) Virtual Unbundled Access ('**VUA**') (including FTTP-based VUA and FTTC-based VUA) and VUA combined with GNP where required (see paragraphs 9.68 to 9.76) in the form of an active enhanced Layer 2 product which allows the handover or interconnection of aggregate end users' connections at the Metropolitan Point of Presence ('**MPoP**') providing Access Seekers with a level of control similar to that afforded by Local Loop Unbundling;

(b) Co-location, co-location resource sharing and co-location rack interconnection (see paragraphs 9.77 to 9.92);

(c) Interconnection services (see paragraphs 9.93 to 9.96), including:

i. In-Building Handover ('**IBH**'), providing a connection from the Eircom network to the Access Seeker's equipment within the exchange, or equivalent facility;

ii. In-Span Handover (‘**ISH**’) providing a connection between the exchange and the Access Seeker’s nominated Point of Handover;

iii. Customer-Sited Handover (‘**CSH**’) providing a connection from the Eircom network to the Access Seeker’s equipment in the Access Seeker’s premises, which includes the installation of an Eircom NTU at the Access Seeker’s premises; and

iv. Edge Node Handover (‘**ENH**’) providing a connection from the Eircom network through a dedicated aggregation node interface to the Access Seeker’s equipment;

(d) An interconnection sharing service, allowing an Access Seeker to share its Interconnection Services with another Access Seeker (see paragraphs 9.97 to 9.102);

(e) Migrations, allowing an upstream NG wholesale input used to supply a retail service to be changed whilst maintaining services to the end user, irrespective of whether or not the supplier at the retail level changes (see paragraphs 9.103 to 9.109);

(f) Associated Facilities, including:

i. Multicast, whereby a single copy of a designated data stream from the Access Seeker is distributed within the Eircom network to multiple end users;

ii. Traffic-based and circuit-based Class of Service (‘**CoS**’) providing for the autonomous treatment of traffic at a single router, switch or equivalent equipment using classes to group and manage traffic that have common forwarding characteristics; and

iii. 1:1 VLAN tagging (see paragraphs 9.110 to 9.121);

(g) Access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services (see paragraph 9.122).

9.64 In addition, in all cases, Access must be provided in a fair, reasonable and transparent manner and a number of requirements governing fairness, reasonableness and timeliness of access, including SLAs and requirements regarding timeliness of product development, are set out below.

9.65 ComReg also considered whether to require Eircom to make access to its Optical Distribution Network (‘**ODN**’) available via other forms of ODN sharing,[1051] which could allow Access Seekers to use Eircom’s existing ODN to offer WLA services to their end users. ComReg engaged third-party consultant Analysys Mason to consider and report on the potential for ODN sharing. In October 2022, Analysys Mason produced a report for ComReg setting out its findings (the ‘**ODN Sharing Report**’), a copy of which is attached at Annex 14 below.

9.66 In summary, ComReg understands that there are several potential approaches to non-active ODN sharing in the local access network. These approaches align with global technical standards and are part of major vendor capabilities and roadmaps. The implementation of ODN sharing in local access networks appears, however, to be limited at this stage.

9.67 ODN sharing, using one or more of the mechanisms detailed in the ODN Sharing Report, could be technically feasible over local access networks during the lifetime of this market review. This being the case, SIRO in its Submission was of the view that non-active ODN sharing should be one of the specified form of Access that Eircom must make available.[1052] However, having considered the matter, ComReg does not believe that it is appropriate to do so at this stage, due to current technical, operational and commercial limitations (refer to Figure 1.3 of ODN Sharing Report). This does not preclude, and is without prejudice to, future requests for access based on technological developments during the lifetime of this market review.

Access to VUA and VUA combined with GNP

9.68 ComReg maintains Eircom’s obligation to provide access to VUA, including FTTC-based VUA, FTTP-based VUA and Exchange launched VUA, on a standalone basis. Eircom currently meets this obligation by way of a standalone wholesale Layer 2 access product that enables the handover of aggregate end user traffic at the Access Seeker’s Metropolitan Point of Presence (‘**MPoP**’) (that is, the point of interconnection between the access and core networks of an operator). This means that Eircom offers a VUA service without a Plain Old Telephony Service (‘**POTS**’) included, which allows Access Seekers (VUA being offered at Level 2) to differentiate their services above Layer 2 of the OSI reference model, i.e. at Layer 3, the Internet Protocol Layer, and above.

9.69 The VUA product includes two product variants:

[1051] In addition to VUA which is Layer 2 active ODN sharing.

[1052] SIRO Non-confidential Submission, p.19.

(a) FTTP-based VUA which uses an access network architecture consisting of optical fibre lines in both the feeder and the drop segments, so that the customer's premises (the home or, in multi-dwelling units, the apartment) are connected to the Exchange or other similar facility by means of optical fibre; and

(b) FTTC-based VUA whereby the active VDSL equipment required to provide the broadband service is housed in an Eircom street cabinet. FTTC-based VUA includes Exchange launched VUA (EVDSL) where the active VDSL equipment required to provide the broadband service is housed in an Eircom exchange building or equivalent.

9.70 The primary difference between these two VUA variants is the attainable bit rate (the number of bits per second that can be transmitted along a network path) achievable and that symmetric profiles can only be provided on the FTTP variant. Access Seekers generally purchase these VUA variants to enable them to develop and sell broadband services which will meet the requirements of the residential and small to medium business sector.[1053]

9.71 The demarcation points at the end user premises (the Network Termination Unit ('**NTU**'))[1054] and at the point of interconnection (the Wholesale Ethernet Interconnect Link ('**WEIL**'))[1055] are the same for both VUA variants.

9.72 Eircom in its Submission contended that it was no longer possible to provide VUA combined with GNP due to changes in industry porting processes. Eircom now describes the migration to VUA and the porting of the number as two independent events. As a result, the only thing Eircom would be able to do would be to facilitate the migration to VUA and respond to the PortingXS ('**PXS**') request to port out the number in line with the porting obligations.[1056]

[1053] See Open Eir NGA VUA Product Description, Version 10.0, 25 October 2021.

[1054] Network Termination Unit or ('**NTU**') means the equipment that resides at the demarcation point between the access network and end users' network or CPE. FTTP-based VUA requires an Optical Network Termination ('**ONT**') at the demarcation point at the end user's premises.

[1055] WEIL is the interconnection service Eircom provides to handover various products including Next Generation Access ('**NGA**') and Next Generation Ethernet ('**NGN**') wholesale products.

[1056] Eircom Non-confidential Submission, paragraph 120.

9.73 ComReg does not agree that the provision of VUA and the industry process for porting prevents Eircom from meeting an obligation to provide VUA combined with GNP. The requirement on Eircom to provide VUA combined with GNP means that Eircom cannot cause or allow any impediment or delay with respect to the provision of VUA to an Access Seeker and the facilitation of an associated port request.[1057] This includes, but is not limited to, ensuring that Eircom notifies the Access Seeker in a timely manner when a VUA order has been completed to allow that Access Seeker to submit a port request. It also includes a requirement that Eircom ensures that account number details relevant to a voice service, that an end user may have been provided with via the Eircom network immediately prior to the provision of VUA are retained on its systems to facilitate the timely processing of a port request that an Access Seeker may submit in relation to an order for VUA. This facilitates an efficient switching process to the benefit of competition and, ultimately, end users.

9.74 ComReg mandates VUA (combined with GNP as required) as the least intrusive remedy.

Emulated FTTC-like service on the FTTP network

9.75 Eircom may, during the next five years, wish to withdraw copper-based services from part or all of its network and ultimately, any impacted end users using FTTC-based VUA services who have not elected to migrate to FTTP will be required to do so if they wish to maintain service on the Eircom network. Article 81 of the Code, transposed by Regulation 63 of the ECC Regulations, set out provisions on migration from legacy infrastructure to modern infrastructure. These provisions are applicable to SPs designated with SMP.

9.76 ComReg is of the view that, were Eircom to switch-off its copper network (in accordance with any requirements applicable at that time in respect of migration from legacy infrastructure to modern infrastructure) such that it would no longer be in the position to provide Access to an FTTC-based VUA product, it is necessary to ensure that Access Seekers continue to have access to an FTTC-like service on Eircom's FTTP network. This emulated FTTC-like service on the FTTP network should be offered in an EA from the time that Eircom initiates the withdrawal of FTTC in that EA, so that Access Seekers may continue with a similar product offering and that there continues to be an 'anchor' for the FTTP VUA product suite in particular as regards prices, as discussed below in Section 9.3.4. Although such an emulated FTTC VUA service is to be provided on the FTTP network, it is to be designed to deliver at least an access typical of a FTTC-based VUA, and priced at no more than the relevant regulated maximum price for FTTC-based VUA.

[1057] The obligations for porting or numbers are set out in Regulation 90 of the ECC Regulations.

Co-location: access to accommodation/power facilities

9.77 Co-location is a service which allows an Access Seeker to receive VUA traffic at its Point of Handover ('**PoH**') (that is, the physical point at which the two networks are interconnected to allow traffic to pass between them) within an Eircom exchange building or similar facility. Co-location services include serviced space and ancillary services (including both Alternating Current ('**AC**') and Direct Current ('**DC**') power, and air conditioning where available) in an Eircom exchange building or similar facility.

9.78 Co-location is required so that Access Seekers' electronic equipment which is required to offer a retail or wholesale product or service can be housed in the serviced space or co-location equipment rack. The co-location equipment rack will contain the WEIL and the Access Seekers' fixed backhaul service. Co-location facilitates the fixed PoH, providing the complete path from the NTU/ONT to an Access Seeker's network.

9.79 For the avoidance of doubt the number of connections for an Access Seeker in a co-location footprint is not limited to one. Vodafone noted in its Submission that it is reasonable to allow two separate backhaul services (on fibre) to be connected to the same co-location footprint whether routed into the co-location footprint via separate sub-ducts or from the same Access Seeker's chamber or diversely from different Access Seeker's chambers.[1058] ComReg notes that Eircom implements diverse fibre routes to its main exchanges to ensure diversity of its core transmission serving these exchanges. Similarly, an Access Seeker can request diverse fibre routes from its co-location rack(s) to its nominated chamber(s).

9.80 In addition to existing co-location options, Eircom must ensure that the physical co-location product offering also includes a cable route from the Access Seeker's co-location to a wireless PoH so that Access Seekers can install wireless backhaul. While wireless backhaul can be installed as a backup to the primary fixed backhaul, in some circumstances, wireless backhaul may be a viable alternative to fixed backhaul where it is not technically and/or economically feasible for the Access Seeker to use fixed backhaul services. To facilitate wireless backhaul, different co-location facilities are necessary i.e. access to the building roof, access to an existing mast within the exchange property, a connection from the co-location rack to the antenna, etc.

[1058] Vodafone Non-confidential Submission, p.13-14.

9.81 Eircom was concerned in its Submission that such a requirement was disproportionate, given that it does not own many masts and is unlikely to build many in the future.[1059] However, there is no requirement on Eircom to develop an active wireless PoH. Rather Eircom is required to ensure that where an Access Seeker wishes to install wireless backhaul in an exchange, in order to transmit VUA traffic to its own network, and access a third-party owned mast on the exchange building/property, Eircom has to provide a containment route from the Access Seeker's co-location rack to a mast on the exchange building/property so that the Access Seeker can install its cable connecting its co-location footprint to its equipment installed on the mast.

Co-location Resource Sharing

9.82 Eircom is required to offer access to co-location Resource Sharing whereby an Access Seeker ('**Guest Access Seeker**') uses the co-location resources of an existing Access Seeker ('**Host Access Seeker**') under a commercial agreement between a Host Access Seeker and a Guest Access Seeker. Such resource sharing allows Access Seekers to lower the cost of co-location and optimise returns on investment, thereby lowering entry and/or expansion costs and allowing them to achieve greater efficiencies and economies of scale.

9.83 This may also facilitate greater optimisation of space within an Eircom exchange as unused co-location space is minimised. By contrast, refusing co-location Resource Sharing may raise Access Seeker costs, including decreasing their economies of scale and impeding their ability to compete with Eircom, which is likely to have greater economies of scale and scope.

Co-location Rack Interconnection

9.84 Eircom continues to be required to allow Access Seekers to interconnect their co-located equipment in exchange buildings or similar facilities. This will enable Access Seekers to share services or to offer wholesale services to other Access Seekers. For example, this would enable Access Seekers to share backhaul resources efficiently.[1060]

9.85 Access Seekers' equipment racks are normally adjacent or in close proximity within the exchange. Access Seekers could route their fibre cables directly between their adjacent equipment racks, or route their fibre cables using cable trays between racks of equipment or by other means, as appropriate.

[1059] Eircom Non-confidential Submission, paragraph 137.

[1060] See Vodafone Non-confidential Submission, p.13 seeking clarification as to whether this is an existing Eircom product. Co-Location Interconnection Rack is provided by Eircom and is described as part of the Physical Co-location Product Description, Version 5.0, dated 9 April 2021 (p.4) https://www.openeir.ie/products/data/physical-co-location/

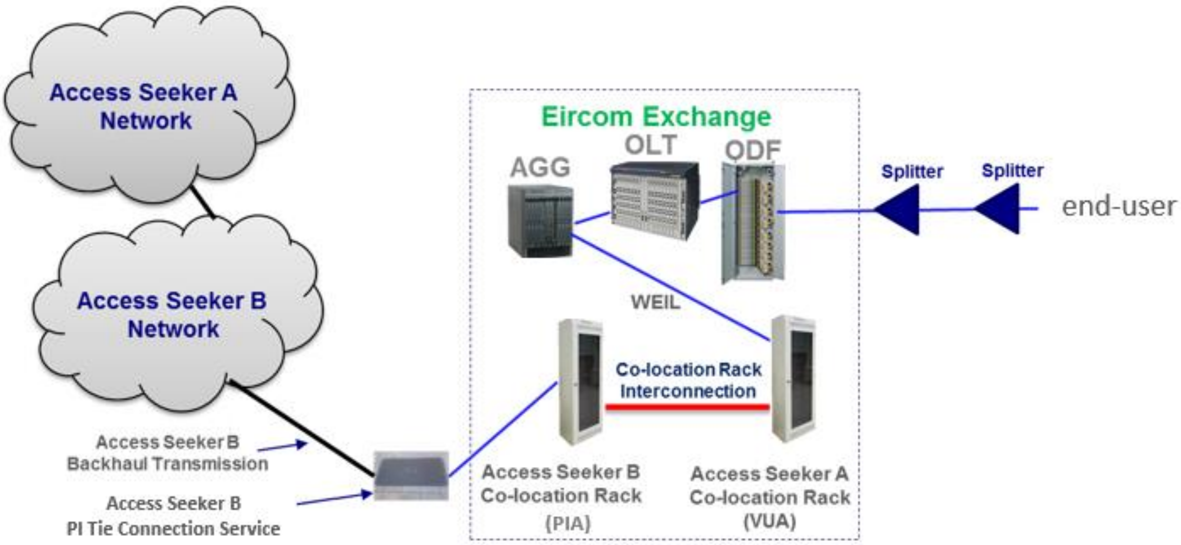
9.86 Co-location rack interconnection enables and supports the provision of WLA products and services and is an Associated Facility within the meaning of the ECC Regulations. In particular, it is a facility associated with an Electronic Communications Network (‘**ECN**’) or an Electronic Communications Service (‘**ECS**’) which enables or supports, via exchange cable trays, conduits and wiring, the provision of WLA products and services via that network or service.

9.87 As depicted in Figure 33, in order to provide services to end users, Access Seeker ‘A’ (‘**AS-A**’) may install equipment in a rack on a co-location footprint within an Eircom exchange (or equivalent). Connectivity is then required between the equipment in AS-A’s co-location footprint and AS-A’s network in order to route traffic to and from the end user, thus enabling the provision of WLA services to end users.

9.88 Access Seeker B (‘**AS-B**’) is also co-located in the same exchange (or equivalent) and has infrastructure that allows connectivity between AS-B’s co-location (in Eircom’s Exchange) and AS-B’s network. Using co-location rack interconnection, AS-A can establish a connection between its equipment in its co-location footprint (in Eircom’s Exchange) to equipment in AS-B’s rack (also within its co-location footprint within the Eircom exchange) using co-location rack interconnection.

9.89 In this way, connectivity from equipment in AS-A’s co-located rack to AS-A’s network can effectively be achieved via a backhaul service offered by AS-B. Co-location rack interconnection enables and supports the take-up of WLA services and the provision of downstream services to end users. Co-location rack interconnection can result in lower costs for Access Seekers as they may be able to avail of an alternative backhaul service from other co-located Access Seekers. Allowing Access Seekers to share backhaul increases their economies of scale and scope, thereby reducing barriers to WLA take-up and encouraging deeper infrastructure competition.

Figure 33: Co-location Rack Interconnection



9.90 When considering the regulatory burden for Eircom of implementing co-location rack interconnection, ComReg considered the following three deployment scenarios:

(a) **Scenario 1:** The racks are immediately adjacent to each other and the Access Seeker's technician connects a fibre or copper cable between the Access Seekers' racks;

(b) **Scenario 2:** The racks are not adjacent to each other, but there is a cable tray to enable the routing of fibre between the two racks by the Access Seeker's technician; and

(c) **Scenario 3:** The racks are not adjacent to each other and there is no cable tray to facilitate co-location rack interconnection. In this case, construction work may be required e.g. Eircom installs a cable tray between co-location racks.

9.91 In the case of Scenario 1 and Scenario 2 above, the burden on Eircom is likely to be minimal as the work to facilitate co-location rack interconnection could be completed by the Access Seeker's technician. In the case of Scenario 3, Eircom implements Quote for Infrastructure Build ('**QIB**') and Provide Infrastructure Build ('**PIB**') wholesale processes[1061] that are available to facilitate the construction of cable trays and the installation of fibre/copper connectivity, if required.

[1061] https://www.openeir.ie/products/data/physical-co-location/

9.92 In its Submission, Eircom requested that ComReg consider its views on co-location which it had set out in its Submission to the PIA Consultation.[1062] In that Submission, Eircom appeared to require that ComReg impose obligations in respect of Access Seekers and clarify that all Access Seekers availing of the Rack Interconnection Service must ensure that all their cables are clearly labelled, safe and tidy and where Eircom infrastructure is being used, that they seek permission in advance with details provided on route and trays to be used to ensure the quality and integrity of cabling is maintained, and that they are required to follow any guidelines that may be issued by Eircom for this facility in any exchange (e.g. using IBH Racks).[1063] However, when designating an operator with SMP, ComReg may only impose obligations on that operator for the purpose of addressing the competition problems arising from the position of SMP. ComReg cannot impose requirements on other operators. ComReg notes that the issues raised by Eircom are matters that Eircom may seek to address by way of reasonable terms and conditions including amendments to existing terms and conditions via its product development process.

Access to Interconnection Services

9.93 ComReg maintains Eircom's obligation to provide Interconnection services and facilities. Interconnection is the physical and/or logical connectivity between networks required to enable the handover of traffic between an Access Seeker's network at the PoH. Eircom currently provides Interconnection Services using the WEIL product set including the following variants (together, '**Interconnection Services**'):

(a) In-Span Handover ('**ISH**');

(b) Customer-Sited Handover ('**CSH'**);

(c) In-building Handover ('**IBH'**); and

(d) Edge Node Handover ('**ENH'**).

9.94 Interconnection is necessary to connect Access Seekers' networks with Eircom's network. Without interconnection, competition in downstream markets would be restricted to resale of services, which limits scope for product differentiation by Access Seekers, undermining consumer choice and competition in the market. Access to Interconnection Services allows an Access Seeker to purchase VUA, and the variant forms of Interconnection are required to provide flexibility for Access Seekers requiring interconnection.

[1062] Eircom Non-confidential Submission, paragraph 135.

[1063] Eircom PIA Non-confidential Submission paragraphs 214 – 217.

9.95 Access to Interconnection Services allows an Access Seeker to purchase VUA. Interconnection Services are essential for Access Seekers to be able to provide ECS and ECN services. The range of Interconnection Services (outlined in paragraph 9.93) is required to provide flexibility for Access Seekers requiring interconnection.

9.96 For example, not all Access Seekers have sufficient infrastructure of their own that is close enough to Eircom's network, to economically or commercially avail of Eircom's IBH or ISH services. Conversely, if CSH were the only interconnection type available, then larger-scale Access Seekers would not be in a position to take advantage of their own infrastructure deployments to lower their costs of interconnection. Access Seekers could end up paying for products, services and associated facilities which are unnecessary for the services that they require. Therefore, the full suite of interconnection services is required (outlined in paragraph 9.93) to ensure that there is sufficient flexibility as Access Seekers will have invested in building out network infrastructure to varying degrees.

Access to Interconnection Sharing Service

9.97 ComReg requires Eircom to provide access to an Interconnection Sharing Service, a service which Eircom already provides as part of its access obligation in the Modern Interface Wholesale High Quality Access ('**MI WHQA**') Markets. An Interconnection Sharing Service allows an Access Seeker ('**Guest Access Seeker**') the opportunity to negotiate a commercial agreement with another Access Seeker ('**Host Access Seeker**') for access to its Interconnection Services to allow the Guest Access Seeker to gain access to VUA-based products. An Interconnection Sharing Service can allow for a more efficient and effective use of interconnection and ensure the Guest Access Seeker can rapidly rollout its VUA-based services to the ultimate benefit of competition and end users.

9.98 In particular, an Interconnection Sharing Service allows the Guest Access Seeker the facility to request Eircom to terminate its VUA traffic on a WEIL which is owned by the Host Access Seeker in circumstances where the Host Access Seeker agrees commercially to allow the Guest Access Seeker to use its WEIL(s). While some Access Seekers may wish to maintain exclusive use of their Interconnection Services, other Access Seekers may wish to share their Interconnection Services, especially where their Interconnection capacity greatly exceeds their own requirements (e.g. 10 Gbps and 100 Gbps WEILs).

9.99 In its Submission, Eircom contended that ComReg had failed to consider the full impact on all stakeholders (in particular, on Eircom). Eircom noted that in order for it to make a (potential) return on its FTTP investment, its business case assumes Access Seekers will purchase a combination of WLA and WCA FTTP services[1064] and that regulatory remedies and commercial services (including Co-location, Co-location Resource Sharing and Co-location Rack Interconnection; Access to Interconnection (IBH, ISH, CSH, and ENH); and commercial backhaul) already exist for Access Seekers so that such a service was not necessary.[1065] In particular, they already support an Access Seeker's ability to climb the ladder of investment so that Interconnection Sharing was not proportionate or justified.[1066]

9.100 However, ComReg notes that there is little burden involved for Eircom as it minimises the provision/build of new Interconnection Services, given that an Interconnection Sharing Service is implemented using Interconnection Services which are already in place (or on order).

9.101 The Interconnection Sharing Service is the first rung on the ladder of investment where a guest Access Seeker reaches agreement to utilise the Interconnection Services of a host Access Seeker. An Access Seeker which wishes to purchase VUA services on a national basis will require an Interconnection Service at every NGA exchange (c.180 Interconnection Services in total). Without this facility, an Access Seeker may not be in a position to purchase VUA services in the Commercial NG WLA Market. It allows the guest Access Seeker to obtain scale in the Commercial NG WLA Market by growing its WLA customer base while lowering the cost of gaining access to this market. Having grown its customer base over time, while using Interconnection Sharing, the guest Access Seeker may wish to continue to climb the ladder of investment and purchase its own Interconnection Services.

[1064] Eircom Non-confidential Submission, paragraphs 122 and 124.

[1065] Eircom Non-confidential Submission, paragraph 122.

[1066] Eircom Non-confidential Submission, paragraph 125.

9.102 Interconnection Sharing can encourage Access Seekers, who do not wish to directly invest in co-location and backhaul facilities, to purchase VUA services, thereby promoting competition and encouraging co-investment by parties seeking access. In accordance with Article 3 of the Code, Interconnection Sharing promotes efficient investment and innovation in new and enhanced infrastructures, by permitting various cooperative arrangements between parties seeking access to diversify the risk of investment. For these reasons, Interconnection Sharing is proportionate and justified as it promotes efficiency, sustainable competition, efficient investment and innovation, to the benefit of end users, while imposing no additional cost burden on Eircom.

Access to Migration Services

9.103 ComReg maintains Eircom's obligation to facilitate migrations. A migration process is essential to allow an Access Seeker to migrate an end user between wholesale access products and between SPs. It provides the ability for an Access Seeker to change wholesale inputs in response to demand-side requirements or for optimization of supply-side inputs with the minimum possible disruption to end users.

9.104 The ability of an Access Seeker to migrate between wholesale inputs is a fundamental requirement for properly functioning downstream markets. If an Access Seeker cannot seamlessly and efficiently switch between wholesale access products, competition in wholesale and/or retail market(s) would be severely hampered, because an Access Seeker would not be able to freely choose between the wholesale access products that best meets its business needs and the needs of its end users.

9.105 For example, if an Access Seeker is consuming standalone FTTC services and that Access Seeker wishes to consume FTTP services, then a Migration service would be required to migrate the end users from standalone FTTC to standalone FTTP.

9.106 If Access Seekers are unable to efficiently switch between wholesale inputs, this could artificially raise their costs and inhibit them from evolving their business strategy or restrict sales.

9.107 ComReg also requires Eircom to explicitly offer the option to combine Migration Services with GNP (see paragraph 9.73 above). GNP facilitates the retention of existing telephone numbers by an Access Seeker and its end users. When GNP is combined with a Migration Service such as standalone FTTC-based VUA service to standalone FTTP-based VUA service, the end user's telephone number can be transferred from the current SP to the Access Seeker when the standalone FTTP-based VUA service is delivered. This facilitates an efficient switching process to the benefit of competition and, ultimately, end users.

9.108 ALTO and BT stated in their respective Submissions that they were not aware that Eircom made available a VUA-to-VUA bulk migration facility and if ComReg believes this facility should be available then a strong regulatory remedy is required.[1067]

9.109 ComReg notes that Eircom already supports VUA-to-VUA migration at scale via its PNO (Provide NGA from Other) order type. Access Seekers can submit orders via Web GUI, Web Service or File Transfer Protocol ('**FTP**'). In the case of migrations involving VUA from different network providers, the migrations may be implemented via cease order (on the transferring network provider's VUA service) and provide order (on the receiving network provider's VUA service). Cease/provide orders can be issued by Access Seekers in bulk using the FTP order channel.

Access to Associated Facilities including Multicast, Class of Service ('CoS') and 1:1 VLAN tagging

9.110 ComReg maintains Eircom's obligation to provide access to Associated Facilities including, in particular, access to Multicast and CoS, which enable or support the provision of Access Seekers' services via VUA. ComReg further requires Eircom to provide access to 1:1 VLAN tagging, which allows an end user to tag specific traffic which the end user can use to identify that specific traffic when it has been transported across the Access Seeker's ECN.

[1067] ALTO Non-confidential Submission, p.5, and BT Non-confidential Submission, p.4.

9.111 All three specified Associated Facilities are key to an Access Seeker's ability to support and differentiate its product offerings. Multicast is a key technical feature required to support Internet Protocol Television ('**IPTV**') on VUA services and is accordingly necessary to allow Access Seekers to offer bundles including IPTV services. As of July 2023, an estimated 108,000 premises availed of IPTV services.[1068] While IPTV can also be provided using unicast, a unicast IPTV solution is not scalable due to the burden of supporting data streams for each IPTV session across the network infrastructure.

9.112 As such, access to Multicast features is essential for Access Seekers to technically and economically provide a viable IPTV service. The absence of a VUA Multicast capability would require a significant upscaling of the Access Seeker's network infrastructure, would be inefficient, and would erect a barrier to entry unduly raising Access Seeker costs.

9.113 Similarly, the availability of CoS parameters is key to the provision of managed VoIP RFTS. Voice services are delay and time sensitive from the end user's perspective. In providing VoIP, Access Seekers must ensure a minimum standard for Quality of Service ('**QoS**') parameters such as jitter,[1069] latency[1070] and frame loss.[1071] These QoS parameters are equally important for other types of services, for example Video on Demand ('**VoD**'), that an Access Seeker may wish to offer using wholesale inputs such as VUA.

9.114 CoS traffic markings identify the priority that should be attached to end user traffic when being processed by network components such as routers and switches. Traffic markings must be applied at the CPE/NTU and transparently transported in the access network. This enables the Access Seeker to manage application-specific traffic appropriately, as traffic is transmitted across the Access Seeker's core network.[1072] CoS features (both traffic and circuit) are necessary to ensure that Access Seekers can innovate and differentiate their service offerings to both residential and non-residential end users.

[1068] https://www.comreg.ie/industry/electronic-communications/data-portal/tabular-information/

[1069] 'Jitter' means the variation in the time, generally measured in milliseconds (ms), between packets arriving at a destination, which can be caused by network congestion, timing drift, or route changes.

[1070] 'Latency' means the time it takes, generally measured in milliseconds (ms), for a source to send a packet of data to a receiver. The key causes of latency tend to be propagation delay, serialisation, data protocols, routing and switching, and queuing and buffering.

[1071] 'Frame Loss' means the failure of one or more transmitted frames to arrive at their destination. This occurs when frames are damaged and discarded, or when the capacity of an intermediate network component is exceeded, which results in frame being discarded.

[1072] Traffic markings associated with CoS features are appropriate in the context of ensuring delay sensitive traffic, such as voice or VoD-related traffic, is managed appropriately. For the avoidance of doubt, CoS features or traffic management should not be implemented in a way which could give rise to concerns with respect to Net Neutrality.

9.115 Finally, ComReg requires Eircom to make available a new associated facility, namely a 1:1 Virtual Local Area Network (‘**VLAN**’) tagging feature which allows the use of C-VLAN ID range (i.e. 1 – 4096) by end users to tag their traffic. This, in turn, will allow an end user to identify traffic marked with specific C-VLAN IDs as all C-VLAN IDs are carried transparently across the Access Seeker’s ECN. ComReg notes that Eircom provides access to the 1:1 VLAN tagging feature[1073] on its FTTC-based VUA and FTTC-based Bitstream Plus VEA products. Using this feature, an Access Seeker can innovate and differentiate its service offerings to residential and non-residential end users.

9.116 BT stated that 1:1 VLAN tagging should allow the correct operation of business Local Area Network (‘**LAN**’) services over broadband and ComReg should clearly specify the service feature in detail (down to individual tag level).[1074] ComReg does not believe that this is necessary. The 1:1 VLAN tagging service feature can be implemented in the same way that the feature is implemented on the FTTC VEA service. This will enable an Access Seeker to migrate its FTTC VEA services to FTTP VUA services when the 1:1 VLAN tagging service feature is available on FTTP. ComReg reserves the right to intervene, as appropriate, including to require Eircom to make certain changes to the 1:1 VLAN tagging service feature.

9.117 Eircom opposed the requirement to provide 1:1 VLAN tagging and was of the view that ComReg had failed to take into consideration that there are already a number of existing access remedies available to Access Seekers given that Eircom currently provides an extensive set of medium to high speed data services on its NGN network with 1:1 VLAN tagging. ComReg would also have failed to consider the implications of such access on the MI WHQA market and in particular the impact on Eircom’s wholesale leased line business.[1075]

9.118 Eircom noted that it provides an FTTC VEA product (1:1 VLAN tagging), but that demand to date is low. Eircom stated that the relevant bandwidth from a technology capability perspective is limited on its FTTC VEA service compared to the services Eircom also offers in the MI WHQA market. As such, Eircom maintains that the potential cannibalisation of its leased line business is limited and does not jeopardise the economic viability of Eircom’s investment in the MI WHQA market. In contrast a requirement to offer an FTTP 1:1 tagging service would have a catastrophic impact so that 1:1 VLAN tagging on FTTP services is not proportionate or justified.[1076]

[1073] The feature is available on a product known as Virtual Ethernet Access (‘**VEA**’).

[1074] BT Non-confidential Submission, p.9.

[1075] Eircom Non-confidential Submission, paragraph 126 - 127.

[1076] Eircom Non-confidential Submission, paragraph 128 - 129.

9.119 However, ComReg notes that Eircom's NGN Ethernet service provides the business user with a dedicated local access link (Wholesale Symmetrical Ethernet Access ('**WSEA**')) with symmetrical bandwidth whereas Eircom's FTTP local access is shared between multiple end users (up to 32 and 64 end users on GPON and XGS-PON technologies respectively) and provides access to broadband services with asymmetrical bandwidth. A user of Eircom's NGN Ethernet service can be assured that its symmetrical bandwidth requirements on its dedicated local access link will always be met. There is no such assurance on FTTP unless the bandwidth requirement is low as the guaranteed bandwidth is capped at 10 Mbps.[1077] This means that there are different services and ComReg does not see that the 1:1 VLAN tagging feature on FTTP-based VUA can have the catastrophic impact that Eircom claims it would have on its investment in the MI WHQA Market. Notwithstanding this, any valid access request in a regulated market shall not be refused on the grounds that the SMP wishes to prevent cannibalisation of revenues from other services in the same or another market. To permit this would be to the detriment of dynamic efficiency in the sector.

9.120 ComReg notes that demand for FTTC VEA does not necessarily extrapolate to demand for the 1:1 VLAN tagging feature on FTTP-based VUA. The 1:1 VLAN tagging feature on FTTP was previously developed by Eircom having received an Access request from an Access Seeker but the service feature was not launched.[1078] 1:1 VLAN tagging capability is an inherent technical feature and is available on wholesale networks using PON technology.

9.121 Eircom has up to seven months from the effective date of this Decision (including a prior notification period of one month to ComReg) to publish and make this associated facility available on publication date to Access Seekers.

Grant open access to technical interfaces, protocols and other key technologies

9.122 ComReg maintains Eircom's obligation to grant open access to technical interfaces, protocols and other key technologies that are indispensable for the interoperability of WLA services.

[1077] Open Eir NGA VUA Product Description, V10.0, dated 25 October 2021

https://www.openeir.ie/wp-content/uploads/2023/08/NGA-Product-Description-Virtual-Unbundled-Access-V10_0-Unmarked-25102021.pdf

[1078] CRD 343 Fibre To The Home GPON Ethernet Access, received on 27 September 2016, cancelled by Eircom on 01 July 2021.

Conditions to ensure fairness, reasonableness and timeliness of access

Overview

9.123 Regulation 55(3) of the ECC Regulations permits ComReg to attach conditions covering fairness, reasonableness and timeliness to obligations and requirements for access. In order to ensure fair but effective and timely access to the Commercial NG WLA Market, ComReg attaches conditions to Eircom's obligations of access.

9.124 In order to ensure that Eircom provides access on fair and reasonable terms, ComReg requires that Eircom:

(a) Seek approval from ComReg for changes to the rules or technical standards for the deployment of telecommunications equipment in the access network, including changes to the access network's design, topology and the Copper Loop Frequency Management Plan ('**CLFMP**');

(b) Negotiate in good faith and offer meaningful Service Level Agreements (SLAs), that is, legally binding contracts between Eircom and Access Seekers committing Eircom to defined service levels, as further described below;

(c) May only impose restrictions on access that are intended for the protection of the integrity of the network to the extent that they are justified, reasonable and proportionate;

(d) May not refuse access by way of new product development or amendments to an existing product, unless the request is unreasonable and objective reasons have been provided to the Access Seeker;

(e) May not decline orders for an existing product where the order meets the terms and conditions for the product; and,

(f) Where an order is declined, provide specific and clear reason text and codes to the Access Seeker at the closure of the order. The use of generic reason codes should be exceptional.

9.125 In order to ensure that access is provided on a timely basis, ComReg requires Eircom to:

(a) Adhere to specified processes and timelines as regards the development of new products or amendments to existing products;

(b) Adhere to specific processes and timelines as regards the negotiation of SLAs in respect of new products or amendments to existing products; and

(c) On a monthly basis, provide to ComReg a report listing all Access requests which have been accepted or refused/declined and the reasons therefor.

Changes to the rules or technical standards governing the deployment of access network equipment and network topology including changes to the Copper Loop Frequency Management Plan (‘CLFMP’)

9.126 ComReg maintains Eircom’s obligation to seek approval from ComReg in writing for changes to rules or technical standards for the deployment of telecommunications equipment in the access network, including changes to the access network’s design and topology, and to clarify further how approval is to be sought and granted as the case may be. ComReg is of the view that a pre-approval requirement is an appropriate and proportionate mechanism to ensure that the rules or technical standards do not unnecessarily or excessively impact on services already available and that Access Seekers’ requirements are taken into account by Eircom when adopting changes.

9.127 Eircom defines rules and sets the technical standards which network equipment must comply with in order to ensure that services offered over Eircom’s access network operate correctly. The rules and standards also ensure that the introduction of new network equipment does not adversely affect equipment already installed or services already being availed of by end users. They also include the CLFMP which defines the spectral rules that all Access Seekers’ equipment must comply with if such equipment is to be deployed on Eircom’s copper access network.

9.128 Rules and standards accordingly allow for the efficient running of the access network. Having such rules and standards is best practice for Network Operators and is a key component of good network management.

9.129 Details of the design and topology of the access network are also made available by Eircom to Access Seekers in a number of files (for example, the Advanced Prequal File (‘**APQ File**’), Network Deployment Plan, etc.) so that Access Seekers may plan, design and deploy their own network equipment. For example, an Access Seeker may choose to deploy equipment in a ‘parent’ exchange to avail of VUA for their end users in that exchange and any ‘child’ exchanges.

9.130 Eircom has the ability to make changes to the access network technology or technical standards which may be designed or have the effect of affecting or restricting access, including access already granted. Examples of access network topology changes include (noting that this list is not exhaustive and is provided for guidance):

(a) Rehoming of ‘child’ exchanges from one ‘parent’ to another;

(b) Rehoming of FTTP end users from one exchange to another;

(c) Redesignation of a ‘child’ exchange to a ‘parent’ exchange;

(d) Redesignation of a ‘parent’ exchange to a ‘child’ exchange; and

(e) Changes to exchange designations.

9.131 Examples of changes to the rules and technical standards include Eircom’s rollout of fibre in the access network, which required new rules and technical standards for the deployment of optical equipment. ComReg expects that the rules and standards for the deployment of network equipment on Eircom’s access networks will likely continue to evolve as new developments in access network technology result in the deployment of new equipment. Similarly, changes/enhancements to copper-based services may require changes to the CLFMP in order to accommodate the frequencies that will need to be injected into the copper access path by the associated network equipment, thus allowing new services to be delivered to end users.[1079]

9.132 All such changes to the rules, technical standards and access network topology have the potential to impact on existing services already being provided to end users, and they need to be managed in an orderly manner. An approval process allows ComReg to ensure that proposed changes to rules, or technical standards for the deployment of telecommunications equipment, including changes to access network topology, do not prevent or hamper the development of sustainable and effective downstream competition. An essential aspect of the process is that Access Seekers are aware of the nature of the change(s) proposed, the benefits accruing to Access Seekers and end users and the interference risks associated with deploying new equipment in the access network. This requires a change process that is rigorous and implemented with a high degree of transparency in order for Access Seekers to fully understand the implications of the proposed change to the rules and technical standards.

9.133 In addition, Access Seekers should be afforded equal opportunity to propose changes to the rules, technical standards, and access network topology, when necessary. This should be available via Eircom’s product development process and Eircom should provide support to Access Seekers, as required.

[1079] Given Eircom’s announcement of its intention to switch off its copper network, and the increased investment in the industry in modern infrastructure networks, it is likely that development and changes on the copper access network will be minimal over the period of this market review. However, for as long as the copper network is in service, the CLFMP shall be maintained and kept up to date by Eircom.

9.134 ComReg will assess proposed changes to any rules, technical standards, or access network topology, from the perspective of potential impacts on end users and Access Seekers and either approve or not approve the proposed change, as appropriate, subject to any conditions to be met. To facilitate its assessment, Eircom is required to provide to ComReg all relevant documentation and data pertaining to the proposed change including:

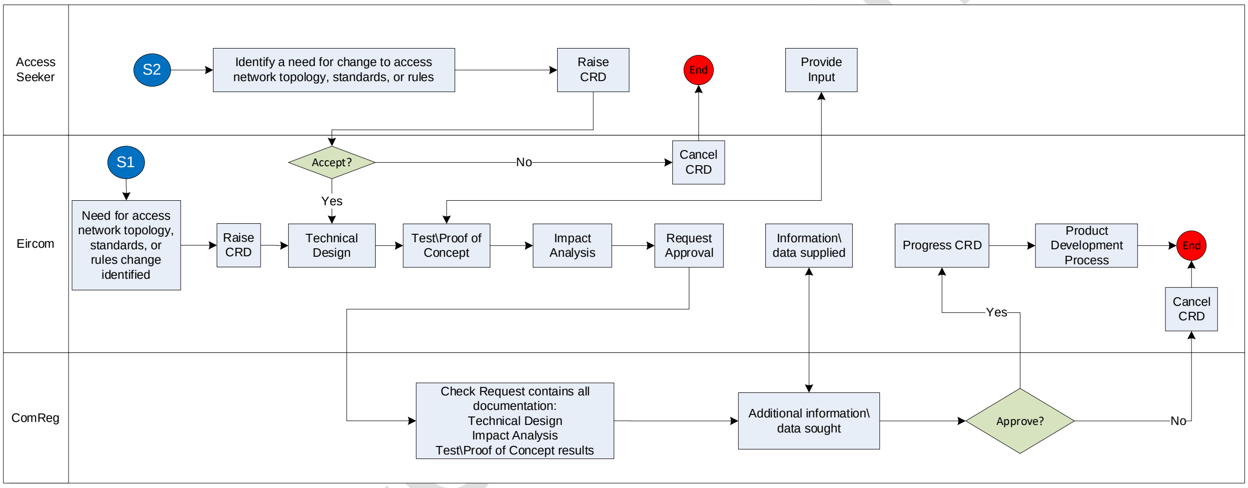
(a) Technical Design;

(b) Test/Proof of Concept results; and,

(c) Impact Analysis.

9.135 More particularly, the change process outlined in Figure 34 includes a requirement on the part of Eircom to carry out a detailed impact analysis of the proposed change on end users and Access Seekers.

Figure 34: Change process for Access Network rules, standards, or topology



9.136 Scenario 1 (‘**S1**’) is the start point when Eircom identifies a need for change, while Scenario 2 (‘**S2**’) is the start point when an Access Seeker identifies the need for change. A CRD is raised by Eircom for S1, and by the Access Seeker for S2 detailing the proposed change. The technical design describes in detail how the proposed change will be made and how it will function. The test/proof of concept is carried out by Eircom with assistance from Access Seekers, if necessary, to verify and validate the technical design. Access Seekers should have the opportunity to provide input to the test and trial and the test results should be made available to Access Seekers and to ComReg.

9.137 Only when ComReg’s approval is granted to the requested change to the rules, technical standards or access network topology, may changes be progressed using Eircom’s standard product development process with all associated document updates and notifications.

9.138 In its Submission, Eircom stated that it should not be required to seek ComReg approval where such changes do not impact Access Seekers, including changes to meet operations' requirements, or to protect or enhance the network which should be made in the shortest possible time.[1080]

9.139 However, Eircom is required not to withdraw access to facilities already granted without the prior approval of ComReg. ComReg notes that routine network updates/changes, which in some cases may require an outage, are managed via the existing Open Eir change management process.

Product Development

9.140 A properly functioning product development process[1081] is particularly important for ensuring the development of effective competition in downstream markets and to allow Access Seekers to plan for and provide innovative services to downstream customers, including end users. Uncertainty regarding the content and timing of product updates creates uncertainty in the market and can potentially lead to increased costs across the industry and to concerns regarding the availability of information to Eircom's downstream arm in advance of competing retail operators. Conversely, increased clarity and certainty with respect to product developments and process changes should enable Access Seekers to plan for such changes more effectively and, where necessary, to implement consequential changes to their own systems and processes. Any resulting improvement in resource allocation across industry may lead to lower costs and improved speed to market for product innovations, ensuring the development of effective competition to the ultimate benefit of end users.

9.141 Eircom's product development process is complex. ComReg acknowledges that complexity arises in part from the need to accommodate a number of competing priorities using finite resources. In order to ensure that requests for access (including requests which are initiated by Eircom itself – either its retail or wholesale arm) are processed in a manner that is fair, reasonable and timely, however, there should be full clarity as regards key decision gates and development stages, so that Access Seekers may fully exercise their right to make requests for access to Eircom. In turn, the key decision gates and development stages should allow for active Access Seeker participation.

9.142 In particular, clarity is required as regards the following:

(a) The **timeline** during which the request will be developed and launched;

[1080] Eircom Non-confidential Submission, paragraphs 158-159.

[1081] The Eircom Regulated Access Product ('**RAP**') Product Development Process is a series of steps undertaken to bring a product idea from conception through to product launch.

(b) The **stages** of the product development process, including the times at which Access Seekers may provide inputs; and,

(c) The **making of a request for access**: the **information** that needs to be provided in order for an Access request to be processed by Eircom.

9.143 As regards the product development process, the following should ensure that the appropriate information is exchanged and that there is adequate interaction and engagement between Eircom and the Access Seeker making the Access request but also, other Access Seekers:

(a) Eircom to acknowledge a request for access, be it for a new product, service, or associated facility or an amendment to an existing product, service, or associated facility, including in both cases requests for SLAs, in writing to the requestor within three (3) working days of receipt and providing the requestor with a unique reference to identify the Access request;

(b) All Access Seekers to be informed of receipt of a request for Access, as soon as possible and in any event within fifteen (15) working days of the receipt of the request, to include details of the request's allocated unique reference number (to allow tracking of the request), a copy of the request, and a description of the key features and functionality requested;

(c) Within fifteen (15) working days of the receipt of the request, on a per request basis, Eircom shall publish an engagement plan outlining:

i. How and when it will consult and seek design input from the requestor and other Access Seekers (for example, workshops, meetings, Eircom's Product Development Workshop ('**PDW**'), etc.);

ii. How and when it shall consult and seek views from the requestor and other Access Seekers with regard to SLA requirements;

iii. What timelines will be used for design input and SLA negotiations (in the case an Access request is for a new or amended SLA); and

iv. When it will issue its status update (see below), which should be as soon as possible, but no later than eighty five (85) working days after receipt of the request;

(d) Eircom to publish a status update as soon as practicable and in any event within eighty five (85) working days of receipt of the request, with the following information:

i. A description of the solution to be provided including any aspects of the proposed solution which do not reflect or are inconsistent with the request, and the objective reasons therefor, including in particular differences in key features, functionality, or any other limitations;

ii. The development timelines including proposed notification, publication and launch dates;

iii. What timelines will be used for SLA negotiations (in the case where an Access request is for a new or amended product, service or Associated Facility); and

iv. The priority level granted to the request and any impact on the priority granted to other Access requests, including any input values and calculations used by Eircom in the determination of the prioritisation of the request, and where other Access requests are being reprioritised as a result (whether granting a lower or higher priority), the reasons for same.

9.144 In its Submission Eircom argued that ComReg had provided no justification or cogent reasoning as to why the product development timelines and associated actions required pursuant to the 2018 Decision were insufficient and did not address the competition problem identified and that it was unclear how ComReg's alternative product development process which was equally complex, was capable of addressing the competition concerns raised.[1082]

9.145 Eircom submitted that:

(a) the reduction in time for publishing an Access request from 40 working days to 15 working days was not justified or proportionate, and that ComReg had not considered whether existing obligations already addressed the competition problem identified.[1083]

(b) publishing an engagement plan could not be completed within the first 15 working days of receipt of an Access request as each Access request needs to be assessed on a case-by-case basis which may require different levels of engagement with operators; a period of 55 working days was appropriate;[1084] and

[1082] Eircom Non-confidential Submission, paragraphs 148.

[1083] Eircom Non-confidential Submission, paragraphs 151-152.

[1084] Eircom Non-confidential Submission, paragraph 153.

(c) development timelines should be indicative and not actual timelines in order to account for the possibility of plans being changed due to new higher priority access requests,[1085] and Eircom did not understand what extra information it could provide Access Seekers in this respect.[1086]

9.146 However, even accounting for prioritisation, there is no predictability as to how active Access requests in the Commercial NG WLA Market progress. To show just one example, on the Product Change Request Log (‘**PCRL**’),[1087] there is CRD 704.[1088] This has a prioritisation score of 50 and was requested in December 2019 and scoped in April 2020. As of the date of publication of this Decision, CRD 704 still has not progressed beyond the planning stage into the development stage over the intervening four year period. Meanwhile, CRDs 862,[1089] 939,[1090] and 942[1091] which were raised in November 2021, October 2022, and October 2022 with prioritisation scores of 44, 44 and 51 respectively have actually launched in March/April 2023. This opaque decision-making does not lead to certainty for Access Seekers as to the treatment and progression of Access requests.

9.147 While ComReg accepts that interaction may be needed between Eircom and the requestor to seek clarifications on requirements prior to publication of an Access request, an 8 week period is excessive for that purpose and a 3 week period is sufficient. This is particularly the case as finalised requirements are not in fact a prerequisite for publication of an Access request or an engagement plan. Rather, early publication of the details of the Access request will allow Access Seekers to play a more inclusive part in the early stages of product development, thereby creating more certainty on what will be delivered. Eircom can use the engagement plan to outline the timeline from the publication date of the Access request to the status update (a maximum of 85 working days after receipt of Access request) which will include the timeline to finalise requirements (if necessary), the timeline and method to engage with Access Seekers, the SLA Negotiation Period (if necessary) and the date of the status update.

[1085] Eircom Non-confidential Submission, paragraph 154-155.

[1086] Eircom Non-confidential Submission, paragraph 156.

[1087] PCRL dated 17 August 2023.

[1088] [✂ [redacted] ✂].

[1089] [✂ [redacted] ✂].

[1090] [✂ [redacted] ✂].

[1091] [✂ [redacted] ✂].

9.148 ComReg is further of the view that a period of three weeks is reasonable for publication of the engagement plan. While ComReg agrees that each Access request must be assessed on a case-by-case basis, there are only a finite number of activities which could be required and need to be planned for (for example, further requirements gathering (including SLA requirements, if necessary), industry workshops, bi-laterals, etc.). During the initial assessment of an Access request, Eircom should be able to determine which elements will be needed going forward. A template engagement plan can be prepared in advance which would be tailored on a per Access request basis.

9.149 ComReg notes also that the prioritisation process to date has not been functioning effectively. ComReg does not consider that indicative timelines would provide sufficient certainty to Access Seekers or improve the functioning of the process. While the Eircom product development process outlines the input criteria that make up the prioritisation score for each Access request, Eircom only publishes the final score, not the value it gives to each of the four input criteria (Financial Impact, End User Experience, Resource Requirements, Execution Risk).[1092] This is the clarity and transparency which ComReg considers is required and the values assigned for each of these input criteria for each Access request should be published to enable a direct comparison of different Access requests. ComReg notes that the assigning of values remains for Eircom and allows Eircom to decide which developments it will prioritise and resource.

9.150 The requirements to be met by Eircom in terms of product development differ from the requirements set out in the PIA Decision. In particular, in contrast to the requirements for PIA, ComReg is not imposing a maximum product development timeline in the Commercial NG WLA Market. This reflects the wider variation in complexity of Access requests which may arise in the Commercial NG WLA Market, compared to the PIA Market. Access requests in the Commercial NG WLA Market are more likely to require IT development both on Eircom's external facing OSS systems and on Access Seekers' integrated Business Support Systems ('**BSS**'). Hence, it is more difficult to require Eircom to deliver all Access requests in a one size fits all finite timeline.

[1092] These criteria are defined in Eircom's Product Development Process documentation.

9.151 In response to VMI's request for more details as regards the justification for the different approach in the PIA and the Commercial NG WLA markets,[1093] ComReg notes that analysis of the development times for Access requests in the market as per Eircom's PCRL showed a wide variation in development times depending on the request making it more difficult to set a meaningful maximum period for development. ComReg has provided Eircom with more flexibility in setting timelines for development in the Commercial NG WLA Market, while still requiring Eircom to commit to a timeline of its own choosing to provide certainty for Access Seekers.

9.152 Allowing Eircom to propose the development timelines gives it the flexibility to assess each Access request individually and plan its delivery in the most efficient and time effective manner. This is balanced by the requirement that, once set by Eircom, the product development timelines proposed by Eircom in paragraph 9.143(d)(ii) above must be adhered to and may only be deviated from with ComReg's consent.

9.153 Moreover, in the case where an Access Seeker believes that Eircom is unduly delaying the development of an Access request, it may seek ComReg's intervention by way of dispute resolution under Regulation 67 of the ECC Regulations. Furthermore, ComReg may independently intervene in the case where Eircom proposes a timeline which is unreasonable or unduly long, by directing Eircom to deliver the request within a specific timeline and ensure that the Access request is met in a timely manner.

Trials

9.154 ComReg notes that trials may be required as part of the development process for products, services or associated facilities, including in particular to test technical or operational readiness including, in certain circumstances, with end users. ComReg maintains Eircom's obligation to provide information to Access Seekers with respect to conducting trials. Thus, standard notification and publication timelines do not apply to trials, provided that a number of conditions are met and procedural steps followed, subject always to the condition that a trial should not be conducted in such a way that the product or process being trialled is effectively being launched. This could be the case, for example, where a fully operational system is trialled for a prolonged period. Trials are accordingly permitted only for a reasonable period sufficient only to achieve the objectives of the trial, and they should terminate at least one month prior to the launch of the new or amended product, service or facility being trialled, save as otherwise agreed with ComReg.

[1093] VMI Non-confidential Submission, p. 25.

9.155 A key condition is that all Access Seekers have the opportunity to participate in trials. To that end, ComReg requires that Access Seekers be informed of a trial at least three months in advance by way of a written invitation to each operator that has signed a contract with Eircom on the basis of the ARO, and publication of a general invitation on Eircom's publicly available wholesale website, and ComReg having been notified one month in advance of Eircom informing Access Seekers of the trial. The notification to both ComReg and Access Seekers should include sufficient information with respect to any proposed trials to allow Access Seekers to make an informed decision as to their participation in the trial. This includes a statement of the objectives of the trial and the requirements for participation and information on any relevant interoperability tests.

Service Level Agreements ('SLAs')

9.156 SLAs are essential in ensuring Access Seekers' ability to rely on access to Eircom's network in delivering products in downstream markets, including in ensuring Access Seekers' ability to commit to service levels to their own customers. Both sub-standard SLAs and delays in negotiating and agreeing SLAs may have a significant detrimental impact on Access Seekers, in particular those who are trying to enter the market or grow market share and win customers from established SPs such as Eircom. Sub-standard SLAs, for example may manifest, *inter alia*, in inadequate repair times, or service credits at a level which do not incentivise Eircom to meet the service levels committed to. Delays in the development and availability of suitable SLAs can have an adverse impact on competition and on end-users, as the absence of suitable SLAs ultimately lowers certainty regarding the timeliness and quality of Access being provided.

9.157 In addition to demanding higher quality and more innovative products and services, end users expect efficient and timely provision of services, including a high degree of reliability and effective fault management and repair. As such, Access Seekers are reliant on efficient delivery, service quality and after-sales support from Eircom to be able to compete effectively in downstream markets. In this regard, the expected level of service, both at the point of delivery and in-life, are key selling points which can influence an end user when making a decision to purchase a product or service or to switch SP. This means that the SLAs supporting regulated WLA products are an extremely important component of the wholesale input and are integral to the wholesale offering.

9.158 Fit-for-purpose SLAs achieve two main objectives: first, they help, in setting agreed service levels between Eircom and Access Seekers, ensure that Access is provided in a manner that is fair, reasonable, and timely, and second, they ensure that Access Seekers are compensated where service levels are not met. The two go hand in hand. SLAs give Eircom actual and adequate incentives to deliver agreed service levels, allowing Access Seekers to commit to, and compete on, guaranteed levels of service in downstream markets, but only if SLAs provide for the payment by Eircom to Access Seekers of meaningful compensation where agreed service levels are not met.

9.159 Furthermore, the information provided to Access Seekers by Eircom to facilitate the operation of their business in the Commercial NG WLA Market, particularly relating to FTTP due to ongoing network rollout is a key component to enabling delivery of service to end users. Unreliable or incorrect information can result in poor outcomes for end users in their attempts to obtain a connection to the FTTP network, which can have a negative impact on Access Seekers' reputations.

9.160 To ensure the quality of FTTP information provided by Eircom to Access Seekers, in the Consultation ComReg considered that a condition of access should be that, upon request, an SLA be put in place regarding the accuracy of FTTP-related information. Eircom submitted that an SLA on the accuracy of FTTP rollout information supplied by Eircom would be unreasonable considering the purpose of SLAs. Eircom also suggested that it was inappropriate for ComReg to propose this in the context of ComReg having an obligation to remain impartial.[1094] Furthermore, Eircom stated that SLAs form part of commercial contracts and set out a supplier's commitment to provide services to an agreed quality in terms of timing and maintained that SLAs are not attached to the *"quality of information"*. Eircom suggested that such information can only be provided on a best effort basis. Eircom stated that if there is a competitive advantage to *"better information"* it would be a natural outcome without regulatory intervention, particularly over the period of the market review as SIRO and VMI continue to rollout but have no regulatory obligations imposed on them.[1095]

[1094] Eircom Non-confidential Submission, paragraph 141.

[1095] Eircom Non-confidential Submission, paragraphs 142-143.

9.161 In contrast, Sky noted that *"the accuracy of the homes passed files is critical to the service provided to consumers and end users"* and *"beyond SLAs ComReg should put in place remedies that improve the data provided within these files"*.[1096] SIRO's view was that *"ComReg should require Eircom to provide an indication of which premises passed will require a non-standard install. Or at the very least, stand up an SLA/KPI to measure transparently the accuracy to the APQ file, on a monthly basis"*.[1097] SFG agreed with ComReg that unreliable or incorrect information can result in poor outcomes for end users in their attempts to obtain a connection to the FTTP network and stated that

[✂ [redacted] ✂].[1098]

9.162 Eircom offers FTTP services as part of its suite of RAPs in the Commercial NG WLA Market. The APQ File provides information to Access Seekers on which premises can access NGA services (FTTC and FTTP) and so ComReg sees it as an essential component of the service. Over the course of the previous market review period, Access Seekers have raised the issue of accuracy in the APQ file, in particular in relation to FTTP delivery. As Eircom technicians/contractors are on the ground rolling out the FTTP network there should be information relayed back to Eircom's systems that is timely and accurate. Eircom is responsible for ensuring the accuracy of the information relayed back into its systems by its technicians/contractors and is also in full control of all information presented to Access Seekers in the APQ File, so there is no justification for incorrect records in this regard.

9.163 Potential consequences of inaccurate information in the APQ File include a poor outcome for end users in terms of getting FTTP delivery and potential brand damage to RSPs attempting to offer these FTTP services to end users. Eircom's point regarding competitive advantage and no obligations imposed on other OAOs is irrelevant. Where Eircom is the operator designated with SMP, obligations stem from that designation and the need to address the identified competition problem.

[1096] Sky Submission, p. 6.

[1097] SIRO Submission, p.21.

[1098] SFG Submission, p.29.

9.164 SLAs not only measure quality in terms of timing, but also measure quality in terms of events and quality. For example, within the NGA SLA, there the metric for Early Life Faults (‘**ELF**’) measures the quality of installations by calculating the number of new services upon which faults are reported within eight working days of a provisioning order being completed and sets a performance target. Eircom will pay out service credits if it fails to meet the performance target set. Another example within the NGA SLA is the Dead on Arrival (‘**DoA**’) metric which measures the quality of installations by calculating the number of new services upon which faults are reported within two working days of a provisioning order being completed and sets a performance target, whereby Eircom will pay out service credits if it fails to meet the performance target set. The Repeat Fault on Fibre to the Cabinet (‘**FNC**’) / Fault on Fibre to the Home (‘**FNH**’) fault metric is another NGA SLA metric which measures quality, in this case the quality of a repair, by measuring the number of repeat faults following a repair within 28 days. These examples show that SLAs can measure the quality of certain aspects of the service, not just quality in terms of time to deliver or time to fix.

9.165 Therefore, ComReg's view is that an SLA on the accuracy of FTTP premises passed information is something which is proportionate and within Eircom's capability and is to be provided by Eircom for Access Seekers.

9.166 The nature of an effective, fit-for-purpose SLA will depend on many factors, including the nature of the wholesale services provided by Eircom and the nature of the downstream retail or wholesale services to be provided by Access Seekers. An SLA could be based on a commitment to achieve specified service levels, or on the occurrence of particular events such as service outages, or indeed other circumstances. It shall also be possible for Access Seekers to make a reasonable request for changes to the SLA provided by Eircom. The precise nature of such an Access Seeker requested SLA would be best settled in negotiations between Eircom and Access Seekers (subject to the condition that Eircom and/or Access Seekers may seek ComReg’s intervention by way of dispute resolution under Regulation 67 of the ECC Regulations).

9.167 In light of the risks outlined above, and having regard to Eircom’s incentives in delaying negotiations or only agreeing sub-standard levels of service, ComReg is of the view that it is justified and appropriate to set down detailed requirements as regards the conduct of negotiations and the content of SLAs, as discussed in the following paragraphs.

SLA Negotiation Period and Conclusion in respect of a Request for new SLA or amended SLA

9.168 Prolonged discussions on the details of the SLA or prolonged deliberation by Eircom only serve to delay the availability of SLAs, and for the reasons set out above, this is not in the best interests of Access Seekers, competition, or end users. It can also amount to an effective refusal of access.

9.169 ComReg averts this risk by setting a maximum time period of **six months** for discussions to take place as regards an amendment to an existing SLA or a new SLA (the **'SLA Negotiation Period**') in respect of an existing product, service, or associated facility. During the SLA Negotiation Period, Eircom must discuss and negotiate in a proactive manner, and in good faith, with Access Seekers. The SLA Negotiation Period is to end no later than six months from the request for SLA, either by agreement between the relevant parties or, in the absence of agreement, on the expiry of the six month period or on any date prior, where all parties agree that the negotiations are at an end, with Eircom making its Best and Final Offer ('**BAFO**').

9.170 ComReg further requires that Eircom's BAFO becomes effective within three months of it being made, save where Eircom has applied, setting out reasons therefor, for an extension of the three month period and ComReg, at its sole discretion, has granted same.

SLA Negotiation Period and Conclusion in respect of new product development or amendment to existing product

9.171 Specific issues arise in respect of new product development (to include amendments to existing products) where Eircom may have the incentive to delay SLA negotiation until after the completion of the product development and/or only provide an insufficient or basic SLA which does not meet Access Seeker requirements, thereby undermining the timely and effective use of the products in question. ComReg considers that SLAs are, in general, an integral part of a product offering. While not all amendments to products, services or associated facilities will require changes to the associated SLA, Access Seekers are likely to have a view as to whether proposed amendments to existing products, services or associated facilities will also require an associated SLA amendment. For these reasons, the 2018 Decision introduced an obligation on Eircom that new or amended SLAs for new or amended products, services or associated facilities be available at time of launch to avoid any restriction or distortion on competition. This obligation will continue.

9.172 In order to ensure that this is the case, ComReg requires Eircom to notify the SLA at the same time as the notified new or amended product documentation. Eircom shall publish dates for the SLA Negotiation Period, including the start date, with the status update (no later than 85 days from receipt of the request) to ensure that the SLA can be notified with the new or amended product documentation. This will ensure that the SLA Negotiation Period aligns with the specific product development timeline published in the status update and ensures that SLA requirements are included and taken into account in the development of the Access request. The SLA Negotiation Period is to end no later than six months from the start date of the SLA Negotiation period, either by agreement between the relevant parties or, in the absence of agreement, on the expiry of the six month period, or on any prior date where all parties agree that the negotiations are at an end, with Eircom making its BAFO. This should limit the risk of delays caused by requiring the SLA to be ready for the new or amended product launch.

9.173 The agreed SLA or Eircom's BAFO shall become effective following the advance notification timeline requirements,[1099] save where Eircom has made an application setting out its reasons for an extension and ComReg has used its discretion to grant the extension.

9.174 The alignment of the SLA negotiation process with the existing product development timelines does not, in ComReg's view, add any significant burden on Eircom. This obligation will provide certainty for Eircom and Access Seekers on when new or amended SLAs relating to Access requests for new or amended products, services or associated facilities will be negotiated. In ComReg's view, this obligation is justified and proportionate for the reasons outlined above.

9.175 In its Submission, Vodafone cited its poor experience with SLA negotiations and expressed its view that as the network evolves to full fibre, there needs to be a change in how access regulation evolves. Vodafone stated that the services delivered by Eircom should be benchmarked against other wholesale providers in the market and best in class service from other fibre providers globally. In this regard, Vodafone outlined a number of challenges with existing product offerings such as with data (accuracy), first appointment timelines, the high number of reschedules and non-standard orders, and remediation work. Vodafone urged ComReg to actively enforce the obligation to negotiate SLAs in good faith in order to achieve the intended outcomes of the Access remedies.[1100]

[1099] Outlined in Transparency, section 9.3.3 below.

[1100] Vodafone Non-confidential Submission, page 13.

9.176 SFG expressed concern in its Submission that the current 'Request-Negotiate-BAFO' approach to SLAs provided insufficient incentive to Eircom to offer fair and reasonable SLAs and suggested that ComReg should identify alternative methods to incentivise Eircom. Otherwise, SFG suggested many requests were likely to end up in dispute before being resolved.[1101] SFG also stated that six months was too long a negotiating period and that if Access Seekers are of the view that no progress is being made in negotiations, they should be permitted to bring disputes to ComReg much sooner. SFG's view was that if there is a prospect of a dispute being raised one or two months after the commencement of negotiations it will create at least some incentive on Eircom's part of progress matters in a meaningful way.[1102]

9.177 ComReg notes that the maximum period for the BAFO to be made by Eircom is six months. ComReg's view is that this is a maximum time and shall not be used as a target by Eircom if it is negotiating in good faith. ComReg will monitor SLA negotiation timelines in the market. As stated in paragraphs 9.169 and 9.172, it is possible for the negotiations to end prior to the maximum six month period where all parties agree they are at an end. If all parties except Eircom agree that negotiations are at an end, it would suggest that Eircom is still willing to move on certain elements under negotiation. If it turns out that Eircom will not change its position, it could imply that Eircom is not negotiating in good faith.

9.178 If an Access Seeker has an issue with an SLA negotiation, it can raise the matter either in the industry forum or directly with ComReg. Paragraph9.47 9.47 outlines a non-exhaustive number of ways in which a willing seller may be seen not to be negotiating in good faith, such as not responding to proposals in a timely manner, or not deploying appropriate personnel for negotiations. As ComReg is not a party to the SLA discussions, it is for Access Seekers to raise an issue with ComReg if it perceives a problem during SLA negotiations and provide evidence of same.

[1101] SFG Submission, p. 29.

[1102] SFG Submission, p. 29.

Service Credits

9.179 There should be clarity as regards the circumstances where a right to compensation arises, and the methodology used by Eircom to calculate the appropriate amount of compensation due to Access Seekers. Clarity on both aspects is required in order that Access Seekers understand how Eircom arrived at the calculated amount of service credit and have assurances that Eircom is appropriately incentivised to deliver the agreed level of service. ComReg notes that Eircom in its Submission disagreed with ComReg's approach to service credits and compensation noting that *"it already provides in its regulated contracts for the payment of reasonable Service Credits for non-compliance with Service Levels, which it considers appropriately recompenses Access Seekers"* and that *"ComReg's proposed measure is highly punitive and goes beyond the established law on the limits of what service credits may legally provide for".*[1103] However, SFG were of the view that

> *"current WLA/WCA SLAs need to be renegotiated as they lack the appropriate incentive levels for Eircom to meet targets".*[1104]

9.180 Meaningful compensation means that Access Seekers recoup through compensation at a minimum the direct costs and any other loss of value arising from Eircom's failure to meet the agreed level of service, and appropriately incentivised means that it should not be less costly for Eircom to pay the SLA service credits than meet the agreed service levels. To that end, Eircom is required to:

(a) Make available to Access Seekers during the SLA Negotiation Period an explanation of the proposed levels of service credits by reference to the costs to Eircom of deploying resources to meet the committed SLA service levels, and expected direct and indirect losses likely to be incurred by Access Seekers where service levels are not met, as estimated by Eircom, itemising the relevant elements (such as lost rental cost, work crew redeployment cost, etc.) contributing to each service credit, along with their monetary value; and,

(b) Make available to Access Seekers during the SLA Negotiation Period worked examples of use cases where SLA payments are triggered and service credits are due, to allow Access Seekers to reconcile service credit payments with the requirements of the SLA and with the service provided by Eircom over the relevant period.

[1103] Eircom Submission, paragraph 146.

[1104] SFG Submission, p.3.

9.181 SLA service credits should be fair and reasonable. It is reasonable that Access Seekers should not have to bear any administrative burden relating to the payment of service credits, as such payments arise from Eircom failing to meet committed service levels.

9.182 The calculation and justification regarding the value of service credits and how they, firstly, incentivise Eircom to deliver an efficient level of service and, secondly, cover costs incurred by Access Seekers in the event of metrics not being met, does not impose any significant burden on Eircom. However, appropriate levels of service credits should benefit Access Seekers in providing further assurance that they will not be at a loss due to Eircom failing to meet SLA committed service levels.

9.183 It is accordingly important that Eircom provides the methodology for calculating the quantum of service credits within the SLA documentation and justification for same, including how they incentivise Eircom to deliver an efficient level of service and allow Access Seekers to recoup direct costs and other loss of value, along with associated supporting evidence. The SLA documentation should contain an itemised list of direct costs and other losses of value contributing to the service credit and the associated monetary value as well as worked examples of use cases where SLA payments are triggered and service credits are due. Furthermore, Eircom should seek input on all aspects of service credits during the SLA Negotiation Period and discuss same with Access Seekers.

9.184 In its Submission, Eircom contended that the above requirements amounted to penalty clauses that are generally unenforceable because the service credits would not include a *"genuine pre-estimate of loss"* as permissible in liquidated damages clauses because *"it is wholly open-ended, requiring estimation on a case by case basis of what the loss of value is for each Access Seeker".* This would not be proportionate and would be *"deeply unfair"; "such unspecified and uncapped liability"* would be contrary to established commercial practice.[1105]

[1105] Eircom Submission, paragraph 146.

9.185 However, the purpose of requiring that Eircom provides the basis for the calculation of proposed service credits by reference to its costs and the losses that an Access Seeker would suffer where the agreed service levels are not met is precisely to ensure that the service credits represent a genuine pre-estimate of loss and are sufficient to encourage Eircom to meet the service levels rather than pay credits. Eircom's estimates can then form the basis of informed negotiations. For the avoidance of doubt, Eircom is not obliged to provide commercially sensitive or otherwise confidential information but rather informed pre-estimates of costs and losses.

Suspension on an SLA

9.186 ComReg understands that there are some circumstances under which an SLA may need to be suspended. Suspension of an SLA should be an exceptional occurrence and should not have the effect of neutralising the SLA. ComReg notes in this regard that SLA suspensions, particularly where they are prolonged or unexpected, can have a significant impact on the effectiveness of the underlying levels of Access being provided. It is essential that any suspension of an SLA is based on objective measurable criteria. Access Seekers should have an opportunity to input into the development of these objective criteria.

9.187 Accordingly, where Eircom wishes to provide for the possibility of suspending the SLA, as part of the terms and conditions of the SLAs, such terms and conditions should be agreed with Access Seekers during the SLA Negotiation Period. In negotiating, and providing for, the terms and conditions governing the circumstances when the SLA can be suspended, and the process to be applied for the suspension of the SLA, Eircom is required to ensure such terms and conditions are reasonable, transparent, clear and detailed, and based on objectively defined and measurable parameters. This information will be included in the published SLA documentation and Access Seekers informed of each instance of an exclusion from the SLA together with the parameters upon which the exclusion is based.

Implementation and monitoring

9.188 Having regard to the Submissions received, ComReg expects that the above requirements will lead to a revision of existing SLAs for WLA. In this regard, Eircom is required to ensure that any new SLAs or amendments to existing SLAs that are required as a result of these obligations are available to Access Seekers within seven (7) months of the Effective Date of the final Decision. Eircom may carry out expedited SLA negotiations if required to achieve the implementation of the updated or new SLAs within the timeline required.

9.189 In its Submission, Eircom cited a previous High Court ruling[1106] that a decision may not be enforced during the appeal window. Eircom stated that as the SLA Negotiation Period may last ‘no more than six months’, this would mean it would need to have fully drafted and published all the proposed new SLAs within the first month after the Effective Date, i.e. during its 28-day appeal window, which would contravene the High Court’s ruling, as it would have the effect of removing Eircom’s right to appeal these SLA provisions.[1107]

9.190 ComReg would remind Eircom that the six month period for negotiation is a maximum timeline, not a target. Eircom's response would suggest that it sees it as such. If Eircom is genuinely negotiating SLAs in good faith, there should be examples where the negotiation period is less than six months. ComReg's proposal does not impair or curtail Eircom's right to appeal. Within the 28 day appeal window ComReg may not seek to enforce an obligation within the Decision. No SLA requirement is enforceable within the appeal window.

9.191 A number of Respondents to Consultation were concerned that the changes brought by this Decision to the regime established in 2018 do not go far enough. ComReg accepts that the success of the regulatory regime for SLAs does depend on engagement between the parties; Eircom’s obligation to negotiate in good faith is apposite in this regard. But there is also an onus on Access Seekers to set out in sufficient detail the requirements of the SLA in order to enable meaningful discussions and engagement.

9.192 Clarity as regards service level requirements is essential to allow for productive negotiations and also regulatory intervention by way of dispute resolution under Regulation 67 of the ECC Regulations as the case may be. In order for ComReg to resolve and bring a dispute to an end, the matters in dispute must be capable of final resolution. This means, insofar as SLAs are concerned in particular, that all issues between the parties around an SLA that prevent negotiations to conclude and an SLA agreement to be reached must be brought to ComReg. ComReg does not believe that it is consistent with its dispute resolution function under Regulation 67 to intervene as a mediator between the parties,[1108] or to issue determinations that do not resolve the dispute but rather seek to settle discrete matters as negotiations unfold.

[1106] *Eircom v Commission for Communications Regulation* 2005 No.152JR.

[1107] Eircom Non-confidential Submission, paragraphs 144 and 313.

[1108] As suggested by SFG (SFG Submission, p.3) and BT (BT Submission, p.9/10).

9.193 Nevertheless, noting in this regard also the Submissions of several Access Seekers that current SLAs are not fit-for-purpose,[1109] it is ComReg's intention to monitor closely the matter of SLAs in the market and the discharge by Eircom of its obligation to have in place SLAs which encourage an efficient level of performance on its part. ComReg notes further that it is now empowered under Regulation 51 (5) to specify service levels in respect of key performance indicators and intends to give the matter further consideration having regard, among others, to market conditions.

9.3.2 Non-Discrimination

9.194 Regulation 52 of the ECC Regulations provides that ComReg may impose on an SMP SP obligations of non-discrimination in relation to access or interconnection in order to ensure that the SMP SP concerned:

(a) applies equivalent conditions in equivalent circumstances to other SPs providing equivalent services; and,

(b) provides services and information to others under the same conditions and of the same quality as the SMP SP provides for its own services or those of its subsidiaries, affiliates, or partners.

9.195 Regulation 52(3) of the ECC Regulations provides further that ComReg, *"may impose on an SMP operator obligations to supply access products and services to all undertakings, including to itself, on the same timescales, terms and conditions, including those relating to price and service levels, and by means of the same systems and processes, in order to ensure equivalence of access".*

9.196 As noted in Recital 184 of the Code, the principle of non-discrimination ensures that SPs with SMP do not distort competition, in particular, where they are vertically-integrated and supply services to SPs with whom they compete on downstream markets. Non-discrimination obligations also play an important role in ensuring the effectiveness of other obligations such as those relating to access, transparency, and price control. In turn, obligations of transparency, for example those relating to KPI metrics and performance metrics, support non-discrimination obligations.

[1109] As suggested by SFG (SFG Submission, p.3) and Vodafone (Vodafone Submission, p.14).

9.197 In light of Eircom's vertical integration and its ability and incentive to discriminate between itself and Access Seekers in relation to WLA pre-ordering, ordering, provisioning, and service assurance, ComReg imposes a non-discrimination obligation on Eircom. This covers discrimination between Eircom's wholesale customers and discrimination between Eircom's wholesale customers and its own services or those of its subsidiaries, affiliates, or partners. A non-discrimination obligation ensures that Eircom does not favour itself, or unduly favour any particular Access Seeker in the provision of WLA products, services and information, such that it might restrict or distort competition in any downstream market, ultimately impacting on the development of sustainable retail and/or wholesale competition.

9.198 The European Commission notes in its 2013 EC Recommendation[1110] that one of the main obstacles to the development of a true level playing field for Access Seekers is the preferential treatment of the downstream businesses of a vertically-integrated SMP SP (for example, discrimination regarding quality of service, access to information, delaying tactics, undue requirements and the strategic design of essential product characteristics). The EC emphasises that,

> *"it is particularly difficult to detect and address non-price discriminatory behaviour through the mere application of a general non-discrimination obligation. It is, therefore, important to ensure true equivalence of access by strictly applying non-discrimination obligations and employing effective means to monitor and enforce compliance".*

9.199 Eircom supplies WLA services including VUA and NG migrations to Access Seekers and also, by means of self-supply, to itself. ComReg accordingly maintains Eircom's non-discrimination obligation to provide access and information to all undertakings including itself, its subsidiaries, affiliates or partners, on the same timescales, terms and conditions, including those related to prices and service levels, using the same systems and processes.

[1110] Commission Recommendation 2013/466/EU of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, OJEU [2013] L251/13 (the '**2013 EC Recommendation**').

9.3.3 Transparency

Overview

9.200 Regulation 51 of the ECC Regulations provides that ComReg may impose obligations to ensure transparency in relation to access or interconnection. This requires an SMP SP to make public specific information such as accounting information, technical specifications, network characteristics, prices, and terms and conditions for supply and use, including any permissible conditions limiting access to, or use of, services and applications.

9.201 Regulation 51(2) of the ECC Regulations provides that requirements may be imposed in respect of the publication of a reference offer that is sufficiently unbundled to ensure that Access Seekers are not required to pay for associated facilities which are not necessary for the service requested. Such reference offer shall include a description of the relevant offerings broken down into components according to market needs and a description of the associated terms and conditions, including prices. ComReg may also specify the precise information to be made available, the level of detail required and the manner of publication.

9.202 Transparency obligations can be standalone but can also support other obligations being imposed and usually relate to requirements to make specified information publicly available. In this regard, ComReg is of the view that a transparency obligation is necessary to monitor and ensure the effectiveness of the access, non-discrimination and price control obligations. ComReg also notes that, as set out in Recital 182 of the Code, transparency of terms and conditions for access and interconnection, including prices, also serves to speed up negotiations between operators, avoid disputes and give confidence to market players that a service is not provided on discriminatory terms. In addition, transparency provides the means for Eircom to demonstrate that access to products, services and associated facilities in the Commercial NG WLA Market is provided in a non-discriminatory manner.

9.203 For the purpose of meeting transparency obligations, clear and unambiguous wording must be used in all material published or to be provided to Access Seekers. In accordance with general principles governing contracts, vague or ambiguous terms will be construed in favour of Access Seekers.

9.204 In its response to the 2023 Consultation, Eircom, while accepting that on a general principle level the language it uses should be clear and understandable, questioned what it considered to be a codification of general principles of contract law, namely contra proferentem, into *ex ante* regulation and was also of the view that such a general principle could not apply in the presence of an obligation of non-discrimination.[1111]

9.205 However, to be clear, in stating that vague or ambiguous terms in contracts will be construed in the favour of Access Seekers, ComReg only points to the established principle governing contracts which may be relied upon when construing vague or ambiguous terms that Eircom may have drafted. It does not purport to codify or otherwise impose on Eircom any new requirement in this respect and as noted by Eircom, existing contract law rules continue to apply. ComReg cannot understand the reason why this general principle cannot apply having regard to Eircom's obligation of non-discrimination. Eircom should approach the application of the terms in a consistent manner for operators purchasing WLA and if such vagueness or ambiguity exists it needs to be clarified by Eircom at the earliest opportunity for such operators.

9.206 ComReg continues to apply the transparency obligations as they apply under the 2018 Decision, subject to a number of adjustments, as discussed below. The obligation includes requirements to publish the following:

(a) A Reference Offer setting out the terms and conditions including prices on which WLA is available to Access Seekers;

(b) Information on product development;

(c) An NGA rollout plan;

(d) Key Performance Indicators; and

(e) Performance with respect to Service Level Agreements.

9.207 Each of these categories is considered in further detail below.

9.208 It should be noted that where Eircom is required to provide advance notification to ComReg, this does not constitute an approval process and subsequent publication by Eircom does not necessarily constitute compliance.

[1111] Eircom Non-confidential Submission, paragraphs 161-164.

Reference Offer

9.209 Section 51(5) of the ECC Regulations provides that, where an SP is subject to obligations concerning wholesale access to network infrastructure, ComReg is required to ensure that the publication of a reference offer takes utmost account of the BEREC guidelines on the minimum criteria for a reference offer issued in accordance with Article 69(4) of the Code. BEREC issued such guidelines[1112] on 5 December 2019. The BEREC Guidelines set out four categories of information to be included in a reference offer:

(a) Terms and conditions for the provision of network access;

(b) Details of operational processes;

(c) Service supply and quality conditions; and

(d) General terms and conditions of the agreement.

9.210 ComReg maintains Eircom's obligation to publish an Access Reference Offer ('**ARO**') setting out the products, services and Associated Facilities offered on a regulated basis. This, in general, involves removing from the ARO the relevant information that is specific to PI products, services and associated facilities as well as products, services and Associated Facilities that are no longer regulated.

Terms and conditions for the provision of network access

9.211 A reference offer contains a description of the offer of contract for access broken down into components according to market needs. ComReg notes that this requirement will be satisfied by the ARO taking the form of a draft contract setting out a description of the specific contractual terms and conditions, including prices, associated with each of the network access products, services and associated facilities provided in the Commercial NG WLA Market, as well as the technical characteristics of the products, services and associated facilities offered in terms of WLA.

9.212 For the avoidance of doubt this includes each of the specified products and services that Eircom is required to make available pursuant to its binding access obligation.

[1112] BEREC Guidelines on the minimum criteria for a reference offer, BoR (19) 238, 5 December 2019 (the '**BEREC Guidelines**').

9.213 Information must also be published on any relevant ancillary, supplementary and advanced services (including OSS, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing), including their technical usage restrictions and procedures to access those services; the relevant charges, terms of payment and billing procedures; and applicable requirements and processes for SP accreditation and audit.

9.214 As regards billing, Eircom is required to ensure that invoices for WLA are sufficiently disaggregated, detailed and clearly presented so that an Access Seeker can reconcile the invoice to Eircom's ARO and the ARO Price List. This is to ensure that Access Seekers may monitor the wholesale charges being levied on them and facilitate an auditable means of detecting any billing anomalies and/or non-compliance with regulatory obligations.

Details of operational processes

9.215 Eircom is required to publish details of all relevant operational processes, including in terms of:

(a) The process and requirements applicable to product development including information requirements, timelines, prioritisation and criteria, and decision making processes;

(b) The Product Development Roadmap, namely the list of all proposed, planned and in progress developments for regulated products, services and associated facilities, and related information, ensuring that such Roadmap remains up to date;

(c) Pre-ordering, ordering, provisioning and service assurance;

(d) Information on reason codes for declined orders. Such information must be provided in sufficient detail so as to allow Access Seekers to clearly understand the reason why an order was declined;

(e) Rules of allocation of space between the parties when co-location space is limited;

(f) Repair and maintenance;

(g) IT systems and changes to such systems, to the extent that they impact Access Seekers and publish such changes in sufficient detail to allow Access Seekers to perform independently any development that may be required to adapt to such changes;

(h) Details of any necessary interoperability tests for service establishment; and

(i) Specification of cables and equipment to be used on the network.

9.216 ComReg notes, in particular, that transparency as regards Eircom's product development process and the rules used by Eircom to prioritise product developments and meet Access requests in a fair, timely and reasonable manner is a key aspect of Access Seekers' ability to rely on access to Eircom's WLA. ComReg requires that Eircom publish the process and criteria, including the input values and calculations, used by it for the purpose of prioritisation.

9.217 Access Seekers also need to be able to plan for the introduction of new products, services or associated facilities and therefore need information, with a reasonable degree of certainty, regarding the characteristics, timing and availability of developed products, services or associated facilities.

9.218 Access Seekers must be provided with:

(a) sufficient information relating to the contents of proposed product developments;

(b) sufficient information to understand the criteria and processes used by Eircom for prioritising developments; and

(c) proposed launch dates of any new products or changes to existing products.

9.219 Eircom is required to publish, and keep updated, on its publicly available wholesale website, a description of its product development process, including a description of all process steps and activities and identifying all key points in Eircom's product development process. This is to include the points where Eircom decides to advance, delay or terminate the development of a product, service or facility (the '**Product Development Decision Points**') and any key stages in the analysis, design, development and launch, and the date on which the product, service or facility will be made available (together, '**Milestones**') from receipt of a written request for access to the launch of a new or amended wholesale product, service or facility.

9.220 Eircom is required to publish the list of all proposed, planned and in progress developments for regulated products, services and associated facilities (the '**Product Development Roadmap**') on its publicly available wholesale website and keep such Product Development Roadmap up to date on an ongoing basis, including the following details for each Access request, which are to be provided as soon as possible and in any event no later than within 15 working days of receipt of the request:

(a) the unique reference to identify the Access request; and

(b) a description of the request and copies of or links to all relevant documentation.

9.221 In addition, the Product Development Roadmap is to be kept up to date with the priority given by Eircom to each request.

Service supply and quality conditions

9.222 In line with the BEREC Guidelines, Eircom must publish on its wholesale website the SLAs that it negotiates and agrees as part of its access obligation (which includes a requirement to ensure fair, reasonable and timely access).

General terms and conditions of the agreement

9.223 Finally, the draft contract offer published as part of the ARO should contain all applicable general terms and conditions, including (without limitation):

(a) Eircom's dispute resolution procedures to be used between it and Access Seekers;

(b) Definition and limitation of liability and indemnity;

(c) Glossary of terms relevant to wholesale inputs and other items concerned; and,

(d) Details of duration, renegotiation and causes of termination of agreements.

Form of publication

9.224 The information to be made available by Eircom under the transparency obligations is, by default, to be published on Eircom's publicly available wholesale website.

9.225 In exceptional circumstances, in respect of information that is required to be made available under the transparency obligations, but is commercially sensitive such that it would not be appropriate to share such information beyond the Access Seekers availing of WLA, or with a demonstrable intention to avail of WLA from Eircom, Eircom should restrict access to such information. For example, this could be done by requiring a password to access a section of Eircom's wholesale website and/or subject its provision to reasonable terms and conditions such as the requirement to enter into a Non-Disclosure Agreement. ComReg reserves the right to intervene, as appropriate, including to require Eircom to make certain information publicly available where it cannot provide appropriate justification for not doing so.

Changes to the ARO

9.226 Publication or the making available of information by way of an ARO as described above will only meet the objective of transparency if the published or available documentation remains up to date and Access Seekers may easily ascertain what changes have been made. The provision of clear information on what changes are made to the ARO and when such changes are made also supports monitoring and enforcement of compliance with SMP obligations. ComReg requires that Eircom must publish and keep updated on its publicly available wholesale website the following:

(a) Both clean (or unmarked) and tracked changes (or marked) searchable versions of the ARO and ARO Price List. The tracked change version must be sufficiently clear to allow Access Seekers to clearly identify all actual and proposed amendments from the preceding version of the ARO/ARO Price List;

(b) An accompanying change matrix which lists all of the amendments incorporated, or to be incorporated, in any amended ARO/ARO Price List (the '**ARO/ARO Price List Change Matrix**'); and

(c) A copy of historic versions of its ARO, ARO Price List, ARO Change Matrix and ARO Price List Change Matrix.

Advance notification timeframes

9.227 In order that changes are made transparently and are clear to all, allowing Access Seekers to factor changes into their commercial decision-making activities and make any necessary adjustments or developments to systems or operational processes, changes to the ARO and associated documentation are subject to prior notice to ComReg and, separately, Access Seekers.

9.228 Proposed amendments to the ARO Price List relating to new or amended products, services or associated facilities shall be made available at the same time to Access Seekers as the relevant proposed amendments to the ARO. Having such information available at the same time will facilitate Access Seekers in not just making any technical or operational preparations that may be needed but also allow Access Seekers to assess the potential business case of investing in such a new offering from Eircom and take any necessary business decisions related to such an offering in sufficient time in advance of launch, including for example the sourcing and purchase of any new equipment that may be needed.

9.229 ComReg requires that, by default, amendments to existing products, services or associated facilities or the introduction of new products, services or associated facilities should be given to ComReg at least three months in advance of changes coming into effect, and to Access Seekers at least two months in advance. ComReg is to be notified one month in advance of notification to Access Seekers (the '**1 + 2 advance notification rule**').

9.230 As an exception to this 1 + 2 advance notification rule, Access Seekers must be provided with an appropriate period of notice with regard to specific changes that would result in Access Seekers requiring additional time in order to effectively compete with Eircom in downstream markets using new or amended products, services or associated facilities. The specific exceptions to the 1 + 2 notification rule are with respect to changes to Eircom's IT systems or where an Access Seeker would need to source or purchase any new equipment or update existing equipment in order to avail of the new or amended product, service or associated facility. In these circumstances, the associated changes to the ARO and ARO Price List should be given to ComReg at least seven months in advance of changes coming into effect, and to Access Seekers at least six months in advance. In other words, ComReg is to be notified one month in advance of notification to Access Seekers (the '**1 + 6 advance notification rule**'). ComReg considers that such an approach is appropriate and proportionate and provides Access Seekers with the necessary information and notice relating to such changes.

9.231 With respect to changes to Eircom's IT systems that would trigger the 1 + 6 advance notification rule, these are changes to the extent that would require Access Seekers to carry out development work without which it would not be possible for Access Seekers to continue to order existing products, services or associated facilities, or to be able to order new or amended products, services or associated facilities.

9.232 The documentation to be included at notification should include the information relevant to Access Seekers with respect to the proposed IT changes. The introduction of an IT change that can impact Access Seekers in the manner described above should only arise in exceptional circumstances. Eircom will therefore be required to set out objective reasons in this documentation as to why such an IT change is considered necessary.

9.233 Access Seekers may need to source or purchase new equipment or update existing equipment that may be required to effectively compete as a result of a new or amended product, service or associated facility. Such scenarios may arise where Eircom's wholesale products, services or facilities are being introduced or amended, as a result of which they will provide for profile speeds or functionality that can only be utilised by Access Seekers introducing new end user equipment or replacing or updating existing equipment.

9.234 As regards advance notification to ComReg, such advance notification before publication facilitates compliance monitoring and allows ComReg to ensure, in advance of publication, that the changes are sufficiently clear and readily understandable to Access Seekers. However, this is not an approval process and publication accordingly does not imply compliance.

9.235 Changes requiring an obligation to notify and publish include instances where:

(a) Changes are made to the terms and conditions, including prices, associated with each of the products, services and associated facilities provided in the Commercial NG WLA Market, or to their technical characteristics including relevant engineering or technical standards for network access;

(b) Changes are made to the operational processes described in the ARO (e.g. in the IPM);

(c) An existing product is amended or a new version introduced;

(d) A new product or service is introduced; and,

(e) Changes are made to the general terms and conditions offered by Eircom to Access Seekers.

9.236 In its Submission, Eircom raised concerns in relation to the 1 + 6 advance notification rule. Eircom questioned how it can know whether proposed changes will require work by Access Seekers on their IT systems without an obligation on Access Seekers to inform Eircom of this fact in a timely fashion early in the product development process.[1113]

9.237 Eircom also expressed concern that the 1 + 6 advance notification rule could be open to what it referred to as abuse by its competitors where there is no obligation on such competitors to objectively demonstrate the need for changes to their IT systems.[1114]

[1113] Eircom Non-confidential Submission, paragraph 308.

[1114] Eircom Non-confidential Submission, paragraph 308.

9.238 However, what triggers the 1 + 6 advance notification rule is not, as such, changes required to Access Seekers' IT systems, but rather changes to Eircom's IT systems requiring Access Seekers to carry out development work without which Access Seekers could not continue to order existing products, services or facilities or be able to order new or amended products, services or facilities. Such changes are therefore those which could prevent Access Seekers from continuing to consume data in existing fields on a like-for-like basis or the introduction by Eircom of new fields in the technical interfaces that Eircom makes available to Access Seekers.

9.239 Finally, for the avoidance of doubt, in relation to existing contracts, text changes proposed by Eircom to the general terms and conditions will not be automatically incorporated into existing contracts. Amendments of existing contracts will require the agreement of the parties to the contract as changes to Access Seeker contractual obligations. Eircom can negotiate with Access Seekers regarding any such changes. In the absence of agreement, in appropriate cases, one party or both may refer the disagreement for dispute resolution by ComReg under Regulation 67 of the ECC Regulations.

9.240 In its Submission, Eircom referred to what it considers to be a number of necessary exceptions that must be automatically incorporated into existing contracts for regulatory purposes. These included changes on foot of regulatory obligations including pricing and non-pricing amendments, the outcome of Eircom's dispute resolution procedures, the definition and limitation of liability and indemnity, glossary of terms relevant to wholesale inputs, and changes associated with products, services and associated facilities or to their technical characteristics.[1115]

9.241 For the avoidance of doubt, ComReg confirms that changes made in alignment with regulatory obligations, including pricing and non-pricing amendments are, unless otherwise stated by ComReg, automatically incorporated into existing contracts between Eircom and Access Seekers. The other categories of changes that Eircom has referred to are, however, the very types of changes that the requirement set out in paragraph 9.239 above is to guard against; that Eircom does not act in a unilateral manner to the detriment of Access Seekers and ultimately end users.

[1115] Eircom Non-confidential Submission, paragraphs 165-166.

9.242 ComReg notes in this respect, first, that the principle that Eircom may not unilaterally make changes to the general terms and conditions set out in a contract with Access Seekers only applies in reference to the general terms and conditions that govern the Access agreement (category (d) at paragraph 9.235), rather than changes to the terms and conditions for the provision of network access (category (a)); the operational processes (category (b)) or the services supply and quality conditions (c)). Changes to the latter will of their nature normally be incorporated subject to, and in accordance with, the relevant provisions in the general terms and conditions.

9.243 Insofar as changes to the general terms and conditions of the Agreement are concerned, changes to those will be automatically made to existing contracts only where they are changes mandated by ComReg, and whether or not this is the case will depend on the actual circumstances of the changes. This means that changes to the definition and limitation of liability and indemnity, for instance, or the dispute resolution processes set out in the general terms and conditions, would only be incorporated where the changes have been directed by ComReg, including, for instance, as part of dispute resolution.

9.244 In its Submission, Eircom also submitted that the Draft Decision Instrument in the 2023 Consultation contains what it described as a range of separate requirements for Eircom to seek ComReg approval, to provide a justification to ComReg, as well as other separate obligations to formally notify ComReg, and further obligations to seek consent. Eircom argued that the cumulative effect of these provisions is to slow down its product development process which will inevitably have an effect on competition.[1116]

9.245 ComReg considers that it has provided appropriate reasoning for such requirements in the 2023 Consultation and further notes that where it has imposed a period of time for notification or approval, it is because ComReg considers that time to be proportionate and necessary to allow ComReg time to consider the information. It is important that ComReg is fully aware of developments and amendments proposed by Eircom even if in certain cases no formal approval is required.

[1116] Eircom Non-confidential Submission, paragraph 317.

Timeline variation with respect to advance notification timelines

9.246 While clear mandatory notification timelines are an essential aspect of transparency and ensuring certainty, it is also important to ensure a degree of flexibility so that the timeline may be amended in appropriate circumstances. It may be, for instance, that there is a case for immediate availability of a new or amended product, or that a two or six month publication timeline, as appropriate, is insufficient owing to the operational and/or technical adjustments required in order to avail of an amended product, or associated with a change of operational processes.

9.247 ComReg maintains the approach followed to date, allowing notification timelines to be varied, either on Eircom's application or on ComReg's own initiative, where justified and appropriate.

Transparency requirements with respect to NGA rollout plans

9.248 ComReg also maintains Eircom's obligation to provide information to Access Seekers with respect to NGA rollout plans. This ensures that Access Seekers are provided with up to date and accurate information with respect to network rollout allowing them to efficiently and effectively plan for and deliver products and services on a wholesale basis or to end users.

9.249 Eircom's NGA rollout plans are an essential tool to aide Access Seekers' marketing and sales processes and so trust and certainty regarding the data included in these files is vital. ComReg is concerned, however, that Eircom's NGA rollout plans may not be accurate, and that where inaccuracies are identified, remediation may not occur in a timely fashion.

9.250 In the 2023 Consultation, ComReg proposed requirements on Eircom with respect to identifying and correcting inaccuracies in the NGA Rollout Plan at the earliest opportunity. In its Submission, Eircom expressed the view that reconciling the NGA Rollout Plan with up to date information is nonsensical. Eircom submitted that reconciliation only requires an update of the APQ File as both the Deployment Plan and Order of Magnitude File are <u>forecast</u> deployment information and do not contain *"as-built information"*.[1117]

9.251 ComReg does not agree with Eircom's representation of the proposed requirements with respect to reconciliation. Eircom is expected to proactively monitor the files included in its NGA Rollout Plan in order to identify any inaccuracies and to correct such inaccuracies at the earliest opportunity. This does not exclude reconciliation of forecast information.

[1117] Eircom Non-confidential Submission, paragraph 167.

9.252 For the avoidance of doubt, ComReg is imposing a requirement on Eircom to ensure that the data included in its NGA Rollout Plan is accurate, clear and current. This means that Eircom is expected to proactively monitor the files included in its NGA Rollout Plan in order to identify any inaccuracies and to correct such inaccuracies at the earliest opportunity, and to reconcile the data contained in its NGA Rollout Plan files with as-built information and revised forecasts at the earliest opportunity. It also means that the meaning of all fields contained within the files included in Eircom's NGA Rollout Plan should be fully documented and published by Eircom in a manner that allows Access Seekers to interpret the intended purpose of each field.

9.253 In its Submission, Eircom submitted that the Order of Magnitude file can contain over 600,000 entries every three months, with each entry representing an individual address. Eircom noted that each address also has its own local characteristics and accordingly there may be unexpected issues. Eircom argued that it was therefore disproportionate to impose an obligation on Eircom for the data to be *"accurate"*. Eircom further noted that under Regulation 51(7) of the ECC Regulations, with respect to a transparency breach, it is a defence for the undertaking charged to show that it took all reasonable steps and exercised all due diligence to avoid committing the offence. Eircom requested that ComReg amend its proposal so as to take what Eircom referred to as a proportionate approach and one that takes account of the ECC Regulations.[1118]

9.254 ComReg does not agree that the requirement for Eircom to ensure that the data included in its NGA Rollout Plan is accurate is a disproportionate obligation. Eircom is in control of the data collected or processed and where inaccuracies are detected, it can take appropriate steps to ensure and improve the accuracy of that data whether that is with respect to forecast or as-built information. The imposition of this requirement does not infringe on Eircom's right to rely on any relevant defence provided for in the ECC Regulations, if appropriate to do so.

9.255 ComReg further mandates that additional fields are included in the NGA rollout plans comprising the Deployment Plan, the Order of Magnitude File and the APQ File as described below. The additional fields are to be introduced by Eircom in a manner that would not require Access Seekers to carry out development work without which it would not be possible for Access Seekers to continue to process files included in the NGA Rollout Plan.

[1118] Eircom Non-confidential Submission, paragraph 168.

9.256 In its Submission, Eircom noted that while the addition of fields may not require development work, their addition will obviously necessitate that Access Seekers update their systems to extract or query those additional fields. Eircom considered that ComReg must accordingly clarify its position.[1119]

9.257 ComReg disagrees that there is an absence of clarity with respect to the requirement on how the new fields are to be introduced. As per the 2023 Consultation, the requirement sets out that Access Seekers need to be able to continue to process the files in the NGA Rollout Plan, it is clear that if Access Seekers wish to extract or query new fields then some form of development work would be required by them.

9.258 Eircom disagreed that the NGA Deployment Plan should contain a list of cabinets; in Eircom's view cabinets are not used in the deployment of FTTP services.[1120] ComReg considers, however, that while Eircom has a requirement with respect to the proactive monitoring and accuracy of the data in the NGA Rollout Plan, the location of cabinets for FTTC is relevant for Access Seekers in correlating distance from such cabinets to end users against the associated pre-qualification value for each such line/premises. Such transparency can assist Access Seekers in understanding where there may be inaccuracies in the NGA Rollout Plan. For the avoidance of doubt, the accuracy of these files is a matter for Eircom in the first instance. As Eircom has been providing information on such cabinets in its NGA Deployment Plan to date, ComReg considers that it is important that Access Seekers continue to be provided with this information in the same NGA Deployment Plan file, including so as to prevent any impact to IT systems or business processes.

9.259 Eircom submitted that consistent with its obligations under the 2018 Decision that the information provided under that Decision is sufficient to enable operators to identify the addresses to be passed by Eircom's FTTP network and that information with respect to fibre DPs was therefore not required. Eircom expressed the view that ComReg provided no evidence, or cogent reasoning as to why information requirements proposed in the 2023 Consultation with respect to fibre DPs are necessary to enable operators to identify the addresses to be passed by FTTP.[1121]

[1119] Eircom Non-confidential Submission, paragraph 169.

[1120] Eircom Non-confidential Submission, paragraph 170.

[1121] Eircom Non-confidential Submission, paragraph 171.

9.260 With respect to Eircom's views on information to be provided on fibre DPs, ComReg notes that Access Seekers have experienced difficulties with respect to the accuracy of NGA rollout files due to premises being marked as passed in these files when for example there was in fact no light at the fibre DP. ComReg also notes other difficulties with respect to the accuracy of NGA rollout files whereby fibre DPs were marked as being full (through the use of a ready for Order ('**RFO**') date of 2099) but without premises actually being connected. ComReg therefore sees the need for the additional parameters relating to fibre DPs so as to provide Access Seekers with better visibility on the actual status and location of fibre DPs and to allow Access Seekers to better engage with Eircom on such matters, noting however that at all times the accuracy of the NGA rollout files is a matter for Eircom in the first instance.

9.261 In the 2023 Consultation, ComReg proposed that Eircom remove entries to the Order of Magnitude File that are older than 12 months and which Eircom does not plan to pass within three months prior to publication of the next iteration of the file.[1122] With respect to this proposed requirement, Eircom expressed the view that it appears counter-intuitive to remove an Eircode which would then require Eircom to start the whole notification/timeline process again — particularly, in circumstances where localised issues are capable of being resolved. Eircom submitted that, consistent with the practice to date, Eircodes are only removed from the Order of Magnitude File once they are published in the APQ File.[1123]

9.262 Having considered Eircom's views with respect to removing such entries from the Order of Magnitude file, ComReg considers that the proposed requirement would not cause difficulties with respect to notification timelines but that an equivalent level of transparency can be provided through an alternative approach. ComReg has therefore decided to amend the requirement so that instead of entries being removed (that have been present for 12 months and that are not planned to be passed within the next 3 months), Eircom will at the earliest opportunity, where a change to the expected RFO date is identified by it, revise the expected RFO field in the Order of Magnitude file to reflect the date when such premises are planned to be passed. Premises for which Eircom no longer plans to pass however must be removed from the Order of Magnitude File at the earliest opportunity.

[1122] 2023 Consultation paragraph 9.185(b).

[1123] Eircom Non-confidential Submission, paragraph 173.

9.263 Eircom disagreed with the proposed requirement for the Order of Magnitude File that for each entry, Eircom would state the date it was first included and the date it was last amended. Eircom's view was that it considered the additional overhead of maintaining the files in such a manner offered no benefit to the operator or the end user. For Eircom, this exercise can be achieved already by operators themselves by comparing the relevant previous files which are published for differences.[1124]

9.264 ComReg considers, however, that Access Seekers being presented with information on when entries were first included in the Order of Magnitude File and when Eircom last amended such entries, provides them with an indication of the reliability of the RFO date stated in the file. ComReg does not agree that there would be material overhead in Eircom maintaining the files to record the date that entries were first included and last amended since such tasks can be automated. ComReg considers that such an approach is more efficient than Access Seekers having to compare differences between files.

9.265 Eircom also disagreed with the requirement that the APQ File includes where available and in all cases for FTTP, the Eircode of each premises that is passed and whether or not the premises is connected. Eircom expressed the view that ComReg has not identified any reason for this additional information in the APQ File when, in Eircom's view, this is already available in the Masked CLI file which can already be compared as both the APQ File and Masked CLI file contain an ARD ID which is the unique Eircom identifier.[1125]

9.266 ComReg disagrees with Eircom with respect to the need for the Eircode to be included in the APQ File. The approach of Access Seekers having to compare the APQ File and Masked CLI File places an unnecessary overhead on Access Seekers. It is more efficient that Eircom include this information in the APQ File at source rather than the effort of determining this information being multiplied out by the number of Access Seekers requiring such information.

9.267 In its Submission, Sky expressed the view that in cases where premises are found to be unserviceable through a standard process, the files should be updated to either remove the Eircode from the passed list or the Eircode should be flagged as non-standard.[1126]

[1124] Eircom Non-confidential Submission, paragraph 172.

[1125] Eircom Non-confidential Submission, paragraph 174.

[1126] Sky Non-confidential Submission, p.6.

9.268 In its Submission SIRO suggested that ComReg should require Eircom to provide an indication of which premises passed will require a non-standard install. In the alternative, SIRO submitted that at the very least, there should be an SLA/KPI to measure transparently the accuracy of the APQ file, on a monthly basis.[1127]

9.269 Having considered Sky's Submission, ComReg is satisfied that the mandated obligations proposed in the 2023 Consultation and being imposed in this Decision are the minimum necessary with respect to the competition issues identified but reserves its right with respect to the imposition of the requirement suggested by Sky and SIRO at a later date. This does not however preclude Access Seekers from making reasonable requests for access that will need to be assessed by Eircom as per the discussion on Access requests in paragraphs 9.140 to 9.155 above.

9.270 ComReg's views with respect to an SLA on FTTP information have been discussed above as per paragraphs 9.159 to 9.167. ComReg considers that an SLA on the accuracy of FTTP information is something which is proportionate and within Eircom's capability to provide and is to be provided by Eircom for Access Seekers.

9.271 Sky also submitted that where it becomes obvious that clusters of Eircodes are not viable based on orders associated to an area, these Eircodes should also be flagged accordingly.[1128] ComReg considers that if there are scenarios whereby a premises has been passed but where it is no longer considered viable for Eircom to serve such a premises due to work being required on its network or on public property then Eircom shall remove such a premises from the APQ File at the earliest opportunity.

9.272 Finally, having further considered the requirements on information that Eircom provides with respect to rollout and the availability of WLA to Access Seekers, ComReg considers that it is necessary to expressly set out that there is a requirement on Eircom to continue to make available the information it already provides in this regard. This includes, without limitation, information currently made available in the Masked CLI File[1129] and Address File[1130] and fields present in NGA Rollout Files but not specifically referred to in this Decision.

[1127] SIRO Non-confidential Submission, p.21.

[1128] Sky Non-confidential Submission, p.6.

[1129] The Masked CLI File is similar to the Advanced PreQual File but provides information on a phone line basis and includes lines which do not qualify for Next Generation Access.

[1130] The Address File, also referred to as the Address (ARD ID) File, is file made available by Eircom containing information on all addresses recorded on its network.

9.273 Having considered Respondents' views, the requirements with respect to the NGA Rollout Plan are set out below.

Deployment Plan

9.274 ComReg requires that, for the EAs included in Eircom's NGA rollout plan the following details must be made available, by way of a Deployment Plan data file, issued monthly, at least six months in advance of the expected RFO date:

(a) list of cabinets with their associated geographic coordinates;

(b) the location and name of the exchange which houses the MPoP for each cabinet and each OLT from which premises are proposed to be served;

(c) for each EA the number of premises that Eircom forecasts will be passed by FTTP and the expected RFO date.

9.275 ComReg further requires that the Deployment Plan is to be amended with respect to fibre DPs so that this plan is updated to include information on the identity, geographic coordinates, capacity, installation status, the expected Ready for Order Date and whether the RFO has been passed for DPs, as such information is determined by Eircom, and at least 3 months before the expected RFO (when the Order of Magnitude File is updated).

Order of Magnitude File

9.276 Eircom must make available at least three months in advance of the expected RFO sufficient information to enable operators to identify the addresses to be passed by FTTP. Such information is to be made available by way of an Order of Magnitude File, issued quarterly, which must provide the:

(a) Exchange Area;

(b) expected RFO for the premises to be passed;

(c) Eircode of each expected premises;

(d) identities of the DPs from which the premises are expected to be served; and

(e) in respect of each entry, the date it was first included and the date it was last amended.

9.277 Furthermore, ComReg requires that in order to ensure that the Order of Magnitude File is kept up to date, Eircom:

(a) removes entries to the Order of Magnitude File from the time that they are assigned an actual RFO and included in Eircom's APQ File and, in any event, prior to publication of the next iteration of the file; and

(b) shall, at the earliest opportunity, for entries in the Order of Magnitude File for which Eircom has identified a change in the RFO date, revise the expected RFO date field in this file to reflect the date when such premises are planned to be passed. Premises for which Eircom no longer plans to pass, however, must be removed from the Order of Magnitude File at the earliest opportunity.

Advanced PreQual File

9.278 ComReg requires Eircom to make available 28 calendar days in advance of the actual RFO the following information in relation to premises passed by NGA by way of an Advanced PreQual File issued weekly:

(a) the RFO for each premises;

(b) the EA for each premises;

(c) list of all uniquely identified premises that are capable of receiving FTTC and the associated Pre-Qualification Value for each such line/premises;

(d) list of all premises passed by FTTP categorised by the EA showing the MPoP for each address and the identity of the fibre DP to which each premises is indexed or connected; and

(e) where available and in all cases for FTTP, the Eircode of each premises that is passed and whether or not the premises is connected.

9.279 In order to enhance the accuracy and usefulness of the Advanced PreQual File, ComReg also requires that Eircom may only add addresses that have been passed by FTTP as set out in paragraph 9.278 above. Premises passed are those premises for which:

(a) the DP installation has been completed so that the DP is ready for the drop cable to the premises to be installed; and

(b) testing has been carried out by Eircom to verify light is being transmitted between the port on the installed DP and serving OLT.

9.280 In addition, where a premises has been passed but where it is no longer considered viable for Eircom to serve such a premises due to work being required on its network or on public property, then Eircom shall remove such a premises from the APQ File at the earliest opportunity.

Key Performance Indicators

9.281 Regulation 51(5) of the ECC Regulations provides that, where an undertaking has obligations concerning wholesale access to network infrastructure, NRAs shall ensure that KPIs are specified where relevant, as well as corresponding service levels, and closely monitor and ensure compliance with them. For the time being although ComReg does not in this Decision set applicable service levels, it is considering whether further interventions under *inter alia* Regulation 51 of the ECC Regulations may be necessary.

9.282 ComReg requires Eircom to publish Key Performance Indicators ('**KPI**'s) on its publicly available wholesale website. ComReg further specifies this obligation for the time being by reference to the requirements set out in the KPI Decision.[1131]

9.283 In its Submission, Eircom expressed the view that since the list of regulated products specified by ComReg in the 2018 Decision includes products to be deregulated Eircom could not properly consider and comment on ComReg's KPI proposals without visibility of the details of the KPIs themselves.[1132] Eircom also noted that the EECC does not contain any provision entitling National Regulatory Authorities to further specify SMP obligations outside of the process prescribed by Article 67, with public consultation and the notification of measures to the European Commission[1133] and it took issue on that basis with the reservation for ComReg to further specify requirements with respect to KPIs and requested clarification that this does not mean that ComReg is reserving the right to impose new KPI processes or metrics without public consultation and notification.[1134]

[1131] Key Performance Indicator (KPI) Metrics, Decision D04/22, ComReg reference 22/49, published 29 June 2022 (the '**KPI Decision**').

[1132] Eircom Non-confidential Submission, paragraphs 175-176.

[1133] Eircom Non-confidential Submission, paragraph 301.

[1134] Eircom Non-confidential Submission, paragraphs 176 and 314.

9.284 ComReg does not see that there can be any issues as contended by Eircom as regards the KPIs that ComReg proposed to be maintained and Eircom's suggestion that it has been at any disadvantage in terms of making submissions in respect of KPI regulation is not accepted. For completeness, Section 17 of the Decision Instrument sets out below the amendments that are now made to the KPI Decision with respect to the products that are being deregulated. ComReg is also of the view that making it clear that it may further specify requirements in respect of KPIs is entirely consistent with the EECC and is explicitly provided for under Regulation 104 of the ECC Regulations. Were ComReg to do so in future, it will comply with all applicable statutory requirements in respect of consultation and publication.

9.285 In its Submission, Sky expressed the view that KPI reports issued by Eircom should be reviewed by ComReg prior to publication.[1135] While ComReg may review KPI reports as they become available, such reviews should not be considered as a form of approval of whether Eircom has met its obligations, including those relating to transparency or non-discrimination. These obligations, including the publication and accuracy of KPI reports are matters for Eircom in the first instance.

Performance with respect to Service Level Agreements

9.286 ComReg requires Eircom to publish, on a quarterly basis, a Performance Metric Report setting out, by reference to the service levels which are the subject of SLAs, the actual service levels achieved in each of the three previous months in respect of all operators on an aggregate basis. This Performance Metric Report should include at a minimum the following parameters:

(a) the name and relevant identifiers of the service metrics that will allow Access Seekers to identify the specific activities and processes, along with associated process times, for the products being reported on; and

(b) the performance targets and actual performance achieved for each activity.

9.287 ComReg further requires that the report detail the methodology and the source data used to determine the actual performance achieved. It should also describe how the source data were processed by Eircom and include worked examples as to how the processed source data relate to the actual performance achieved.

[1135] Sky Non-confidential Submission, p.7.

9.3.4 Price Control and Cost Accounting Remedies

Overview

9.288 ComReg sets out below the pricing remedies to apply in the Commercial NG WLA Market in order to address the competition problems identified in Section 8. ComReg has considered recommendations from its expert economic advisor, Oxera, and where relevant, ComReg references the Report ('**Oxera Part 1 Report**') prepared by Oxera for the consultation phase[1136] and the '**Oxera Updated Part 1 Report**' prepared by Oxera for this Decision[1137].

9.289 This remainder of this section is structured as follows:

(a) Objectives of the price control, the competition problems the price controls will address, and a summary of the obligations;

(b) Options for price controls – the various forms of price control;

(c) The services ComReg requires price controls for, and the reasons for this requirement;

(d) Other regulatory measures, which sets out obligations related to price change notifications and Eircom wholesale promotions and discounts;

(e) Obligations in respect of cost accounting; and

(f) Obligations in respect of accounting separation.

Objectives of the price control

9.290 Having regard to the competition problems identified in Section 8, the purpose of the price control obligation is to:

(a) Incentivise efficient network investment by Eircom and other operators;

(b) Ensure that Eircom cannot price excessively;

(c) Ensure that Eircom cannot foreclose other operators from the market; and

(d) Ensure that Eircom recovers its actual efficient investment together with an appropriate rate of return,

bearing in mind the objectives set out in Article 3 EECC namely:

(a) promoting connectivity and access to, and take-up of, very high capacity networks;

[1136] Oxera Part 1 Report, Document 23/03E, ComReg 23 03 Oxera Part 1

[1137] Oxera Updated Part 1 Report, document [[23/XX / Link: TBC]]

(b) promoting competition in the provision of electronic communications networks and associated facilities;

(c) contributing to the development of the internal market by removing remaining obstacles to, and facilitating convergent conditions for, investment in, and the provision of, electronic communications networks, electronic communications services, associated facilities and associated services throughout the Union; and

(d) promoting the interests of the citizens of the Union, by ensuring connectivity and the widespread availability and take-up of very high capacity networks.

9.291 ComReg's Strategy Statement for 2021-2023[1138] sets out ComReg's aims when making pricing decisions, which are to strike a balance between:

(a) Encouraging investment in VHCN by Network Operators. It is important that regulated access prices are not set so low that investment that would otherwise be commercially viable is choked off;

(b) Encouraging viable investment in own infrastructure by undertakings which purchase access from other networks, particularly those who use regulated access to Eircom's network;

(c) Ensuring that regulated prices reflect efficient practice and that excessive recovery by the SMP SP does not occur;

(d) Ensuring that wholesale prices do not lead to price squeezes;

(e) Ensuring that wholesale prices do not lead to excessive end user prices; and

(f) Wholesale prices ensure timely and efficient migration to new infrastructure over time.

9.292 Regulation 56(5) of the ECC Regulations also requires that ComReg:

> *"… ensure that any cost recovery mechanism or pricing methodology that it imposes under this Regulation serves to promote efficiency and sustainable competition and maximise consumer benefits."*

9.293 In identifying the appropriate price control against this background, ComReg considers that any price control imposed needs to strike a balance between three forms of efficiency, which are:

[1138] Paragraph 4.45 of ComReg's Strategy Statement 2021–2023. Available at: https://www.comreg.ie/media/2021/12/ComReg-ECS-Strategy-Statement-English-Dec-7-Final-Web.pdf

(g) **Allocative efficiency**, where prices of different products result in an optimum allocation of resources to end users;

(h) **Productive efficiency**, where the cost of production is minimised; and

(i) **Dynamic efficiency**, which refers to the efficiency of investor and end user behaviour over time.

9.294 Allocative and productive efficiency are static concepts taking into account the level of costs to deliver products at a particular point in time, whereas dynamic efficiency takes account of improvements in efficiency over time as innovation and new investments enable new or improved technology or services to be provided at lower cost.

9.295 In ComReg's view, end users are best served over the medium to long term where competition is both dynamically and allocatively efficient. This is best achieved where competition is based on the deepest level of investment in infrastructure which is economically viable. Control over their own infrastructure means that competing operators can more easily make their own technological choices, manage their own service portfolios and control their efficiency levels, compared to relying on the SMP SP's wholesale product portfolio. This is because SPs offer greater differentiation in services and products which are based on their own infrastructure, and where their reliance on the SMP SP's wholesale infrastructure is reduced.

9.296 Promoting dynamic efficiency also involves setting the correct build-or-buy price signal to help inform efficient investment decisions. This means not setting wholesale access prices so low that the Access Seeker would rent access even though it could have viably invested in its own infrastructure. Conversely, prices should not be set so high that the Access Seeker is priced out of the market at the retail level (because it cannot trade profitably at prevailing retail price levels), or the SMP SP makes excessive returns.

9.297 There is a tension between the short-term benefits of lower prices for consumers and the need to encourage investment by Eircom and other SPs which may imply somewhat higher prices, at least in the short term. ComReg's preference over the longer term is to achieve an outcome whereby the market is effectively competitive, which would allow these decisions to be made by market players themselves together with their investors, rather than by regulation. However, ComReg's view is that, given the finding of Eircom SMP on the Commercial NG WLA Market, it is not yet possible to leave these choices to the market, and regulatory intervention is still required on the Commercial NG WLA Market.

9.298 In light of the designation of Eircom with SMP, and the potential competition problems of excessive pricing, price discrimination, exclusionary behaviours, and leveraging discussed in detail in Section 8 ComReg considers that forbearance as regards price control is not an appropriate option at this time as the risks of excessive pricing, exclusionary pricing (for example by way of a margin squeeze) and discriminatory pricing are too great.

Forms of price control

9.299 In addressing the pricing related competition problems, a range of price control options are available to ComReg including benchmarking, retail minus, Margin Squeeze Test (‘**MST**’), and cost orientation.

9.300 ComReg expects that, ultimately, all electronic communications services will migrate from legacy copper and cable networks onto VHCNs. ComReg’s approach strives to strike a balance during the transition period between at times conflicting objectives including ensuring cost recovery (e.g. of the legacy copper network), consumer protection (e.g. promoting service choice and innovation, supporting timely and efficient migration, and protecting from excessive prices) and supporting investors in deploying fibre (e.g. sending appropriate build-or-buy signals so as not to deter efficient investments while avoiding potential inefficient investment in those areas with little scope for competitive entry).

9.301 In assessing the impact on stakeholders and choosing the form of the price control, in accordance with ComReg’s objectives, statutory obligations and Strategy Statement, where there is scope for competing investment, ComReg gives priority to considerations of dynamic efficiency to promote the deployment of VHCNs, including viable investment by new entrants.

9.302 Against this background, neither benchmarking nor retail minus appear appropriate forms of price control.

9.303 Benchmarking is a form of control whereby regulated prices for wholesale access services are set with reference to the prices of comparable services, including, potentially, comparable services in other countries. It can be used, for example, in the absence of sufficient cost data. A risk with this approach is that the benchmark does not reflect the conditions actually faced by the SMP SP. This is because different SPs, and especially SPs in different jurisdictions face different topographic, demographic or cost factors to those in Ireland. These could include different network typologies, terrain, population density or labour costs. Correcting for such differences can be complex and overly subjective, and often infeasible. As a consequence, this approach does not ensure that the correct investment signals are provided.

9.304 In a retail-minus price control the price of the wholesale service is derived from the associated downstream retail price, based on the proportion of avoidable retail and other downstream costs the Access Seeker reliant on the SMP SP's wholesale input would need to incur to effectively replicate its retail price.

9.305 A retail-minus price control provides the SMP SP with the flexibility to experiment with different retail and wholesale price points, thereby facilitating its understanding of end user demand relative to price, which can help inform its own investment plans. However, the wholesale price may not align with the efficient costs of the SMP SP. There is also the risk of increased uncertainty for Access Seekers. It also requires a one-to-one relationship between a retail and a wholesale service. This is not always possible. The approach can also be inflexible in that industry players will always know what the differential between retail and wholesale prices is going to be, thereby reducing the effectiveness of price-based competition in retail markets.

9.306 ComReg is of the view that continuing in general terms with the current price flexibility combined with a MST for FTTP VUA rental, while applying a price cap of CPI-0 annually to the currently cost oriented FTTC VUA prices from the 2021 ANM Decision post 30 June 2024 is appropriate.

Margin Squeeze Test ('MST')

9.307 For Access Seekers reliant on the wholesale inputs of a vertically-integrated SMP SP to compete in downstream markets, a margin squeeze can occur when the SMP SP sets upstream wholesale prices high enough and/or downstream prices low enough, such that Access Seekers are unable to cover their downstream costs (e.g. sales, marketing, etc.). A MST aims to ensure that sufficient margin is available to Access Seekers to prevent foreclosure in downstream markets, that is, that the gap is sufficiently large to permit a user of an access service to trade profitably, compared to the SMP SP's own downstream prices.

9.308 A MST, however, will not address the risk that the SMP SP could set prices at an excessive level to the detriment of end users and conversely, that it may set prices so low that alternative platforms are unable to compete. The latter is a particular risk where such competing platforms do not enjoy the same economies of scale as the incumbent, or their entry into the market or rollout of new technology is relatively nascent. ComReg considers that both of these factors are an issue at this time in the Irish market, and therefore, a MST will not suffice on its own and should be accompanied by some form of cost orientation obligation in respect of FTTC VUA.

Cost orientation

9.309 A cost orientation price control obligation requires that prices are based on the cost of providing the services, ensuring in principle that only efficient costs are recovered. It can also constrain the SMP SP from making excessive returns on its wholesale services and ensures that consumers are not at risk of facing excessive prices. If the appropriate cost methodology is used it can also set correct investment and build-or-buy signals. Setting wholesale access prices using cost orientation helps ensure greater predictability of access price levels for Access Seekers, thereby allowing them to make investment decisions and develop business plans with a greater degree of confidence. It also prevents foreclosure of competing networks.

9.310 Cost orientation may be used to support the prospect for viable network investment by Access Seekers by using a current cost accounting ('**CCA**') approach to model cost oriented prices, thereby prioritising dynamic efficiency by setting prices that can better inform build-or-buy decisions. The CCA approach values assets at the current market value and reflects evolving changes in asset prices. This approach can be implemented to reflect the costs that a hypothetical entrant would incur when investing at any particular point in a Modern Equivalent Asset[1139] ('**MEA**'). A CCA approach can be combined with the use of a Bottom-Up ('**BU**') model, which can be developed to reflect the choices of a hypothetical efficient operator ('**HEO**') from both a technical and an operational point of view. A BU model is a data intensive process of dimensioning the network assets to meet an assumed level of demand, as if the network were being built (either as it stands, or with improvements to the topology). Such a cost model aims at promoting efficient entry, since such a cost model can consider how a network would be built today using modern technology by a reasonably efficient operator. Such an approach, by linking the value of the assets to a newly deployed network, promotes efficient investment incentives. ComReg has, to date, used BU CCA-based models to inform the prices of FTTC.

[1139] Modern Equivalent Asset models costs on what is considered to be the most efficient available technology that performs the same function as the old technology.

9.311 In contrast, a cost model that is based on the costs of the incumbent's TD HCA Separated Accounts is less suited to informing build-or-buy decisions as it may not produce outputs that are consistent with the costs of deploying network assets today. For example, copper networks are long established, with the result that many copper cable assets may be fully depreciated but still in use. Consequently, a TD HCA approach is suitable where efficient cost recovery by the incumbent is prioritised over the need to inform efficient build-buy decisions for network entrants. This will be the case where there is little prospect for viable network competition in respect of a particular service or geographic area.

9.312 The principal drawback to cost orientation, especially in the form of fixed prices underpinned by detailed cost modelling, is that it may be too inflexible where new networks are being rolled out or where there is uncertainty about future demand volumes or cost levels. This is a material concern in the case of FTTP.

9.313 Rather than cost modelling, an alternative is to use a price cap. Price cap regulation is sometimes called **CPI – X**, after the basic formula employed to set price caps.

9.314 A CPI-X price cap can be used to set a limit on the extent to which prices are allowed to increase over the period of the price control. This rate of change is derived with reference to the rate of inflation, measured by the Consumer Price Index ('**CPI**'), adjusted for expected efficiency gains that can reasonably be achieved by the regulated firm. The 'X' in the 'CPI-X' formula is intended to capture the difference between the level of efficiency that is reflected in current prices and the level of efficiency that could reasonably be achieved by the end of the price control period after allowing for inflation in input costs and the reasonable gains in productivity that can be achieved by the regulated firm.

9.315 While a price cap approach does not necessarily rely on the outputs of a cost model to determine the specific price level that should apply in each year of the price control period, a cost model may inform the appropriate value of 'X' to include in the CPI-X formula. For example, if the cost modelling indicates that the SMP SP is currently relatively inefficient compared to the target level of efficiency in that industry, a relatively high 'X' value would be included. However, if the current prices are already consistent with an efficient level of operation, as they would be if the current prices are derived with respect to a model of a HEO, then an 'X' value at, or close to, zero may be appropriate.

Price Control Obligations

9.316 In light of the above, the price control is designed around the principle that an obligation of cost orientation applies to all products in the Commercial NG WLA Market save as regards FTTP VUA rental, as follows:

(a) As FTTP rollout is still ongoing and to protect investment incentives, **FTTP VUA** enjoys ‘**Pricing flexibility’**, so that Eircom may set FTTP VUA rental prices as it chooses, subject however to the following two constraints:

i. An MST in order to mitigate the risk of margin squeeze, leverage and foreclosure, and

ii. A price floor to mitigate the risk to competing networks of excessively low prices, set at the level of the FTTC VUA price cap (see (b) below);

(b) To provide an ‘anchor’ constraining the risk of excessive prices for FTTP VUA, **FTTC VUA** prices are cost oriented. Cost oriented prices for FTTC VUA are set following a ‘**Pricing continuity**’ approach whereby FTTC VUA prices are set at the cost oriented level set out by the ANM Decision for the period ending 30 June 2024, subject thereafter to annual increases capped at CPI-0. This approach takes into consideration transition off copper (including in particular onto fibre) allowing for changes to underlying costs to be reflected in prices, while mitigating the risk to end users of excessive prices, both directly for FTTC and indirectly for FTTP;

(c) In order that FTTP VUA prices remain anchored in the event that Eircom ceases to provide FTTC VUA as a result of copper switch-off, a requirement that in that event, Eircom makes available an **Emulated FTTC-like service** on the FTTP network at the FTTC VUA price; and

(d) To guard against excessive prices, all other products offered by Eircom in the Commercial NG WLA Market are subject to cost orientation, including in particular Non-FTTP VUA products offered as Alternative Comparable Products (‘**ACP**’) (as discussed in the CSO Consultation[1140] and defined in the CSO Decision[1141]) on the withdrawal of FTTC VUA in the context of copper switch-off.

9.317 There is no MST for FTTC on the basis that FTTC VUA prices are capped and the incentive to foreclose competition by way of a margin squeeze through retail price cuts is likely to be low:

(a) FTTP VUA Rental (paragraphs 9.318 to 9.342);

(b) FTTC VUA Rental (paragraphs 9.343 to 9.376);

[1140] Migration from Legacy Infrastructure Consultation (ComReg Doc 22/13) (the ‘**CSO Consultation**’).

[1141] Framework for the Migration from Legacy Infrastructure to Modern Infrastructure, Response to Consultation and Decision, Decision D09/23, ComReg 23/102, dated 1 November 2023.

(c) Emulated FTTC-like service on the FTTP network (paragraphs 9.377 to 9.401); and

(d) Ancillary facilities and services in the WLA Market (e.g. FTTP connections and migrations, Interconnection Services, etc.) (paragraphs 9.402 to 9.452).

FTTP VUA Rental

9.318 In 2018 ComReg allowed Eircom pricing flexibility in respect of FTTP-based VUA, subject to the obligation not to cause a margin squeeze. ComReg considered that, given the prevailing cost and demand uncertainties at that time, FTTP prices set with reference to a BU-LRAIC+ cost model were likely to be very sensitive to the penetration rate of FTTP, such that an incorrect forecast of penetration rates could distort future FTTP investment incentives. ComReg considered that cost orientation may result in too high prices deterring actual or potential purchases of FTTP, or in too low prices reducing or deterring investment by Eircom or other infrastructure investors in FTTP.

9.319 The Oxera Part 1 Report notes that allowing pricing flexibility on FTTP, as ComReg permitted in 2018 is:

> *"consistent with sound economic principles in favour of pricing freedom, particularly during the early stages of FTTH roll-out, including:*
>
> - *operators investing in these networks may face a number of risks (due to demand, cost and regulatory uncertainty);*
> - *in this case, it may be appropriate for regulators to allow for a period of pricing flexibility. Such pricing flexibility may enable operators investing in NGA networks to test price points and wait for the period of demand and cost uncertainty to play out;*
> - *not imposing strict price controls in the early stages of rollout will also allow a period for clarity on the impact of (or emergence of) competition from alternative technologies and any pricing constraints caused by other elements of the regulatory regime itself, such as anchor pricing or copper services regulation;*
> - *in this regard, pricing flexibility could support regulatory objectives with respect to fostering investment in VHCNs;*

- *in contrast, early regulation of FTTH through price caps that may be set at the 'wrong' level (at a level that significantly reduces the expected returns on the investment below the WACC) can undermine the investment incentives for FTTH."*[1142]

9.320 The policy of pricing flexibility for FTTP meant that there has been no direct price control on FTTP services to mitigate against the risk of excessive prices. However, ComReg considered that the risk of excessive prices for FTTP services was sufficiently mitigated by cost oriented FTTC prices acting as an anchor providing an indirect retail pricing constraint on FTTP, on the basis that FTTC and FTTP services are part of the same relevant market. This means that any attempt by Eircom to increase FTTP VUA prices would be constrained by the availability of an alternative lower-speed FTTC service, with the result that the cost controlled FTTC price acted as an anchor for FTTP prices.[1143]

9.321 ComReg's approach to the price control for FTTP also sought to protect through MSTs downstream competition from the potential leverage of SMP from the wholesale market into the downstream wholesale and/or retail markets. This was achieved through a MST requiring that Eircom's retail offers were replicable on the basis of the applicable FTTP VUA price and a MST between the price for FTTP VUA and FTTP Bitstream so as to avoid the risk that the pricing flexibility for FTTP services by Eircom could not be used to undermine Access Seekers who had built out into the network.

9.322 The pricing flexibility approach for FTTP services adopted in the 2018 Pricing Decision was also consistent with the 2013 EC Recommendation, which advocates pricing flexibility for NGA products where sufficient competitive safeguards are in place (non-discrimination, economic replicability test, pricing constraints from the regulated legacy product e.g. the so called 'copper anchor'), or alternative networks retail constraint.[1144]

9.323 ComReg's approach to price regulation of FTTP was intended to support network investment and the success of this approach is evidenced by the increased deployment of FTTP networks by commercial operators in recent years and the consequent level of take-up of FTTP services by consumers, as indicated by recent market statistics and developments:

(a) FTTP retail subscriptions continue to grow and, as at Q1 2023, stood at circa 534,000, an increase of 490% since 2018; and

[1142] Paragraph 4.19 of the Oxera Part 1 Report.

[1143] See paragraphs 6.60 and 6.131 in the 2018 Pricing Decision, as well as A3.11 to A3.18 of the 2018 Decision.

[1144] The 2013 EC Recommendation, recitals 49-69.

(b) Eircom, SIRO and NBI provide wholesale FTTP services, and VMI announced in November 2021 its intention to do so.[1145]

9.324 As further FTTP deployments occur (e.g., Eircom's IFN),[1146] migration from copper to fibre is likely to continue over the market review period.

9.325 Notwithstanding this progress, the fact that commercial FTTP deployment is expected to continue for a number of years (Eircom and SIRO have still to complete a significant proportion of their planned FTTP footprints, while VMI is still in the early stages of the overlay of its CATV network with FTTP) indicates that potential risks (e.g. increasing infrastructure competition could impact both the level and speed of take up of Eircom's FTTP service) may still remain for investors in commercial FTTP networks. This in turn means that there is a continuing need to ensure that ComReg's pricing approach is consistent with its aims, particularly the need to support dynamic efficiency by encouraging viable network investment in competing infrastructures.

9.326 Against this background, ComReg is satisfied that it is appropriate to continue with its policy of allowing pricing flexibility to Eircom in respect of FTTP, and that a more restrictive price control in respect of FTTP, in particular an obligation of cost orientation, is not warranted. In doing so, ComReg is mindful as noted in the Oxera Part 1 Report that any pricing option chosen for FTTP should *"give due regard to the consideration of downside risks of an investment in FTTH and consider the allowable returns over the lifetime of an investment"*,[1147] while also recognising that *"strict cost-based price caps should be considered only once the major risks have crystallised, and Eircom continues to have SMP"*.[1148]

[1145] https://www.virginmedia.ie/about-us/press/2021/virgin-media-ireland-announces-national-fibre-network-upgrade/

[1146] Eircom plans to overbuild all of its FTTC network with FTTP, ultimately passing 1.9 million premises by 2026.

[1147] Paragraph 4.26 of the Oxera Part 1 Report.

[1148] Paragraph 4.28 of the Oxera Part 1 Report.

9.327 Despite ComReg having access to more information on demand for FTTP-based WLA services and FTTP deployment costs than at the time of the 2018 Decision, there is still uncertainty in respect of forecasting FTTP-based VUA volumes (given ongoing migration from copper to FTTP and the potential effects of increased competition from rival network operators) and (to a lesser extent) costs across this price control period and beyond, as the deployment of FTTP networks is incomplete and will continue for the duration of this review period. This uncertainty is compounded by potential long term price distortions brought about by events, such as Covid-related supply chain constraints and disruptions to energy supplies. Consequently, there is a risk that basing cost oriented prices on the outputs of a BU cost model that is populated with incorrect forecasts could affect future market developments by setting FTTP VUA prices at levels that distort investment decisions.

9.328 In their Submissions several Respondents (Vodafone, Sky, and SFG) disagreed with ComReg's proposal to maintain pricing flexibility for Eircom's provision of FTTP VUA in the Commercial NG WLA Market (which was generally supported by ALTO, BT, Eircom, and VMI) and instead considered that Eircom should be subject to a cost orientation obligation for its FTTP in a subset of the Commercial NG WLA Market, which covers Eircom's Rural 340k FTTP deployment (the 'Rural Commercial Area').[1149]

9.329 Vodafone in its Submission argued that pricing flexibility was an inappropriate remedy for the Rural Commercial Area, on the basis that Eircom has already deployed its FTTP network there and it is highly unlikely there will be competing network build in that area.[1150] In addition, introducing a lower-speed 'FTTC-like' FTTP product in this area is unlikely to provide a competitive constraint, because a large number of customers in that area have already migrated to FTTP and are on products with speeds of at least 500 Mbps. For these reasons, Vodafone concluded that ComReg should set cost oriented pricing in the Rural Commercial Area whilst continuing with its proposed pricing flexibility approach for FTTP in areas where competing deployments are likely in the NG WLA Commercial Market.[1151]

[1149] See paragraph 3.31. In relation to the term, 'Rural 340K' Respondents also referred to the 'Rural Commercial footprint', these terms refer to the same area, which was used in the 2021 ANM Decision. The term emerged based on an agreement between Eircom and the Government, whereby Eircom agreed to deploy FTTP to pass circa 300,000 premises which were previously part of the IA of the NBP. Eircom increased the number of premises to circa 340,000 during its FTTP deployment. An important point to note in relation to this Decision, is that the 'Rural 340K' is spread to a varying degree across many of the exchanges which comprise the Commercial NG WLA Market, which has been defined on an entire Commercial EA basis.

[1150] Vodafone Non-confidential Submission, page 10.

[1151] Vodafone Non-confidential Submission, page 22.

9.330 Sky also expressed the view that an FTTP cost orientation obligation would be the most appropriate remedy in the Rural Commercial footprint as in Sky's view Eircom does not face any competitive constraint in this area.[1152]

9.331 SFG did not accept that there is any inherent uncertainty regarding costs and the penetration levels for FTTP-based VUA services given that the costs of Eircom's Rural Commercial Area network rollout are known and have been used to inform the PAM and DAM.[1153]

9.332 However, ComReg notes that in the Commercial NG WLA Market, FTTP deployment is still ongoing and continuing pricing flexibility for FTTP VUA is the most appropriate approach to adopt to avoid the risk of undermining investment decisions during this review period. This is consistent with draft EC guidance in the draft 2023 Gigabit Recommendation (recitals 24 to 26). That being the case ComReg is of the view that an obligation of cost orientation is not appropriate at this time.

9.333 ComReg also notes that it is not the case that there is certainty of costs in the Commercial NG WLA Market and they are not limited to the costs of providing FTTP services to premises in the Rural Commercial footprint – rather relevant costs would include all the network infrastructure that is used in the provision of those services, taking into account the significant economies of scale and scope that arise due to elements of that infrastructure being shared with services provided in the Urban Commercial footprint. For example, the majority of premises in the Rural Commercial footprint would be served from exchanges located in the Urban Commercial footprint. As a result, the costs of the FTTP network elements (such as exchange equipment, backhaul, fibre feeder cables and ducts) in the Urban Commercial footprint and the demand levels on those network elements are relevant to the unit costs of the FTTP services provided in the Rural Commercial footprint.

[1152] Sky Non-confidential Submission, page 5.

[1153] SFG Non-confidential Submission, pages 26 - 27.

9.334 Moreover, the fact that the majority of premises in the Rural Commercial Area are located close to the smaller towns and villages where Eircom has yet to deploy FTTP as part of its IFN plan means that uncertainty still exists in respect of final FTTP unit costs in the significant number of EAs that contain both IFN and Rural FTTP premises. Indeed, it is possible that Eircom could be the predominant provider of FTTP at premises located in a number of these smaller towns and villages, if SIRO and VMI do not extend their networks significantly beyond the larger regional towns and cities where they are currently present (although as noted in Section 5 there is already some degree of overlap in the Rural Commercial Area.)[1154] The fact that the costs of Eircom's Rural Commercial Area network rollout have been used to inform the PAM and DAM, as noted by SFG, does not mean that there is no uncertainty in respect of FTTP VUA. In particular, setting cost oriented prices for accessing poles and ducts in the Rural Commercial footprint is not dependent on the costs and use of poles and ducts in the Urban Commercial footprint.[1155]

9.335 In keeping the pricing flexibility approach, ComReg notes that the risk of excessive pricing, as identified in Section 6 is mitigated by the constraint arising from cost oriented FTTC VUA, a product that is also offered in the Commercial NG WLA Market. In addition, pricing flexibility for FTTP supports dynamic efficiency which may enable a competitive constraint to emerge in the future due to the increased availability of alternative FTTP services from rival platforms.

9.336 Pricing flexibility for FTTP VUA is also constrained by the obligation on Eircom not to margin squeeze and the application of an Economic Replicability Test, or '**ERT'**), which is discussed in detail at paragraphs 9.571 to 9.868. This is consistent with recital 50 of the 2013 Recommendation, which sets out that:

> *"(…) to prevent such pricing flexibility leading to excessive prices in markets where SMP has been found, it should be accompanied by additional safeguards to protect competition. To this end, the stricter non-discrimination obligation, i.e. EoI and technical replicability, should be complemented by guaranteed economic replicability of downstream products in conjunction with price regulation of copper wholesale access products."*

9.337 Similar views were provided in the Oxera Part 1 Report, which notes that:

[1154] See, for example, paragraph 5.409.

[1155] For example, to derive a pole access price for poles in the Rural Commercial footprint ComReg primarily needs to model the average cost of poles in the Rural Commercial footprint. This is mainly dependent on the total number of poles in the Rural Commercial footprint and the total costs of those poles, which can be derived independently of the number and cost of poles in the other footprints in a manner that the costs of the downstream services that use those poles cannot.

"the anchor pricing approach will strike the most appropriate balance between:

- *offering protection to customers from the risk of excessive prices (due to the fact that FTTC and FTTH services are in the same market and will be substitutable, and hence will act as a constraint on the pricing of FTTH services), and*
- *providing investors in FTTH networks with an opportunity to earn fair returns by not directly capping FTTH prices too early, which could undermine the investment incentives, especially if there remains uncertainty over the speed of transition from FTTC to FTTH."* [1156]

9.338 Having reflected on the Submissions to Consultation, Oxera in the Oxera Updated Part 1 Report, maintains its *"recommendation that ComReg continue with pricing flexibility on FTTH subject to the FTTC anchor pricing constraint, including the need for an emulated FTTC-like service provided over FTTH upon CSO (as discussed below)"*.[1157] ComReg also notes Oxera's reflection on the impact of Eircom's 'price guarantee'[1158] currently in place on Eircom's FTTP VUA service, which along with the price floor rules should assist in providing protection to end users.[1159]

9.339 In light of the above, ComReg considers that continuing to afford Eircom pricing flexibility for FTTP VUA is the most appropriate approach to adopt for this review period. Given that FTTP deployment is still ongoing another approach would bear a material risk of undermining viable investment decisions with potential implications in terms of investment and the competitive environment beyond the time horizon of this review period.

[1156] Oxera Part 1 Report, paragraph 4.106.

[1157] Oxera Updated Part 1 Report, paragraph 3.15.

[1158] This 'price guarantee' is a self-imposed pricing policy whereby Eircom has indicated limited price increases to its FTTP VUA service. See https://www.openeir.ie/wp-content/uploads/2023/07/ARO-Price-List-V26_0-Unmarked-05072023.pdf

[1159] Oxera Updated Part 1 Report, paragraph 2.17.

9.340 This is supported by the EECC. In particular recital 193 states that *"…it is important in order to promote efficient investment and innovation to allow those operators investing in new or upgraded networks a certain degree of pricing flexibility"*. Further, recital 193 acknowledges that it is for NRAs *"...to decide to maintain or not to impose regulated wholesale access prices on next-generation networks if sufficient competition safeguards are present"* and that in markets where there is SMP, *"flexibility should be accompanied by additional safeguards to protect competition and end user interests"* including non-discrimination obligations and measures to ensure the technical and economic replicability of downstream products, and a demonstrable retail price constraint from infrastructure competition or an anchor price product.

9.341 Notwithstanding the retention of pricing flexibility for FTTP VUA, ComReg considers that, even in the absence of a need to set cost oriented prices, there are still potential benefits to be gained from developing a suitable FTTP cost model. In particular an FTTP cost model provides useful information to ComReg in ensuring that outcomes are consistent with its general objectives, particularly in informing the assessment of the price floor for FTTP VUA. Consequently, ComReg, with the assistance of advisers Axon Partners, is developing a BU-LRAIC+ network cost model to assess the costs of a FTTP passed premises network (the '**FTTP Cost Model**').[1160]

9.342 In that model, costs and demand are modelled on the basis of a HEO with Eircom's market share and network footprint. As a result, it can only offer limited guidance as to the cost and demand characteristics of the other commercial Network Operators that are deploying FTTP networks. Moreover, ComReg is mindful that uncertainty in respect of FTTP demand and costs is likely to persist over the market review period, which increases the risk of modelling inaccuracies. This uncertainty is further compounded by the general economic outlook and recent inflation surges. Therefore, while ComReg will continue to develop the FTTP network cost model, it does so with the understanding that pricing flexibility continues to be the most appropriate option for FTTP VUA pricing for the duration of this review period.

[1160] For this purpose ComReg, with assistance of its advisers Axon, pursuant to ComReg's information gathering powers under Section 13D(1) of the Act, requested from operators a suite of cost and volume data. ComReg also hosted an initial workshop on the FTTP Cost Model with operators on 25 May 2022, the minutes and presentation materials of which are available upon request.

FTTC VUA Rental

9.343 The pricing flexibility approach to FTTP VUA pricing is predicated on a price controlled FTTC VUA service acting as an anchor to constrain the risk of excessive prices for FTTP VUA. As set out below, ComReg is of the view that it is appropriate and sufficient to use the current cost oriented price for FTTC VUA subject to a CPI-0 price cap for the period of this market review.

9.344 The price control for FTTC VUA under the 2018 Decision took the form of a cost orientation obligation with costs being the BU-LRAIC+ costs of assets that cannot be reused for NGA services (Non-reusable Assets) and costs in Eircom's Indexed RAB for assets that can be reused for NGA services (Reusable Assets).

9.345 In the 2018 Decision ComReg considered that the imposition of cost orientation for FTTC services was proportionate and justified based on a number of reasons including the stabilisation of FTTC demand and costs, previous price increases by Eircom providing evidence that FTTC prices were not effectively constrained and certainty for market participants in respect of the prices being set when compared with the level of certainty that would be available under a MST approach.[1161] ComReg considered that the imposition of cost orientation was appropriate to encourage infrastructure investment while ensuring that prices for Access Seekers were reasonable, and that the use of the BU-LRAIC+ costing methodology would strike the right balance between preventing excessive prices and informing the correct build-or-buy signals based on an 'anchor technology' approach, that is, an approach whereby the prices being set act as a reference point to anchor the investment decisions of commercial operators deploying NGA networks in Ireland.

9.346 Continuing for a cost oriented price for FTTC is appropriate and necessary given that FTTC continues to be the most widely available broadband technology on Eircom's network and in the absence of cost orientation for CGA or FTTP, they are not expected to provide a retail pricing constraint on FTTC VUA prices. There is also insufficient competition from rival Network Operators to impose a constraint at the wholesale level. In light of this, only cost-based FTTC VUA prices might adequately restrict Eircom's ability to exploit its SMP in the Commercial NG WLA Market to make excessive returns on its wholesale services and, in turn, protect consumers from potential excessive FTTC pricing at the retail level. Cost orientation also preserves the ability of FTTC VUA to remain an anchor constraint that can safeguard against excessive prices for Eircom's FTTP VUA services, while continuing to inform the build-or-buy decisions for Network Operators.

[1161] Paragraph 7.1230 of the 2018 Decision.

9.347 To inform the cost oriented prices for FTTC-based services ComReg relies on three related cost models:

(a) The ANM, described in the 2021 ANM Decision, estimates the costs of all links between the local exchange and the customer premises, including LLU (the full copper loop from the local exchange to the customer's premises), SLU (the sub-loop from the FTTC cabinet to the customer's premises) and the NGA Link (the fibre connection between the FTTC cabinet and the local exchange);[1162]

(b) The NGN Core Model models the costs of the fibre link between the local exchange and the aggregation node for FTTC VUA, as well as the core backhaul costs between this aggregation node and the handover point for FTTC Bitstream; and

(c) The NGA Cost Model derives the costs of the FTTC specific assets such as DSLAMs, FTTC cabinets and FTTC connections[1163] as well as the associated planning and operating costs and combines these with the relevant outputs from the ANM and NGN Core models to derive the prices for FTTC VUA and FTTC Bitstream services.

9.348 These cost models primarily use a BU costing approach to derive the current costs of providing FTTC-based services predicated on the assumption that the HEO will continue to use FTTC in the provision of NGA broadband services for the duration of the price control period and beyond (i.e., out to 2050). The use of bottom-up cost models was intended to set appropriate build-or-buy signals for investment and therefore to support ComReg's objective to prioritise dynamic efficiency gains over productive or allocative efficiency concerns and, in particular, to encourage new entrants where network competition is viable. This is consistent with the 2013 EC Recommendation.

[1162] The ANM model from the 2021 ANM Decision replaced the Revised CAM which was the source of the LLU, and SLU inputs used in the 2018 Pricing Decision.

[1163] FTTC connections include activities that are specific to FTTC, such as connecting circuits at the cabinet and MDF and installing the NTU in the customer's premises. It does not include activities that are related to the provision of the local copper loop, such as work on the service lead/drop wire, as these costs are modelled separately as part of the SLU/LLU copper loop costs.

9.349 ComReg is of the view that the outputs from the existing cost models can be used as the starting point for setting future prices for FTTC VUA rental, without any material updates. This is because, for the reasons set out below, in this transition period, any benefit from undertaking updates of the existing Bottom Up cost models is outweighed by the risk of errors leading to prices that over-estimate or under-estimate the appropriate level of wholesale prices in the future, and that developing an alternative RAB-WACC cost model is not appropriate as it would not be consistent with ComReg's objectives related to promoting dynamic efficiency and investment in VHCN.

9.350 First, existing models are based on the costs and service volumes of a HEO that is assumed to operate a steady state copper-based FTTC network. As such, it is not necessary to undertake regular updates of the cost and demand parameters in the BU models to the same extent that it would be if they were based on the costs and service volumes reported in Eircom's TD accounts.[1164]

9.351 Second, significant practical difficulties are starting to emerge in obtaining cost data for many of the assets that are used in the BU model. The BU costing approach is predicated on the assumption that the modelled HEO is continuing to invest in copper cables and FTTC equipment. However, as copper networks are continuing to be replaced by fibre networks, investment in copper assets has declined to such an extent that there is no longer any demand at scale for these assets. As a consequence, it is increasingly difficult to source reliable cost data to inform possible updates of key copper-specific components of the BU models. Even obtaining reliable data for non-copper specific components has been complicated by recent events, e.g., it is unclear to what extent recent increases in power costs are the result of short-term supply issues or indicative of more long-term price trends.

[1164] For example, the HEO is assumed to continue to invest in and maintain a copper-based FTTC network, while the majority of network investment in Eircom's TD accounts will be fibre related.

9.352 Third, BU cost model demand is premised on the assumption that the HEO continues to rely on FTTC to provide broadband. However, broadband provided over FTTC has recently started to decline, such that FTTC will not be the dominant broadband technology on Eircom's network in a number of years. Currently, Eircom is the only wholesale provider of FTTC, and FTTC subscriptions peaked on Eircom's network in 2020. Further, Eircom's overlay of FTTC by FTTP could see FTTP emerging as the dominant broadband technology on its network by 2025. Nonetheless, updating the BU cost models to reflect recent demand trends would jeopardise regulatory consistency and require abandoning the existing BU costing approach, as a HEO would not deploy a new copper network in parallel with a fibre network, only to then cannibalise the demand on that new copper network.

9.353 In fact, in order that the cost model reflects actual FTTC and FTTP service volumes on Eircom's network, the modelled costs would need to be based on Eircom's Top Down costs. This would require the development of a new cost model using a regulatory asset base ('**RAB**') approach focused on ensuring Eircom would make a reasonable level of return (the appropriate WACC rate) on all of its efficiently incurred expenditure, over the lifetime of the network.

9.354 Such a top-down RAB-WACC model would involve pooling all of Eircom's NGA assets into one regulated asset base and estimating the allowed revenues that can be earned based on the regulated WACC.[1165] Such an approach, which would use Eircom's actual capital expenditure (Capex) and operating expenditure (Opex), would reduce the risk of inaccurate costs compared to a BU-based approach, as all of the historical cost and demand information could be derived from Eircom's TD HCA accounts.

[1165] ComReg adopted a RAB approach for CEI assets (ducts and poles) but not for NGA specific assets. This means in setting FTTC prices in the 2021 ANM Decision (and previously in the 2018 Pricing Decision), the costs of making the pole and duct network fully NGA ready were recovered from the combined modelled FTTC and FTTP volumes.

9.355 It is also the case that a RAB-WACC approach that is designed to include both FTTC and FTTP assets could allow the incumbent operator to recover some of the costs of its FTTP investment from FTTC services and may therefore encourage it to speed up FTTP investment and allow it to better manage the adoption of FTTP services.[1166] This is the approach that Ofcom has recently adopted to cost NGA services in that part of the UK where it determined there was no prospect for future infrastructure competition.[1167]

9.356 However, the risk of modelling inaccuracies would not be eliminated as future expenditure and demand would still have to be based on estimates, albeit possibly be linked to Eircom's budget plans. Even if the issues and risk of error associated with forecasting the future levels of demand and costs that are necessary to ensure overall cost recovery over the lifetime of the network could be overcome, significant practical challenges in implementing a RAB-WACC approach would remain. In particular it would require significant informational and modelling demands to ensure the asset register accurately captures past expenditure, keeping it up to date with ongoing Capex, monitoring that revenues earned by Eircom are in line with the allowed revenues of the RAB-WACC model, and taking remedial action if that is not the case. For example, to better ensure cost recovery, the RAB-WACC model might need to consider the extent to which the costs of some network assets were over- or under-recovered in the past,[1168] as well as the potential terminal value of some copper assets that might be realisable after copper switch-off.

[1166] Both the Revised CAM and the ANM cost models adopted a RAB approach for ducts and poles that meant that some of the investments in renewing ducts and poles for an NGA Ready network could be recovered from FTTC VUA prices, even if the investment was ultimately undertaken to support a FTTP deployment.

[1167] Ofcom (2021), 'Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26: Volume 4: Pricing remedies', paragraph 2.25, p. 44.

[1168] As most of the investment is incurred in building the initial premises passed Network Operators tend to report losses in the early years of network deployment, when take-up is low. These losses are then offset by higher reported returns as service take-up matures and the residual value of the initial network investment is eroded by straight-line depreciation. In recent years Eircom's HCA Separated Accounts have continually reported levels of return in excess of the regulated WACC.

9.357 Furthermore, Top Down models are typically best suited to situations where the regulated assets have natural monopoly characteristics and hence, where no or very limited competition is expected. While ComReg does not expect that there is a prospect for significant competition in respect of Eircom's duct and pole assets, this is not the case for all NGA assets and Eircom is currently facing or expected to face competition in the provision of NGA services in some areas of the Commercial NG WLA Market from SIRO and VMI. Consequently, switching to a RAB-WACC approach for all NGA assets would not be consistent with ComReg's objective to promote dynamic efficiency by encouraging the development of network competition where and when viable.

9.358 Therefore, ComReg is of the view that, in this transition period, developing an alternative RAB-WACC cost model is not appropriate and, furthermore, that any potential benefits from undertaking updates of the existing Bottom Up cost models are outweighed by the risk of potential errors leading to prices that over- or under-estimate the appropriate level of wholesale prices in the future.

9.359 Consequently, in the absence of updated cost models, rather than fixing regulated FTTC VUA prices at the level of the cost model outputs for each year of the review period, ComReg uses the cost oriented price that was determined in the 2021 ANM Decision for the period ending 30 June 2024 (€19.12), thereafter allowing increases of no more than the level of inflation using a CPI-0 formula.

9.360 Eircom in its Submission agreed that setting X equal to zero in the 'CPI-X' price cap formula is reasonable as the HEO approach used in the ANM already captures achievable efficiencies.[1169] VMI and its advisers SPC Network suggested that not only the prices post July 2024 should be allowed to increase by up to CPI-0%, but that an inflation related increase should also be applied to the cost oriented starting price of €19.12. This is on the basis that, when the ANM was finalised in 2021, inflation was negative and there were no expectations that it would rise to levels recorded since early 2022.[1170]

[1169] Eircom Non-confidential Submission, paragraph 203.

[1170] SPC Network Non-confidential Submission, paragraph 61.

9.361 NBI, however, noted that Eircom's investment in FTTC was already a sunk cost and so *"allowing the FTTC price to rise by CPI is quite generous".*[1171] Sky also argued that the use of CPI-0% would appear very generous as Eircom remains a highly profitable entity, which is evident from Eircom's published accounts, and that Eircom's actual cost of providing FTTC continues to decrease over time.[1172] SFG submitted that allowing FTTC prices to increase by up to CPI from July 2024 so that *"underlying cost pressures are captured"* was at odds with the positions that ComReg previously adopted in the 2021 ANM Decision and in the recent PIA Consultation[1173] where ComReg did not include inflation trends in the cost modelling. Some Respondents also raised concerns that permitting Eircom to increase prices by up to CPI-0% from July 2024 risks undermining the effectiveness of the FTTC VUA price as an anchor on FTTP prices. For example, SFG noted that *"An "anchor" that is permitted to rise in this manner inevitably allows the price of what it was supposed to restrain to also continually rise – something which an SMP provider will welcome given its incentive and ability to sustain such increases."*[1174]

9.362 ComReg accepts that Eircom's investment in copper-based FTTC is a sunk cost and that most, if not all, of that FTTC investment has been heavily depreciated, (and is no longer being replaced with new FTTC investment). Consequently, the overall level of FTTC related costs is decreasing in Eircom's accounts. Nonetheless, ComReg's primary purpose in setting cost oriented FTTC prices since 2018 has been to inform the build-buy decisions of Network Operators deploying fibre rather than ensuring precise cost recovery by Eircom. As a result, the cost modelling for FTTC in both the ANM and NGA cost models assumes ongoing investment by the modelled HEO. For example, the capital valuation of copper cables in the ANM is based on a bottom-up approach consistent with a recently deployed cable network, while investment in FTTC specific assets in the NGA cost model is assumed to continue on the basis that FTTC remains the anchor technology for the provision of broadband services.

[1171] NBI Non-confidential Submission, page 10.

[1172] Sky Non-confidential Submission, page 5.

[1173] SFG Non-confidential Submission, page 28.

[1174] SFG Non-confidential Submission, page 27.

9.363 The intention in using a bottom-up approach in this way is to promote dynamic efficiency by deriving cost oriented prices that better reflect the costs faced by operators building a network today than would be the case if the costs were derived from the incumbent operator's accounts. As noted by both SIRO[1175] and VMI,[1176] this reasoning remains relevant because all fixed Network Operators are continuing to invest in FTTP. Therefore, ComReg cannot ignore the reality that current levels of inflation can affect the cost of future network investment, and allowing Eircom some upward pricing flexibility to increase FTTC VUA prices in response to those inflationary pressures is not unreasonable.

9.364 There is no contradiction between the approach taken by ComReg in this Decision or the approach taken in the ANM Decision or in respect of PIA. In the 2021 ANM Decision, noted that a *"0% price trend is reasonable, **at least for the forthcoming price control period**"*[1177] (emphasis added), and this is not inconsistent with allowing inflation based increases for the period after July 2024. ComReg also notes that since the 2023 PIA Consultation ComReg has collected data from the Network Operators and identified significant cost increases. As a result, positive cost trends have been factored into the updated cost modelling used to derive the cost oriented prices for PIA services in the 2023 PIA Decision.[1178]

9.365 Allowing increases by CPI-0% means that FTTC VUA prices continue to be based on costs, even though the evolution of costs in the later years of the review period is based on the CPI-0 formula, rather than on detailed updates to cost models. ComReg does not consider that it would be appropriate to impose an additional price increase to the price applicable to end June 2024. Any increase to that price in advance of July 2024 risks wholesale FTTC prices increasing by more than CPI in a single year, as Eircom could also impose a CPI-0% price increase from July 2024.

9.366 The CPI value is the annual CPI value for the previous calendar year.[1179] Capping price increases annually to CPI-0 in any year also means that, should Eircom choose to not fully implement a CPI-0 increase in one year, there will be no carry over of 'unused increases' into subsequent years.

[1175] SIRO Non-confidential Submission, pp.19 - 20.

[1176] VMI Non-confidential Submission, p.27.

[1177] The 2018 Pricing Decision, paragraph 5.568.

[1178] For further information on cost modelling for PIA services, see Section 7 of the 2023 PIA Decision.

[1179] CPI Inflation Calculator interactive comparison app by CSO Ireland, https://visual.cso.ie/?body=entity/cpicalculator

9.367 Adopting this 'pricing continuity' approach allows future prices to increase by the level of inflation experienced in the economy. This should provide reasonable predictability of prices, which is an important aspect of creating the right environment for operators to make investment decisions[1180] and is consistent with Regulation 56(4) of the ECC Regulations. Eircom in its Submission agreed that pricing continuity provides a balance between allocative and dynamic efficiencies, which should be of key concern to ComReg at this particular juncture.

9.368 A similar approach to the pricing of NGA services has been adopted by Ofcom for those areas where there is a prospect of network infrastructure competition in the UK.[1181] The Oxera Part 1 Report also favours such a pricing approach as it avoids the need for re-running and updating the HEO based FTTC BU-LRIC+ model. It is particularly appropriate where current FTTC prices are already cost oriented (as is presently the case) and general inflation trends are deemed to be a reasonable predictor of how the costs in a HEO based FTTC model could be expected to evolve.

9.369 The Oxera Part 1 Report highlights that a flat real pricing continuity approach could produce a slightly higher price path for FTTC prices than would be derived from an updated BU-LRIC+ model, given that no future efficiency assumptions would be built into this approach. In this regard, the Oxera Part 1 Report notes that slightly higher FTTC prices:

> *"would tilt the balance slightly towards incentivising investment between competing network infrastructures, while still providing protection for consumers by limiting the extent to which prices can rise to general inflation levels. For similar reasons, a pricing continuity approach may also incentivise a speedier migration towards FTTH services, provided that FTTH prices stay constant or increase at a lower rate than general inflation".*[1182]

[1180] VMI's national fibre network upgrade; SIRO's investment to upgrade bandwidth; SIRO's network expansion; and Eircom's deployment passes 800,000 premises.

[1181] Ofcom, Statement: Promoting investment and competition in fibre networks Wholesale Fixed Telecoms Market Review 2021-26, 18 March 2021, available at: https://www.ofcom.org.uk/consultations-andstatements/category-1/2021-26-wholesale-fixed-telecoms-market-review

[1182] Paragraph 4.43 of the Oxera Part 1 Report.

9.370 However, incentivising investment has been and continues to be a primary concern for ComReg when regulating FTTC VUA prices. This is reflected in the fact that ComReg adopted a BU-LRAIC+ approach to the costing of those assets that are required to provide FTTC services, which includes valuing the copper cable network on the basis of the costs of deploying such a network today and ensures that the RAB for ducts and poles includes the future investment that is required to make all poles and ducts NGA ready.

9.371 ComReg is accordingly satisfied that existing market prices for FTTC VUA provide appropriate build-or-buy price signals and reflect a reasonable level of operator efficiency as they are based on a BU cost model of a HEO. Consequently, setting the ‘X’ component in the CPI-X price trend formula to zero should ensure that the HEO’s level of efficiency continues to be reflected in future prices. It is also the case that the current FTTC price modelling derives FTTC VUA prices that increased over time, and the prices set in the 2021 ANM Decision allowed for an increase of circa 3% in the FTTC VUA price on 1 July 2023 (€18.54 to €19.12).[1183] While these price increases are not directly linked to inflation, nonetheless, it is not unreasonable to assume that market players would expect that, beyond June 2024, future FTTC VUA prices would continue to increase to some extent.

9.372 The pricing continuity approach that ComReg mandates for FTTC VUA prices facilitates the maintenance of relatively stable and predictable FTTC prices in real terms. The same level of pricing stability would not be achieved by updating existing BU-LRAIC+ models or developing an alternative RAB-WACC model using actual network costs and demand characteristics evident on Eircom’s network during the current period of network transition between FTTC and FTTP. The application of a CPI-0 price trend also means that prices in the later years of the review period remain cost oriented in that prices evolve in line with a general cost trend.

9.373 A pricing approach that ensures a degree of pricing stability for FTTC VUA prices while maintaining pricing flexibility for FTTP VUA should also help to incentivise all commercial Network Operators to maintain the recent momentum evident in FTTP network investment.

[1183] The observed increase in the modelled prices is primarily due to lower overall demand on Eircom’s network increasing unit costs as well as reduced use of e-side copper as CGA service volumes decline, partly due to migration to FTTC. The decrease in demand is also due to some legacy copper services, such as ISDN, ceasing. The copper demand scenario in the ANM also allows for some overall line loss on Eircom’s network to rivals.

9.374 ComReg acknowledges that the pricing continuity approach could see FTTC VUA prices trending upwards. However, just as ComReg considers that reducing the FTTC VUA price from €20.36 to €18.36 on 1 March 2022, as part of the 2021 ANM Decision, was appropriate on the basis that the unit costs associated with FTTC services had reduced (primarily due to the application of a lower WACC), so it would also be appropriate if prices were to increase above €19.12 after 1 July 2024, on the basis that those increases reflect underlying cost pressures as captured by CPI.

9.375 ComReg therefore considers that a degree of upward pricing flexibility for FTTC VUA prices remains appropriate given recent levels of inflation and doing so by means of a CPI-0% price cap is a more pragmatic alternative to detailed cost modelling for FTTC, when there is significant uncertainty in respect of future demand and costs. Such an approach should continue to incentivise investment by competing network infrastructures, while still providing protection for consumers by limiting the extent to which prices can rise to general inflation levels. ComReg also notes that in the Oxera Updated Part 1 Report Oxera's recommendation remains unchanged following consideration of the Submissions. Oxera's conclusion reflects its assessment:

> *"Given the current high inflationary environment, some respondents expressed concern that the FTTC price will be set at too low a level (to start with), while others consider the FTTC price will rise too quickly and thus not provide a good constraint on FTTC prices (or on FTTH prices via the anchor). On balance, across the comments put forward, and in line with our assessment at the time of the Oxera Part 1 Report, and consistent with our comments above, we consider to maintain the approach, of real pricing continuity (CPI+0%).*
>
> *This recognises the complexity of adopting alternative approaches, while also noting that the approach taken can have the benefit of incentivising investment between competing network infrastructures, while still providing protection for consumers by limiting the extent to which prices can rise to general inflation levels."*[1184]

[1184] Oxera Updated Part 1 Report, paragraphs 2.16 and 2.17.

9.376 Having considered the level of uncertainty that currently exists in respect of cost and demand forecasts due to the ongoing transition from copper to fibre networks, and recognising the extent to which this uncertainty is further compounded by the continuing economic uncertainty in respect of future cost trends, ComReg is of the view that its pricing continuity approach (applying a CPI-0 price cap annually to the currently cost oriented FTTC VUA prices post 30 June 2024) is the most appropriate form of price control for a review period where investment by Network Operators in the expansion of their FTTP network footprints is expected to continue.

Emulated FTTC-like service on the FTTP network

9.377 The effectiveness of the FTTC VUA service acting as an ‘anchor product’ providing a competitive constraint on FTTP pricing is contingent on FTTC services continuing to be available in the market, thus allowing consumers to opt for an FTTC service as an alternative to the FTTP services.

9.378 As the migration from FTTC continues, it is expected that Eircom will ultimately proceed to copper switch-off (‘**CSO**’) in the future. Access Seekers and their customers may therefore no longer have the choice of a copper-based service, reducing the overall effectiveness of the FTTC VUA ‘anchor product’ as a competitive constraint on FTTP pricing. In order to mitigate against this, Eircom is required to make an ‘emulated’, FTTC-like, service available on the FTTP network at the same price as FTTC in those areas where FTTC is being withdrawn as part of CSO.

9.379 Eircom in its Submission contests ComReg’s *vires* under the Access Regulations (now the ECC Regulations) or the Code to impose a requirement on Eircom to provide access to an emulated FTTC-like service because, Eircom says, *“… the Code only contemplates the need for emulation to be of at least comparable quality. It categorically does not require an equivalent setting of an FTTH price”*.[1185] However, the requirement that Eircom makes an emulated FTTC-like service is not to impose on Eircom a specific alternative product of at least comparable product, as Eircom suggests. The purpose of the Emulated FTTC-like service is to ensure the continuation of the indirect price constraint on FTTP that FTTC provides thereby addressing the risk of excessive pricing that exists as a result of Eircom SMP and ensuring that there are sufficient competitive safeguards are in place to allow pricing flexibility for FTTP, as envisaged by Recital 26 of the draft 2023 Gigabit Recommendation.

[1185] Eircom Non-confidential Submission, paragraphs 131 to 133.

9.380 ComReg notes that its approach is also very similar to the EC's draft recommendation at Recital 29 of the draft 2023 Gigabit Recommendation as consulted upon by the EC, that NRAs could substitute a copper-based anchor for an *"entry-level fibre product"* where there is need to preserve the anchor's constraint during the transition to fibre. This approach was supported by BT and ALTO in their Submissions.

9.381 In particular, Recital 29 of the draft 2023 Gigabit Recommendation recognises that:

> *"where the product offered by the SMP operator on the legacy access network is no longer able to exercise a demonstrable retail price constraint on the VHC wholesale product (for example in the event of a copper switch-off, or where the NRA finds that retail products provided over copper are not substitutable with those provided over VHCNs), it could be replaced by a VHC-based product, such as an entry-level fibre product".*

9.382 Point 42 of the draft 2023 Gigabit Recommendation provides guidance to NRAs on the definition of the characteristics of the regulated anchor, including that it should be cost oriented, and copper-based. Point 42(c) specifically caters for the situation where an NRA concludes that a copper-based anchor *"would no longer exercise a demonstrable retail price constraint"*, which ComReg considers could arise due to copper switch off by Eircom. Point 42(c) also explains that NRAs, *"should define an entry level regulated product provided over a VHC network in the relevant wholesale market as the regulated anchor"* and *"should allow the SMP* ***operator to provide an anchor offering similar performances to the most recent copper-based anchor****, provided that the anchor is able to exert a demonstrable retail price constraint over higher performance products provided over VHCNs".* This is what ComReg has done.

9.383 In their respective Submissions, BT[1186] and ALTO[1187] proposed that ComReg set an entry level FTTP price at the FTTC level. As noted by Oxera in its Updated Part 1 Report, the *"proposal to introduce an emulated service is equivalent to suggesting that Eircom make available an 'entry level' FTTH service (albeit equivalent to the FTTC service) at the same price as the FTTC service. In this regard, we consider that this proposal does not differ significantly from the BT and ALTO proposal to set an entry level FTTH price at the FTTC level."*[1188] ComReg notes that VMI and NBI saw merit in the proposal to ensure that the anchor constraint remains effective over the price control period.

9.384 Eircom recognised also in its Submission[1189] that there may be some commercial attractions to the development of a FTTC-like emulation service on FTTP, but also argued that the service should still be at a slight price premium compared to the standard FTTC VUA service, primarily due to the FTTP-based service being a better quality service.

9.385 The purpose of the Emulated FTTC-like service, however, is to preserve the anchor constraint. Permitting a premium on this service would weaken the anchor constraint (by raising the anchor price) and would alter the price signal sent to competing Network Operators and Access Seekers. The pricing of the Emulated FTTC-like service at the FTTC price means end-users have the option to select an FTTC-like service rather than higher priced FTTP services while not undermining the migration to FTTP of end users who value higher speed services.

[1186] BT Non-confidential Submission, pages 2 and 8.

[1187] ALTO Non-confidential Submission, page 9.

[1188] Oxera Updated Part 1 Report, paragraph 4.7.

[1189] Eircom Non-confidential Submission, paragraph 134.

9.386 It is for Eircom in the first instance to determine the exact performance characteristics required of the emulated FTTC-like service subject to the requirement that it provides a similar level of service as its FTTC-based VUA product. In its Submissions NBI indicated that it would prefer a more prescriptive design to be set by ComReg and there was a concern that a higher quality FTTP service could be available at the same or lower price than the emulated FTTC-like offering.[1190] However, ComReg notes that the purpose of the requirement that Eircom makes available an Emulated FTTC-like service on its FTTP network is to maintain the anchor role played by FTTC as regards FTTP prices. In that context, the requirement also makes clear that nothing more in terms of quality and functionality than delivered over FTTC is required of Eircom and ComReg does not believe that it is necessary at this stage and in the circumstances to specify further the detail of that Emulated FTTC-like FTTP product.

9.387 It does mean, though, that the Emulated FTTC-like service must have a speed profile designed to deliver an equivalent level of service to FTTC VUA. There is currently a single wholesale price for a FTTC VUA service, notwithstanding the fact that the speeds provided can vary significantly (e.g., depending on the length of the copper loop the service is provided on). However, the maximum attainable speed tends to be c.100 Mbps. Consequently, a speed that is significantly below 100 Mbps (e.g., a 30 Mbps service) is likely to be less effective as a constraint on FTTP prices and would be a reduction in the service speed experienced by most existing FTTC customers, while setting the speed too high (e.g., 200 Mbps) could significantly affect the take-up of standard FTTP services and undermine the returns and investment incentives of FTTP operators.

9.388 As regards the risk of FTTP services priced below the Emulated FTTC-like FTTP service, this is not permissible. As discussed in paragraphs 9.487 to 9.495 on Price Floors, the FTTC price acts as a price floor for all FTTP services.

[1190] NBI Non-confidential Submission, pages 9 - 10.

9.389 Accordingly, introducing the Emulated FTTC-like service at the same time as FTTC is being withdrawn in an EA will help maintain the retail price constraint (i.e. the anchor) on the standard FTTP prices that was previously provided by the availability of the FTTC VUA service. It also supports the pricing flexibility approach used in respect of FTTP, as only the emulated, FTTC-like service would be subject to a price control based on the FTTC price. By the time FTTC is withdrawn in an EA, it is expected that there will have already been significant migration from FTTC to FTTP. ALTO[1191] and BT[1192] foresaw operational problems and customer complaints tied to copper withdrawal happening by premise rather than by exchange. However ComReg expects that the Emulated FTTC-like service will be introduced on an exchange by exchange basis in parallel with copper switch off when significant migration has already taken place so that the operational problems the concern of ALTO and BT should not arise in any material way.

9.390 Providing for an Emulated FTTC-like service has the additional benefit of providing some protection to those copper-based customers who, in the absence of an Emulated FTTC-like service, would have been resistant to the prospect of migrating onto a higher price / higher speed FTTP product that they may not wish to purchase. Also, customers who value higher speed services would still be able to upgrade to higher bandwidth FTTP services at prices that are subject to a retail price constraint as a result of the anchor.

9.391 Therefore, ComReg considers that the speed profile designed to deliver, at least, an equivalent level of service to FTTC VUA should ensure that existing FTTC customers are no worse off after FTTC withdrawal compared to the status quo. It may be necessary for Eircom to set the speed profile such that it should also be sufficiently below the average speeds that will be available on the standard FTTP services to ensure that customers are not inadvertently discouraged from migrating to standard FTTP services, thereby safeguarding the returns and investment incentives of FTTP operators. However this is a matter that ComReg believes is appropriate to leave to Eircom at this stage.

[1191] ALTO Non-confidential Submission, page 9.

[1192] BT Non-confidential Submission, pages 2 and 9.

9.392 ComReg has also considered whether to require Eircom to make the Emulated FTTC-like service available wherever FTTP is present, regardless of whether FTTC is available. In this regard, Eircom has already completed a Rural FTTP network that passes c.340,000 premises with FTTP, most of which, given their rural location, would never have been in a position to avail of a viable FTTC-based service. VMI in this regard sought clarification as to why ComReg does not require Eircom to offer the Emulated FTTC service in FTTP-only areas where FTTC has never been available and invited an explanation of the operational reasons as to why ComReg considered that to be the case.[1193] Vodafone though considered that introducing the Emulated FTTC-like service in areas where FTTP has been deployed would unlikely provide a competitive constraint as end users in those areas are likely already served by speedier services.[1194]

9.393 In light of these issues, the Oxera Part 1 Report recognised that the effectiveness of the retail price constraint on FTTP would be enhanced if the Emulated FTTC-like service was offered immediately in those areas where FTTP is present but where FTTC is not available, i.e. the Rural FTTP footprint. Currently, most[1195] broadband customers in the Rural FTTP footprint can only avail of a CGA broadband service, in the form of CG SABB or an FTTP service. The current CG SABB wholesale price is €23.73 with regional handover or €25.33 with national handover. The nearest equivalent standalone FTTC Bitstream service in the Revised Regional WCA Market EAs is €22.48 per port,[1196] and the nearest available equivalent FTTP service is the 150 Mbps FTTP Bitstream service, which is priced at €29.72 per port.

[1193] VMI Non-confidential Submission, page 26.

[1194] Vodafone Non-confidential Submission, page 22.

[1195] ComReg understands that less than 15% of Rural FTTP services could be served with viable NGA using VDSL.

[1196] Additional usage charges also apply for FTTC and FTTP.

9.394 There are, however, practical difficulties in implementing such an approach and ComReg believes that it would not be proportionate to require Eircom to offer the Emulated FTTC-like service to a sub-set of customers in an EA that is not available to other FTTP customers in the same EA. In particular, the Rural FTTP footprint is spread across c.900 EAs and no EA is entirely within the Rural FTTP footprint. This means that the Rural FTTP footprint does not align with Eircom's EAs and the majority of EAs will include premises that are in Eircom's IFN (that are currently passed with a viable FTTC service), premises that are in the Rural FTTP footprint (c.85% of which cannot receive a viable FTTC service) and premises that are in the NBP IA (that will depend on the NBP to receive NGA broadband from NBI).

9.395 Therefore, targeting the Emulated FTTC-like service to those premises in the Rural FTTP footprint in advance of, for example, CSO would require Eircom to identify those premises that are passed by Eircom's FTTP network but cannot avail of a viable FTTC service in each EA, and then make the Emulated FTTC-like service available to that specific cohort of customers in each of c.900 different EAs.

9.396 In light of this complexity, Eircom should only be required to introduce, and then keep available, the Emulated FTTC-like service on FTTP for all premises passed by its FTTP network[1197] in an EA from the time that Eircom initiates the withdrawal of FTTC in that EA. ComReg is concerned in this regard that it may not be proportionate to require Eircom to offer the Emulated FTTC-like service to a subset of its FTTP customer base in advance of CSO, given the administrative burden associated with introducing the Emulated FTTC-like service on FTTP for subsets of customers in each EA and in circumstances where a significant proportion of these customers already avail of an FTTP service. For example, ComReg understands that that there are over 500 EAs where the Rural FTTP footprint accounts for less than 10% of the premises in that EA, while average take-up of FTTP to date by the premises passed by Eircom's Rural FTTP network is **[✂** [redacted] **✂]**.

[1197] While some premises in the IA will only be passed by NBI FTTP, ComReg proposes to make no finding of SMP in respect of NBI, given the restrictions placed on its conduct by means of its contract with the State.

9.397 Eircom sought to further curtail availability of this proposed service to just end users migrating from copper, not existing FTTP end users seeking to downgrade.[1198] However this would undermine the effectiveness of the anchor constraint. Oxera in its Updated Part 1 Report notes that one of the fundamental purposes of this service is to act as a *"continuation of an indirect pricing constraint on FTTH prices (through continuation of the anchor pricing constraint imposed by regulation of FTTC VUA services, even when those services are no longer available)."*[1199]

Other, Non-FTTC VUA, Non-FTTP VUA products including ACPs

9.398 Having regard to Eircom's position of SMP in the Commercial NG WLA Market, it is necessary and appropriate to continue in place the requirement for cost orientation for all products offered by Eircom in the market save for FTTP rental.

9.399 ComReg notes in this regard that in the context of CSO and the withdrawal of FTTC VUA, Eircom may offer in accordance with the Framework for Migration from Legacy Infrastructure to Modern Infrastructure (as discussed in the CSO Consultation[1200] and defined in the CSO Decision[1201]) non FTTP-based products that are alternative comparable products to FTTC VUA. By definition, any such ACP will offer comparable quality and functionality to the FTTC VUA product that it is replacing and is accordingly a substitute for FTTC VUA falling within the Commercial NG WLA Market.

9.400 As a product within the Commercial NG WLA Market, an ACP substituting for FTTC VUA will be subject to the general obligation of cost orientation that applies to all non FTTP based services in the market. Noting that it is not clear which ACPs Eircom may offer ComReg does not propose to further specify the obligation of cost orientation as regards ACPs. Given that ACPs would substitute for FTTC VUA, ComReg will assess such an ACP's price by reference to the FTTC VUA price and accept on a *prima facie* basis that an ACP priced at the FTTC VUA price is cost oriented. Any pricing differences should be capable of reasonable justification by reference to costs.

[1198] Eircom Non-confidential Submission, paragraph 134.

[1199] Oxera Updated Part 1 Report, paragraph 4.5.

[1200] Consultation Framework for the Migration from Legacy Infrastructure to Modern Infrastructure Consultation and Draft Decision. ComReg 22/13R, 25/03/2022 (the '**CSO Consultation**').

[1201] Framework for the Migration from Legacy Infrastructure to Modern Infrastructure, Response to Consultation and Decision, Decision D09/23, ComReg 23/102, dated 1 November 2023.

Ancillary services and facilities

9.401 Ancillary services and facilities in the WLA Market include CG and NG services and facilities such as connections and migrations, co-location, multicast, Class of Service, VLAN tagging, and interconnection (including ENH, IBH, ISH and CSH).

9.402 The existing price control for CG and NG ancillary services and facilities in the WLA Market is in the form of a cost orientation obligation designed to prevent excessive and/or discriminatory pricing and ensure that there is a level playing field between all SPs to compete. The cost orientation obligation also ensures that Eircom can recover the cost of provision of these services and facilities as well as a reasonable return.

9.403 As NG ancillary services and facilities continue to be required to support a level playing field amongst SPs and there are practical difficulties associated with replicating them, an obligation of cost orientation obligation for NG ancillary services and facilities remains appropriate in the Commercial NG WLA Market. ComReg considers that cost orientation is the most appropriate form of price control obligation to address the risk of excessive prices.

9.404 Eircom, however, submitted that cost orientation *"cannot simply be assumed to continue to be the most appropriate remedy in a market that is constantly evolving. Equally, ComReg cannot impose a cost orientation obligation on ancillary services for markets that are no longer regulated."*[1202] Eircom also considered that there is no need to impose cost orientation on FTTP connections and migrations as competitive pressure would be sufficient to protect against excessive pricing of FTTP connection and migration charges and countervailing buyer power in the wholesale market has driven FTTP connection fees downward.[1203]

9.405 The fact that a *"market is constantly evolving"* does not as such make an obligation of cost orientation for ancillary services and facilities inappropriate – on the contrary, an obligation of cost orientation is particularly suited to ensure those services and facilities to which access is required for Access Seekers to provide services over Eircom's network, in order to guard against excessive prices. For the avoidance of doubt, the obligation of cost orientation applies to services and facilities associated with the NG Commercial WLA Market. Eircom's comment that there can be no cost orientation obligation on ancillary services for markets that are no longer regulated is not understood.

[1202] Eircom Non-confidential Submission, paragraph 240.

[1203] Eircom Non-confidential Submission, paragraph 244.

FTTP connections and migrations

9.406 The 2018 Pricing Decision a cost orientation obligation in respect of connections and migrations with applicable charges equalised between connection and migration. The requirement that Eircom make wholesale charges for FTTP connections and migrations the same was designed to strike the right balance between addressing retail demand uncertainty, ensuring cost recovery for Eircom's investment, reducing a barrier to entry (in the form of high up-front connection charges) for retailers, avoiding distortion of incentives for retailers in connecting customers (targeting already connected customers versus unconnected customers), and providing better predictability in the market for retailers in relation to charges.

9.407 Oxera's Part 1 Report, identified two possible policy options for ComReg:

> *"Option 1: continue with the existing approach of requiring connections and migrations to be equalised and not (together) increase to levels that would lead to over-recovery of connection costs;*
>
> *Option 2: take steps to limit migration charges above cost, to avoid distortions to the migration decision as a larger number of customers are already connected to the network, and place limits on connection charges to ensure that new connections remain affordable and are not adversely affecting the take-up of FTTH services."*[1204]

9.408 For the reasons set out below, ComReg maintains the existing requirement that connection and migration costs are recovered by way of equalised connections and migration charges, but subject to an overall price cap, in order to provide stakeholders with greater certainty in respect of the future level of connection/migration charges than currently exists, and to limit any distortions arising from migration charges exceeding the incremental cost of the migration.

9.409 Prior to the 2018 Pricing Decision, wholesale FTTP connection charges and FTTP migrations charges (the fee payable by a RSP on gaining an end user from a connected competitor) were subject to a cost orientation obligation. However, there was (and is) a significant difference in the incremental cost of an FTTP connection and the incremental cost of a subsequent FTTP migration. Consequently, Eircom was charging a fee of €270 per connection and a fee of €2.50 for a migration, while still being compliant with the cost orientation obligation.

[1204] Paragraph 6.17 of the Oxera Part 1 Report.

9.410 Establishing an FTTP connection has a much higher cost than an FTTP migration as connection requires a technician to undertake a number of activities, including the deployment of a drop wire/service lead from the local FTTP distribution point to the customer's premises, installing an Optical Network Termination ('**ONT**') within the customer premises, establishing the FTTP service, and updating all relevant records. The customer specific connection costs may also include the costs of any ducts and/or poles on public roads that are dedicated to a single customer, which can be a significant cost in rural areas. As a result, the average incremental cost of a connection in 2018 was significantly higher than the €270 connection fee that Eircom applied at that time. In contrast, a FTTP migration primarily involves a reconfiguration of the FTTP service and manual update to a database, which means that the average incremental cost of a migration would have aligned with the €2.50 migration charge.

9.411 However, ComReg was of the view that having a charge for connecting a new customer that is significantly higher than the charge for migrating an existing customer to another SP could be a deterrent to encouraging take-up of FTTP services by new end users as it could incentivise RSPs to apply discriminatory pricing measures, differentiating between those end users in premises that already have an FTTP connection and those who have no connection.

9.412 Eircom implemented a maximum national wholesale FTTP Connection / Migration Charge of €170 from 1 January 2019 (thereby reducing connection charges from €270 and increasing migration charges from €2.50). Eircom subsequently reduced the charge for FTTP connections / migrations to €100 from 1 July 2020. More recently, Eircom set charges for FTTP connections / migrations to €0 from 1 October 2022 until 31 March 2023. These charges were planned to revert to €100 on 1 April 2023. However, on 20 March 2023, Eircom notified ComReg that it sought to continue to set a charge of €0 for FTTP connections / migrations. This charge persists as of November 2023.[1205]

9.413 In adopting the equalised charging policy for FTTP connections and migrations, ComReg recognised that it could result in a migration charge that was significantly higher than the incremental cost of migrating a connected customer. This factor was also highlighted by a number of respondents to ComReg's Call for Inputs seeking stakeholders' views as to the market impact of the existing FTTP connection and migration charges, that was issued as part of the 2020 ANM Consultation.[1206]

[1205] As advised in ComReg Information Notice 23/29 ComReg did not object to this notification.

[1206] ComReg Document No 20/101: Regulated Wholesale Fixed Access Charges, Review of the Access Network Model and Specification of the Price Control for Public Switched Telephone Network

9.414 In its response to this Call for Inputs, Vodafone argued that a wholesale FTTP migration charge that is significantly above cost may constrain consumer choice and that the migration charge should reflect the true cost of migration. BT was also of the view that the FTTP market was growing rapidly and that it was time to align wholesale FTTP migration charges with its costs. BT also considered that a 42-month period provides sufficient time to recover the cost of a connection. Sky's response argued that the equalisation of the wholesale FTTP migration charge distorted competition as it weakened retail competition and options for already connected customers.

9.415 Sky's response included a report by Analysys Mason, which argued that the equalised connection/migration charges do not reflect the distribution of benefits, as the benefits of a FTTP connection are not instantaneous but rather are ongoing (use of fibre enabled services for the consumer, and profit for the retailer). Analysys Mason also argued that the evidence of connection charges being set to zero by Eircom Retail and other retailers appeared to align with that view. Analysys Mason concluded that pricing which does not follow the distribution of benefits is uneconomic since it distorts economic decisions by wholesale buyers and retail consumers, and, as such, all connection costs should be recovered over time through rental charges rather than through one-off charges.[1207]

9.416 Having considered the submissions to the Call for Inputs in light of the data that were available in 2021 and the original rationale behind the equalisation of charges, ComReg did not consider that there was sufficient justification for reopening the price control on equalised charges that had just been established at the start of the price control period. In particular, it was ComReg's view that, in any assessment of the pricing approach taken in the 2018 Pricing Decision,

> *"recognition needs to be given to the highly inter-related nature of the decided-upon charging methodology. …, requiring Eircom to equalise the charges for connection and migration was [adopted] to remove the disincentive for retailers to connect new customers to the FTTH platform. The equalised charging regime recognises that the benefit to a retail service provider ('**RSP**') is the same regardless of whether the customer being acquired is a new connection or an existing connection being migrated".*[1208]

Wholesale Line Rental – Consultation and Draft Decision, dated 22 October 2020 (the '**2020 ANM Consultation**').

[1207] ComReg's consideration of those issues can be found in section 8.3.3 of the 2021 ANM Decision.

[1208] 2021 ANM Decision, paragraph 8.68.

9.417 As of Q1 2023 overall FTTP subscriber numbers have now reached circa 534,000 (with the majority of these [✂ [redacted] ✂] on Eircom's network) and future growth over the market review period is expected to continue as Network Operators expand their FTTP footprints. Demand on the FTTC network appears to have peaked in 2020 and it is expected that FTTP will overtake FTTC as the predominant broadband technology on Eircom's network by 2025 due to the ongoing migration from FTTC to FTTP.

9.418 The growing active FTTP base on Eircom's network means that the opportunity for an RSP to acquire a new customer through a migration event rather than as a result of a new connection will increase. Initially, the volume of customer migrations is inevitably constrained by the low level of active customers on a newly deployed network as it takes a number of years to establish a significant customer base that is available to churn between RSPs. Consequently, the majority of customer acquisitions during the FTTP deployment phase required Eircom to incur the cost of a new physical connection, with the result that, to date, only a very limited number of customers would have been affected by above-cost migration charges under the equalised connection/migration charge policy adopted in November 2018. For example, Eircom recorded no customer migrations in the 2018 financial year, even though the migration charge was only €2.50 and the FTTP connection charge was €270. The accounts for the 18 month period ending on 31 December 2021 recorded migrations accounted for [✂ [redacted] ✂] of the total of all FTTP connections and migrations, during a period when the connection / migration charges were €100. Eircom's accounts for the 12 month period to 31 December 2022 recorded migrations accounting to [✂ [redacted] ✂] of the total of all FTTP connections and migrations (again with the policy of equalised connection and migration charges in place).

9.419 In this context, the Oxera Part 1 Report recognised that, in light of the objective of encouraging take up of FTTP services, an equalised connection/migration charge approach has been an appropriate policy. Given the nascent stage of FTTP rollout in 2018, low migration fees and high connection fees could have had the effect of discouraging SPs from taking up FTTP services, and ComReg's policy would result in lower connection charges, which could increase the demand for FTTP services.

9.420 The Oxera Part 1 Report also recognised that any potential distortions to competition caused by setting wholesale migration charges significantly above cost (to facilitate some cross-subsidisation of connection charges) are likely to have been minimal during the early stages for FTTP as a limited number of customers would have been affected by above-cost migration charges when the overall connected base remained small. However, the Oxera Part 1 Report considered that:

"as the number of customers connected to the FTTH network increases, any migration charges significantly above cost could result in a reduction in migrations to competitors if the end-user were to face higher switching costs as a result (i.e. if the RSP were to pass on the migration costs to customers)".[1209]

9.421 ComReg notes that the extent of any potential distortion will be dependent on RSPs' pricing approach. In this regard, data available to ComReg indicates that major RSPs are not passing on the wholesale connection/migration charges to end users in the form of one-off charges at the retail level, or else have been levying a retail connection charge that is significantly below the €100 wholesale connection/migration fee that they would have been charged by Eircom to acquire the customer. If this commercial pricing behaviour by RSPs were to continue during the market review period, the Oxera Part 1 Report considered that:

"concerns about the level of connection charges affecting customers' decisions to take up FTTH, and any potential distortions to competition that would come from above-cost migration charges, would also be unwarranted."[1210]

9.422 The actual level of the wholesale connection/migration charge can also mitigate the potential distortion as, even if the RSP chose to pass through all the wholesale acquisition charges in the form of up-front connection charges at the retail level, the level of any distortion in retail behaviour will depend on the extent that the equalised wholesale charges diverge from the incremental cost of the migration. For example, given that migration costs are considered to be in or around €2.50, a wholesale connection/migration charge that was set at zero would not lead to any material distortions.

9.423 The Oxera Part 1 Report considered that continuing with the existing approach could be appropriate if Eircom were expected to continue to set wholesale connection and migration charges to zero. In that case, maintaining equalised charges would act as a safety cap, to ensure that, should prices rise in future, they cannot (together) increase to levels that would result in over-recovery of connection costs. Any distortions might also be limited, given that a large number of new connections are still to be made, and migrations may continue to be a small share of total connections and migrations in the coming years.

9.424 However, if there is an expectation that the connection/migration charge will increase, the Oxera Part 1 Report considered that setting migration charges to incremental cost would be warranted where:

[1209] Paragraph 6.10 of the Oxera Part 1 Report.

[1210] Paragraph 6.16 of the Oxera Part 1 Report.

- *"RSPs pass through any increases in wholesale migration costs to end-users;*
- *the number of customers connected to Eircom's FTTH network increases such that the large majority of customers changing RSP would face migration charges."*[1211]

in which case a cap on the level of wholesale connection charges, for instance at the level of €100 applied by Eircom to connection and migration charges for the period 1 January 2019 – 30 September 2022, might mitigate any concerns that a connection charge that is too high could lead to lower take up of FTTP.

9.425 Such a cap could be set at €100, that is, at the level of the charge that was in place from January 2019 to September 2022. Although a €100 connection charge may be below the incremental cost of delivering a new connection, Eircom would be in a position to recover any shortfall through the monthly rental charge, where it continues to be subject to pricing flexibility. The Oxera Part 1 Report noted that:

> *"The recovery of costs from alternative sources is the approach that Eircom must be taking currently, given its observed commercial behaviour and previous behaviour whereby the connection charge was set below the costs of the connection."*[1212]

9.426 Oxera's concern that setting wholesale migration charges significantly above incremental cost could distort competition in the retail market echoes many of the concerns raised by the respondents to the Call for Inputs in 2020. ComReg also accepts that the potential for such a distortion will increase as FTTP becomes the dominant broadband service and customer acquisition at the retail level is increasingly facilitated by migrations rather than new FTTP connections. Nonetheless, available evidence indicates that RSPs have not been passing these through to consumers in the form of one-off charges at the retail level in any material way but, rather, have elected to recover them as part of the customer rental charges.

[1211] Paragraph 6.22 of the Oxera Part 1 Report.

[1212] Paragraph 6.27 of the Oxera Part 1 Report.

9.427 It is also unclear whether the adoption of a differentiated connection/migration charge regime at the wholesale level would lead to a situation where retail customers face a different connection charge depending on whether the RSP acquired that customer as the result of a migration (e.g. retail connection charge = €2.50) or a new connection (e.g. retail connection charge = €100). As outlined in the Analysys Mason response to the Call for Inputs referred to in paragraph 9.415, RSPs appear to have adopted an economically rational pricing policy which recognises that the benefits of a FTTP connection to the retail customer are not instantaneous but rather accrue over the customer lifetime as retailers tend to recover acquisition and promotion costs as part of the ongoing rental charges rather than as upfront connection costs.

9.428 Should RSPs continue to recover all customer acquisition costs in the form of ongoing rental charges over the customer lifetime, it means that end users do not face a one-off migration charge, thereby mitigating the potential for an above cost migration charge to distort the retail customer's behaviour.

9.429 In imposing equalised charges for connection/migrations in the 2018 Pricing Decision, ComReg afforded Eircom the ability to fund any deficit in customer connection costs from both ongoing rentals and future migration charges over the lifetime of the connection. The adoption of the equalised connection/migration charges policy did help reduce connection charges further below the incremental cost of the connection than might otherwise have been the case, as it gave Eircom some assurance that it could recover the costs in future migration charges. Changing this policy by requiring the migration charge to be set to incremental cost after one price control period could undermine regulatory certainty, particularly if, at the same time, a €100 price cap on new connection charges were imposed.

9.430 It is also the case that FTTP take-up is still at a relatively early stage, and the majority of customers are yet to be connected to a FTTP network. Low migration fees and high connection fees could still be a deterrent to encouraging take-up of FTTP services by new end users as it could incentivise RSPs to target those end users in premises already connected ahead of unconnected end users.

9.431 For these reasons, ComReg believes that the equalisation policy should be maintained but subject to a cap on connection/migration charges in order that stakeholders benefit from greater certainty in respect of the future level of connection/migration charges than currently exists, and also address any possible distortion that might arise from having a migration charge that is above the incremental cost of the migration. In this regard, ComReg is capping the equalised connection/migration charge at €100 (the rate that Eircom applied from January 2019 to September 2022).

9.432 Vodafone supported the continuation of cost orientation in relation to Eircom's FTTP connections and migrations, and also stated in its Submission that the cap on an FTTP connection and migration charge should be set equal to the average cost of a connection and migration.[1213] SIRO considered that an *"arbitrary choice of €100 as a connection cost cap is too low to allow Eircom to recoup transparently all the costs that they may be required to carry"* and argued that the level should be set in the order of €270 (which was Eircom's connection charge prior to 1 January 2019).[1214]

9.433 Setting the cap at €100, however, is not an arbitrary choice. The information available to ComReg in respect of Eircom's annual average FTTP connection costs[1215] indicates that the average cost has been declining in recent years. The average customer specific connection cost has declined significantly between Eircom's 2018 financial year and its 2022 financial year. One reason for this decline is that urban FTTP connections tend to have a lower cost than rural FTTP connections and the proportion of urban FTTP connections has been increasing in recent years, as Eircom has expanded its FTTP deployment in urban areas. As a result, average FTTP connection costs are now at a level where imposing a price cap of €100 per connection/migration event would allow Eircom to recover all FTTP connection costs over the lifetime of the connection asset[1216] based on the average customer life ('**ACL**') of 42 months used in the MSTs.

9.434 Eircom outlined a number of concerns related to ComReg's analysis of Eircom's data and that the *"simplified analysis should be approached with caution"*. Eircom shared a number of factors it considered relevant in this regard but did not provide an alternative value for the cap based on these factors. Eircom explained that the investment per connection/migration can vary significantly by geography, the return on investment should include the risk associated with uncertainty in demand for FTTP services over the connection assets' lifespan; the economic life of the assets used to deliver the FTTP connection service; and the number of connection/migration events over the economic life of the FTTP path into the building served. Eircom also said that referring to a single year's AFI information is meaningless.[1217]

[1213] Vodafone Non-confidential Submission, page 23.

[1214] SIRO Non-confidential Submission, page 21.

[1215] As part of its accounting separation obligations, Eircom is required to provide ComReg with Additional Financial Information pertaining to the costs and volumes of FTTP connections and migrations.

[1216] For the purposes of this analysis, ComReg based the asset life of an FTTP connection on the asset life used by Eircom in the HCA Separated Accounts, which is 20 years.

[1217] Eircom Non-confidential Submission, paragraph 244.

9.435 However, ComReg is satisfied based on its analysis, which relies on data provided by Eircom in its AFI going back to 2017 rather than on a single year, that capping charges at €100 allows Eircom to fully recover its connection costs over the economic life of the connection (assuming an asset life of 20 years and an average customer life of 42 months) even if it opted to recover none of the costs through line rental, while a connection and migration charge of less than €100 would require some contribution to cost recovery from the line rental charges.

9.436 Allowing Eircom to increase charges above this level could lead to over-recovery by Eircom given the policy of equalisation of FTTP connection and migration charges and permitting Eircom the flexibility to recover costs incurred (either up-front, on an on-going basis, or a mix of the two). ComReg is also of the view that it is appropriate to use the national average cost of a connection for the purpose of assessing cost oriented charges at a national level and notes that Eircom does not appear to suggest that there should be geographic differentiated charges for FTTP connections and migrations. ComReg notes further that the risk of not getting a return on FTTP connection investments should be lower than it might be for other FTTP investments due to the fact that the investment in a connection is only undertaken in response to a specific request for an FTTP service and therefore does not provide a basis for increasing the cap based on uncertainty of demand.

9.437 Although a €100 connection/migration charge could lead to a distortion if RSPs opt to recover it from customers in the form of a one-off charge, the evidence to date indicates that RSPs tend not to do so and recover wholesale connection/migration charges as part of the service rental charges, and such a distortion appears unlikely to arise. Indeed, analysis by ComReg indicates that, when wholesale charges are assessed over the ACL, there appears to be relatively little difference in the overall level of wholesale charges faced by the RSP between recovery by Eircom of all connection related costs in the form of a series of connection/migration charges, or recovery through the recuring rental charges over the 20-year asset life of the connection.

9.438 From a cost recovery perspective, the RSP would face the same overall level of wholesale charges if Eircom's pricing approach involved the RSP incurring an upfront migration charge of €100 each time it acquires a new customer through a migration event (the 42 month ACL means that, on average, a customer will migrate every 42 months) and lower monthly rental charges, or if Eircom's pricing approach was to recover connection costs by way of an allowance in the monthly rental charges to recover those connection costs over the 20 year asset life of the customer connection.

9.439 Consequently, maintaining an equalised connection/migration charge regime for FTTP, where the maximum individual charge is capped at €100, is not expected to lead to a distortion of competition that could materially constrain consumer choice. ComReg believes, however, that Eircom's pricing flexibility should be further limited by a requirement that charges for FTTP connections/migrations remain in effect for a period of no less than six months. This is necessary to give all RSPs on Eircom's FTTP network the time to execute retail strategies and tailored marketing campaigns that take account of the price changes. ComReg is also of the view that the prices need to be effective for at least six months, as that is the minimum period necessary to give all RSPs the chance to benefit from the price changes. The price changes also need to be in effect long enough for Eircom to test the potential effectiveness of such price changes at the wholesale level.

9.440 In the Submissions, Vodafone and SIRO raised the issue of on-site remediation costs and whether they were included within the connections and migrations charges. For Vodafone, any assessment of FTTP connection and migration costs must exclude any part of the connection costs RSP funded.[1218] SIRO submitted that either Eircom should cover the cost of such remediation service within its €100 charge, or else charge a direct supplemental cost oriented connection charge for providing such a remediation.[1219] SIRO also noted that as RSPs separately incur the cost for undertaking this work, which is of a capital nature, it is *"masking the true connection cost for retailers"* and is opaquely funding Eircom's network deployment and urged that where an RSP incurs the charge then that RSP should be refunded if they lose the end user.[1220]

[1218] Vodafone Non-confidential Submission, page 23.

[1219] SIRO Non-confidential Submission, page 20.

[1220] SIRO Non-confidential Submission, page 20.

9.441 The need for on-site remediation can arise due to the conditions discovered when a connection to an FTTP network is being attempted (such as a blockage or collapsed duct on an end user premise), and it is necessary to undertake corrective action to provide an FTTP connection. The RSP (or end user) can contract directly with the installation contractor (or another) to rectify the situation and thence complete the FTTP connection. ComReg understands that, to date, not all the costs associated with deploying and or remediating duct on private property will have been incurred by Eircom. Providing an FTTP service requires that a service lead be deployed into an end user's premise, and in certain instances this may require an RSP (or an end user) to pay for remediation to enable the connection to be made. When determining cost oriented charges ComReg excludes any investment that would have been undertaken by third parties other than Eircom, for example, any investment undertaken by RSPs (including Eircom Retail) to remediate ducts on private property as highlighted by Vodafone.

9.442 All RSPs, including Eircom Retail, are liable to incur this charge where they are necessary to connect an end user who has chosen to connect to FTTP. For the avoidance of doubt Eircom's HCA accounts for its retail business include the remediation costs it has incurred (as well as the wholesale FTTP connection and migration charges), and these also feature in the retail MST which has been set to require Eircom to demonstrate that its retail offers are replicable by its competitors.

9.443 In summary, Eircom should have the flexibility to recover the costs of the customer specific connection related investments from a combination of an initial upfront connection charge, a charge for migration to another SP and recurring rental charges,[1221] subject to the following conditions:

(a) The charges for new connections and migrations to another SP should be the same;

(b) The combination of a new connection charge and a charge for migration to another RSP should not exceed the level that would allow Eircom to recover its customer specific connection related investment over the lifetime of the underlying assets, given the same assumptions about customer churn that are used in the MSTs;

(c) The charge for each new connection or migration should not exceed €100; and

[1221] An assessment of the price floor for FTTP VUA rental services can also consider the extent to which Eircom is not fully recovering the costs of FTTP connections through one-off charges. See paragraph 9.497 for more details on price floors.

(d) Any charge for new connections and migrations must be in place for at least six months.

9.444 As previously explained in the 2021 ANM Decision (at paragraph 8.43) ComReg continues to consider that the migration charge should only be levied where there is a change in RSP selling the FTTP service on Eircom's network, where the retail customer is being migrated from a different network, or where the retail customer is being connected to Eircom's FTTP service for the first time. Thus, the charge may be levied where a retail customer switches to FTTP from, for example, an FTTC-based service on Eircom's network without changing RSP. The charge should not be levied, however, if an RSP merely makes a change to the way it gains access to Eircom's FTTP network (e.g. by switching from one intermediate wholesale provider to another, or by switching between using an intermediate wholesale provider and purchasing services directly from Eircom). Such changes involve neither a change of underlying network nor churn at the retail level.

9.445 Finally, as €100 is a ceiling, Eircom may charge less than €100 for the connection/migration charge and still comply with its obligations in respect of pricing of FTTP services. Eircom continues to have the option to recover FTTP connection related expenditure as part of the FTTP line rental and a reduction to the connection/migration charge would require that a larger proportion of the connection related expenditure is recovered in the line rental charge. This type of pricing flexibility is consistent with Recital 49 of the 2013 EC Recommendation, which stated that, *"it is important in order to promote efficient investment and innovation, in accordance with Article 8(5)(d) of Directive 2002/21/EC, to allow those operators investing in NGA networks a certain degree of pricing flexibility to test price points and conduct appropriate penetration".*

9.446 However, ComReg is also of the view that it is important that any changes to connection/migration charges do not create uncertainty for Access Seekers or lead to distortions in respect of the price for products and services that are subject to cost orientation. The fact that the charges for FTTP rental services are not cost oriented means that it is difficult for ComReg to determine the extent to which connection costs are recovered in the existing FTTP rental charges or if the introduction of a lower connection/migration charge would necessitate an increase to existing FTTP rental charges. Therefore, ComReg requires that Eircom continue to provide the existing Additional Financial Information ('**AFI**') in respect of FTTP connections and migrations so that ComReg can track the level of expenditure that Eircom incurs in respect of FTTP connections and migrations each year in addition to the level of connection and migration related revenues.

9.447 VMI sought that ComReg would intervene to change the permitted approach where evidence arose which indicates that a change may be merited.[1222] For the avoidance of doubt, ComReg will continue to monitor market conditions with the view to ensure that the rules as regards the cost orientation and equalisation of FTTP connection and migration remains appropriate.

FTTC connections and migrations

9.448 Eircom's provision of FTTC connections and migrations supports both the connection and the migration of end users between competing RSPs. It is essential to ensure that these services are not priced in an excessive and/or discriminatory manner, and that the charges set for these services enable a level playing field for efficient SPs to compete. ComReg accordingly maintains the cost orientation obligation in respect of FTTC connections and migrations, whereby Eircom is permitted to recover no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of FTTC connections and migrations.

9.449 In the 2018 Pricing Decision ComReg maintained the pre-existing price control approach for FTTC connections and migrations, which was one of cost orientation. ComReg also imposed a cost orientation obligation on FTTC rental services for the first time as part of the 2018 Pricing Decision. The cost orientation of FTTC VUA rental meant that ComReg could explicitly recognise the extent to which FTTC specific connection costs[1223] were recovered in the FTTC VUA rental charge to ensure no double-recovery of connection costs between the ongoing monthly FTTC rental charge and the upfront FTTC connection charge. ComReg did this by calculating the deficit between the average FTTC specific connection costs and the average FTTC connection revenues that Eircom was incurring at that time. This connection deficit was then included as an annuity in the FTTC rental charge. The annuity was based on the asset life of the FTTC connection and the regulated WACC.[1224]

Pricing of associated facilities

[1222] VMI Non-confidential Submission, page 34.

[1223] FTTC specific connection costs include the costs of FTTC related jumpering at the cabinet and the exchange but exclude any costs associated with the provision of the service lead into the customer's premises as these costs are recovered as part of the SLU/LLU cost inputs into the FTTC rental charge.

[1224] See Section A 1.8 of the 2018 Pricing Decision for more details.

9.450 In subsection 9.3.1, ComReg requires Eircom to provide a range of Associated Facilities to Access Seekers, including Interconnection Services, Co-Location, Multicast, traffic-based and circuit-based CoS and 1:1 Virtual Local Area Network (‘**VLAN**’) tagging. These are described in further detail in paragraphs 9.61 to 9.63, and 9.77 to 9.115. All of these Associated Facilities are required to support the development of infrastructure competition and continue to be essential to existing investments (Interconnection), to enable and support the provision of WLA and other services (Co-Location), to allow Access Seekers to provide and differentiate their service offerings to end users and promote effective downstream competition (Multicast, traffic-based and circuit-based CoS and 1:1 VLAN tagging). In order that these services are not priced in an excessive and or discriminatory manner, and that the charges set for this price control for these services enable a level playing field for efficient SPs to compete, ComReg maintains Eircom’s existing cost orientation obligation.

9.451 In respect of Interconnection Services, ComReg continues to require Eircom to set cost oriented prices by reference to a BU-LRAIC+ methodology on the basis that LRAIC+ includes appropriate amounts of variable, fixed and common costs, which is the calculus faced by any SP when deciding to enter or expand. It is accordingly suitable to promote efficient infrastructure investment by alternative SPs who may want to replicate the assets in question. In addition, LRAIC+ ensures consistency with the approach already used for WEIL charges in the context of NGN Ethernet Leased Lines.

9.452 In respect of Co-location, Multicast, traffic-based and circuit-based CoS traffic tagging and 1:1 VLAN tagging, Eircom should recover no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return (i.e. the relevant WACC rate) associated with provision of each of these services.

Regulatory approval mechanism for price decreases and price floors

9.453 The 2018 Pricing Decision provided for the possibility that, in exceptional circumstances and subject to ComReg’s approval, the FTTC VUA price could be lowered in respect of a geographic area below the regulated price level (i.e. the national cost oriented price), provided the price remained above a price floor and any decrease was reflected in the price for FTTC Bitstream. The same principle applied in respect of FTTP VUA.

9.454 This allowed Eircom, in exceptional circumstances, to reduce the price it charged for FTTC VUA below the regulated price, or for FTTP VUA below average costs, so that it could compete with another SP’s price in a specific geographic area, in particular services provided over an alternative platform.

9.455 Insofar as FTTC VUA was concerned, geographic reductions were subject to a price floor set at the level of Eircom's BU-LRAIC+ costs for non-reusable assets and TD-HCA for reusable assets in the geographic area concerned, or at an alternative SP's VUA price or equivalent (retail price minus retail and network costs). This sought to *"prevent the risk that Eircom could set wholesale access prices too low which could be detrimental to efficient infrastructure investment in networks by other operators."*[1225] The requirement that any price reductions to FTTC VUA would also be reflected in other FTTC prices followed from the fact that FTTC VUA is an essential input for all FTTC services, and that the economic space between FTTC VUA and FTTC Bitstream ought to be maintained in order that geographic price reductions in FTTC VUA did not distort competition on the downstream WCA market.

9.456 Since 2018, Eircom has not sought approval from ComReg for a price reduction for FTTC VUA rental, or FTTP VUA rental, that would have resulted in geographic deaveraged prices although, in the case of FTTP VUA rental, Eircom did implement a national price decrease in July 2020 (€5 decrease in monthly rental for 300 Mb, 500 Mb and 1,000 Mb FTTP VUA and FTTP Bitstream profiles). In future, network platform expansion or technology upgrades by rival SPs could lead to more aggressive price competition in the WLA market. Should this level of competition emerge, providing Eircom with the necessary flexibility to compete fairly could be to the benefit of Eircom's wholesale customers and, ultimately, end users, in the form of lower prices.

9.457 Different levels of competition emerging in different areas of the State could also require geographic de-averaging of national prices. ComReg notes in this regard that price differentiation between different geographic areas, which is supported by differences in costs, can lead to more efficient outcomes. There are, however, significant risks involved in allowing Eircom to introduce geographic differentiation for FTTC VUA or FTTP VUA and for this reason, ComReg believes that it is appropriate and necessary to maintain a pre-approval mechanism in order to ensure that any geographic price differentiation of FTTC VUA, or FTTP VUA, will not have distortionary effects.

[1225] Paragraph 12.88 of the 2018 Pricing Decision.

FTTC VUA

9.458 Since 2018, the FTTC VUA rental price has acted as a price anchor that has helped inform network investment decisions. The approval mechanism for FTTC VUA price reductions was introduced in 2018 with the aim of maintaining network investors' confidence and ensuring that FTTC VUA price reductions below the regulated price in a given geographic area would not result in foreclosing competitors in the WLA market or in downstream markets, including both at the wholesale and retail levels, and in respect both of SPs using an alternative platform and Access Seekers relying on Eircom FTTC VUA and/or Bitstream.

9.459 Maintaining the approval mechanism for FTTC VUA price reductions means that wholesale prices will be predictable and non-discriminatory for Access Seekers as they will know they will be charged the same price for the FTTC VUA element of an FTTC service, regardless of whether it is purchased as a standalone VUA service or in conjunction with upstream elements such as backhaul (as part of an FTTC Bitstream service) or voice (as part of a POTS-based FTTC service).

9.460 Therefore, in light of these considerations, Eircom may reduce the wholesale access price for FTTC VUA rental, provided that it can demonstrate that it is losing market share (in those Commercial EAs that comprise the substantial geographic region)[1226] and show evidence of the presence of an aggressive pricing strategy of another SP. In other words, in order to obtain ComReg's approval for price reductions, Eircom is required to demonstrate to ComReg's satisfaction that the loss of market share is the result of price competition and that the proposed price reduction is necessary to allow it to compete with other SPs' prices.

9.461 ComReg recognises that Eircom is the only Network Operator selling wholesale FTTC VUA services. However, it is also the case that Eircom's FTTC VUA service competes with broadband services offered by other Network Operators that are in the same market and it is possible that another commercial operator has a more efficient network topology or has lower costs than is modelled in the cost models used by ComReg to inform FTTC VUA prices. As a result, other SPs may be able to set wholesale (or retail) prices at a level that means Eircom cannot compete on the basis of the regulated FTTC VUA price. Hence, an FTTC VUA price that is lower than the regulated FTTC price may be justified.

[1226] For the avoidance of doubt, Eircom's market share in the substantial geographic region would include FTTC and FTTP in aggregate.

9.462 The regulated FTTC price is set based on an assessment of average national costs and Eircom may be able to support a lower price by demonstrating that the costs in a specific area are lower than the national average. While the price modelling in the ANM was not developed with the intention of mandating geographically de-averaged prices it does, nonetheless, model costs across 1,148 EAs. As a result, the cost modelling that underpins the regulated prices for national FTTC VUA prices can provide some level of insight as to how cost might vary between substantial geographic areas. Consequently, a pricing approach to a reduction to FTTC VUA price in certain geographic areas can be informed by the cost modelling that has underpinned the national FTTC VUA price.

9.463 As set out in the Oxera Part 1 Report, the fact that Eircom's FTTC VUA price may be at a level above that of an alternative Network Operator's does not mean, in and of itself, that Eircom should be allowed to lower its price on a geographic basis to meet that competition:

> *"If the alternative network operator is setting prices below the FTTC anchor price because the operator faces costs which are lower than the FTTC anchor, then it should be allowed to take advantage of these efficiencies. If Eircom would have to price below its own costs to match the rival's price, this would negate the efficiency advantage of the alternative network operator and thus have an impact on the operator's investment case and its ability to establish itself in the market. Eircom's pricing below its own costs would not constitute competition on the merits and, in such a case, Eircom should not be allowed to match the rival's price. Hence, in this scenario, Eircom should only be allowed to match the rival's prices if it can provide evidence that its own costs are also lower than the FTTC anchor, as well as being lower or equal to the rival's prices."*[1227]

9.464 For this reason, Eircom, in applying for approval of FTTC VUA price reductions on a geographically limited basis, must demonstrate that:

(a) it is not in the position to compete on the basis of applicable prices, providing evidence of loss of market share in the geographic area concerned which may not be limited to a select number of cherry-picked EAs; and

[1227] Box 5.1 of the Oxera Part 1 Report.

(b) its proposed FTTC VUA price (after the price reduction) in the area concerned is not less than the higher of either (i) an alternative operator's wholesale VUA price or equivalent VUA price (e.g. its retail price minus retail costs and relevant network costs) or (ii) Eircom's full deployment costs for NGA VUA in the specific geographic area concerned, calculated on the basis of a BU-LRAIC+ costing methodology and with Eircom's RAB applied to Reusable Assets.

9.465 ComReg's assessment of Eircom's proposed amendment to the national FTTC VUA price will be on a case-by-case basis and approval will be subject to a number of conditions including the following:

(a) The reduction to the price for FTTC VUA is not a short-term measure;

(b) The reduction to the price for FTTC VUA will not dissuade new investment by alternative operators;

(c) The reduction to the price for FTTC VUA should apply to a substantial geographic region and not just to a very select number of exchanges chosen by Eircom;

(d) Any move from national to geographic differentiated prices will require Eircom to demonstrate to ComReg's satisfaction that there are material and sustained differences in NGA VUA unit costs between significant geographic areas; and

(e) The FTTC VUA price will continue to be the wholesale input used by all FTTC services that are provided in the specific geographic area.

9.466 ComReg notes that FTTC VUA will continue to serve as a price floor for FTTP VUA, such that an FTTP VUA service cannot be offered at a price that is lower than the FTTC VUA price in the specific geographic area.

9.467 This is consistent with ComReg's objective of supporting network competition by encouraging sustainable investment in NGA networks by sending an appropriate build-or-buy signal. However, as explained in paragraphs 9.349 to 9.352, it is increasingly challenging to substantiate the build-or-buy signal with reference to the costs of a newly deployed copper network.

9.468 It is also the case that, as FTTP becomes the dominant NGA technology, any assessment of NGA deployment costs needs to consider the role the FTTC VUA price plays as the price floor for FTTP VUA. FTTC end users will continue to migrate to FTTP over the price control period, meaning that Eircom's ability to compete for market share with rival Network Operators will increasingly depend on its FTTP price levels rather than its FTTC VUA price. Consequently, future modelling of NGA broadband is best achieved if FTTP is considered to be the MEA for all NGA based services, including FTTC.

9.469 Indeed, while Eircom's Submission stated that SIRO *"has a number of active promotions which specifically target eir's copper base (including FTTC)"*,[1228] Eircom has not approached ComReg to reduce the FTTC VUA price to counter such competition, despite the fact that it continues to post returns for broadband related services in its HCA Separated Accounts that are significantly above the regulated WACC.[1229] Instead, Eircom has argued for greater freedom to offer discounts on FTTP, which suggests that Eircom is unlikely to consider reducing the FTTC VUA price unless such a reduction is necessary to facilitate steeper discounts for FTTP services by lowering the FTTC VUA related price floor for FTTP.

9.470 Consequently, when assessing a proposed reduction to the FTTC VUA price, ComReg will also consider the implications that a reduction in the FTTC VUA price will have for the related FTTP VUA price floor. Therefore, Eircom can submit a proposal to reduce the FTTC VUA price in a specific geographic area that is informed by Eircom's understanding of its FTTP network costs in that area as discussed in paragraphs 9.481 to 9.484.

<u>FTTP VUA – Price Floor</u>

9.471 Since 2018, Eircom has been subject to a price floor in respect of FTTP VUA services, in the form of a requirement not to reduce the wholesale access price for FTTP VUA in a specific geographic area below the lower of either:

(a) Eircom's full deployment costs[1230] for the provision of FTTP VUA in the specific geographic area concerned; or

(b) The FTTP VUA or VUA equivalent price of an alternative operator (e.g. an alternative operator's retail price minus retail costs and relevant network costs).

[1228] Eircom Non-confidential Submission paragraph 189.

[1229] For example, the Wholesale Broadband Access Statement in Eircom's most recently published HCA Separated Accounts includes all the costs and revenues for CGA, FTTC and FTTP-based broadband services. This shows that reported returns were above the regulated WACC by as much as circa. €130 million for the 30 month period covering the 18 month financial year ending December 31st, 2021, together with the 12 month financial year ending December 31st, 2022. The majority of these returns are in respect of FTTC services. This covers a period when returns would be expected to be under pressure due to the fact that Eircom is investing heavily in deploying a new FTTP network. Network efficiencies would also be challenged by the fact Eircom is operating two parallel access networks as its broadband demand is being carried on both the legacy copper network and the newly deployed fibre network, while customer numbers on its legacy CGA network in the IA are declining as they migrate to NBI's FTTP network.

[1230] Eircom's full FTTP VUA deployment costs, absent a cost orientation obligation, could be calculated by reference to Eircom's own business case (or business plan), and checked against ComReg's cost models to ensure that all the relevant cost categories were included.

9.472 In maintaining Eircom's pricing flexibility as regards FTTP VUA, ComReg has had regard to the constraint that FTTC VUA exerts in respect of FTTP VUA. This constraint is now formalised further in the form of a general, market-wide, price floor equal to the FTTC VUA price (which is also the same as the price of the emulated FTTC-like service discussed above).

9.473 In their respective Submissions, while VMI and SIRO generally agreed with a price floor for FTTP, Eircom considered that such *"asymmetric conditions and restrictions create an unfair advantage for Siro and Virgin Media"*[1231] to the extent that the *"condition of regulatory intervention is that eir's wholesale price must always be higher than that of its competitors."*[1232] Sky also argued that *"it would seem unreasonable for SIRO or Virgin Media to be able to respond to any reductions in price that Eir may offer the market but for Eir to be unable to respond in kind to any moves that their competitors may make in the market."*[1233]

9.474 However, as noted by Oxera, *"asymmetric regulation is a function of Eircom having been designated as having SMP. Indeed, the market is at a key stage of development, and infrastructure competition could be severely negatively impacted if Eircom had complete commercial freedom"*.[1234] Oxera also points out that it is not correct to say that *"… Eircom's wholesale price must always be higher than that of its competitors (as Eircom suggests). Eircom can match or even price below rivals, provided Eircom's prices are not (1) below the floor (FTTC VUA acting as a proxy) and (2) if below the floor, not below the costs of provision for FTTH VUA."*[1235]

9.475 While it is possible that Eircom's FTTP VUA costs might ultimately be lower than the modelled FTTC VUA costs, there is still some uncertainty in respect of FTTP network costs and, in particular, service demand, which can be impacted by the rate of copper to fibre transition and the potential for increased network competition to alter market shares. This is particularly the case in respect of those specific geographic areas where rival network build has the prospect of being economically efficient, as it is expected to be a number of years until Eircom complete its own network build (the IFN) in those areas.

[1231] Eircom Non-confidential Submission, paragraph 182.

[1232] Eircom Non-confidential Submission, paragraph 183.

[1233] Sky Non-confidential Submission, page 6.

[1234] Oxera Updated Part 1 Report, paragraph 5.5.

[1235] Oxera Updated Part 1 Report, paragraph 5.6.

9.476 Adopting a price floor for FTTP VUA that references FTTC VUA prices, which have formed the basis of build-or-buy decisions for FTTP investment since the 2018 Pricing Decision, should support the objective of promoting competition and encouraging investment by commercial operators. ComReg notes that, to date, Eircom's FTTP VUA price has been set at a premium to FTTC VUA and adopting the regulated FTTC VUA price as the price floor provides some assurance that Eircom cannot lower FTTP VUA prices to levels that undermine the ability to compete of an efficient alternative Network Operator.

9.477 The Oxera Part 1 Report also recognises that, absent a robust FTTP cost model, the FTTC VUA price is a reasonable basis to use as a price floor for FTTP VUA:

> *"We understand that ComReg is in the early stages of developing a draft cost model for FTTH, but that this is not sufficiently developed at this stage to provide a reasonable reference point for the costs of FTTH deployment. Therefore, ComReg may wish to consider setting a reference point for FTTH VUA price floors against the FTTC anchor price point. This is because, absent any reliable benchmark of what the FTTH costs are, it would be reasonable to assume that these costs could not be (much) lower than the FTTC anchor price, which is itself derived from a FTTC BU LRIC model. In this sense, the FTTC anchor price point is taken as a proxy for the costs faced by Eircom in providing the FTTH wholesale service."*[1236]

[1236] Paragraph 5.21 of the Oxera Part 1 Report.

9.478 As regards the level of the price floor, Sky argued in its Submission that Eircom should be given *"more freedom to compete even below the proposed price floor, where it is clear that the market can support a lower price"*.[1237] However, the price floor is intended to represent the lowest price that the market can support without undermining the investment incentives for FTTP network operators. In fact, Eircom has consistently[1238] argued that ComReg's modelling of FTTC costs has resulted in price levels that were too low to support cost recovery and that ComReg's approach to cost-based pricing would undermine the incentive for telecoms providers to build new FTTP networks. Eircom's submission also references its High Court appeal of the ComReg 2021 ANM Decision, where it challenged the FTTC VUA price path set by ComReg.[1239] In circumstances where Eircom previously held the regulated price of FTTC to be too low and such that it would impede FTTP rollout, it is not unreasonable that Eircom should now only be allowed to reduce the FTTC VUA price floor in exceptional circumstances. Where Eircom seeks such a reduction, Eircom should demonstrate to ComReg that any proposed price reduction below the established price floor is not below its full deployment costs for FTTP.

9.479 While Eircom asserted in its Submission that it would require significant effort to develop a cost model let alone a model that could accurately capture the costs of specific geographies,[1240] any submission to lower the price floor can be supported by an analysis of national costs. Eircom should not deviate from a national price unless it can demonstrate that there is a material difference in the average FTTP unit costs between different geographies.

[1237] Sky Non-confidential Submission, page 6.

[1238] For example, see paragraphs 6.3, 6.4, and 6.164 of the 2021 ANM Decision, and paragraphs 6.150 to 6.154 and 6.198 of the 2018 Pricing Decision. Eircom have also appealed the FTTC VUA price reductions introduced by ComReg in the 2021 ANM Decision

[1239] Eircom Non-confidential Submission, footnote 83.

[1240] Eircom Non-confidential Submission, paragraph 184.

9.480 Furthermore, Eircom would not be required to develop a cost model as it could leverage the existing modelling work that has already been undertaken by ComReg. For example, while the ANM models the costs of a new copper access network, Eircom should be in a position to assess how the costs modelled for different network elements in the ANM compare with the actual costs it is incurring to deploy a new fibre access network. Although ComReg has specified that costs should be calculated on the basis of a BU-LRAIC+ costing methodology, ComReg is mindful of the fact that Eircom is still in the process of deploying its FTTP network, such that costs it is currently incurring, which can be derived from Eircom's HCA accounts, should be representative of the costs that would inform a BU-LRAIC+ costing methodology.

9.481 The BU-LRAIC+ cost models reflect the costs a network operator building a network today would incur which means that the costs Eircom is incurring and recording in its HCA accounts as it continues to deploy its FTTP network should be compatible with a bottom-up modelling exercise.[1241] This should mean that it would be possible for Eircom to review the cost modelling in the ANM to assess how the costs of the different network elements and activities that constitute the FTTC VUA price compare with the costs of the equivalent network elements and activities used in the provision of FTTP VUA.[1242]

[1241] Axon have used cost data provided by Eircom and other network operators in Ireland to update the Draft FTTP Cost Model.

[1242] ComReg notes that Eircom [✂ [redacted] ✂].

9.482 For example, the ANM includes an estimate of the efficient repair costs for a newly deployed copper access network. In its response to the 2020 ANM Consultation Eircom said that ComReg's modelling of operating costs in the ANM *"…has proposed a level of assumed saving/cost reduction which is unrealistic and result in unattainable levels of "hyper-efficiencies" with the consequence of eir not being able to recover its properly incurred efficient costs".*[1243] However, Eircom (as at Q1 2023) has over **[✂** [redacted] **✂]** active FTTP lines[1244] on its network, which should provide sufficient data on the level of repair costs it is incurring in respect of its FTTP services to enable it to assess how these costs compare with the equivalent FTTC services repair cost modelled in the ANM. This should allow Eircom to assess how the assumed level of efficiencies modelled in the ANM compare with the actual level of efficient costs it is incurring for FTTP. If, for example, the average FTTP repair cost per line per month is €0.20 below the level of repair cost modelled in the ANM, this could justify a €0.20 reduction in the price floor, while enabling Eircom to recover efficiently incurred costs in respect of FTTP.

9.483 Similar analysis could also be carried out for other network elements such as cabling costs (the annualised costs of fibre cable may be lower than the annualised copper cable costs modelled in the ANM), duct and pole costs, network systems' costs, power related costs, etc. Providing evidence of its own costs in this way should be less burdensome than requiring Eircom to construct a BU-LRIC+ model.

9.484 Oxera notes "*that any provision of costs by Eircom should be subject to careful review of the underlying assumptions on volumes and allocation of costs…Eircom could adopt a cost allocation methodology and market share/volume assumptions that provides more favourable/lower costs than it faces or is likely to face in reality*".[1245] In this regard, ComReg would expect that any submission that Eircom makes could be linked back to the cost and demand data in Eircom's cost accounting systems, which would be audited as part of the finalisation of Eircom's HCA Separated Accounts.

[1243] Eircom 2020 ANM Response, paragraph 191.

[1244] ComReg notes that as of Q2 2023, Eircom had just over **[✂** [redacted] **✂]** active FTTP lines on its network.

[1245] Oxera Updated Part 1 Report, paragraph 5.11.

9.485 ComReg also intends to rely on the FTTP Cost Model that it has been developing to sense check an Eircom's submission. Even in its current draft stage of development, the FTTP Cost Model can give some sense of the reasonableness of Eircom's submission, particularly to assess the implications of how different assumptions about market shares and take up might affect unit costs. Access networks include a large proportion of fixed costs, with the result that estimates of unit costs, which ultimately inform prices, will be sensitive to the modelled level of network demand. Eventually, when the FTTP Cost Model is finalised, it could be used to assess an appropriate price floor.

9.486 ComReg also intends to harvest wholesale pricing data in respect of all FTTP services from all wholesale operators and the RSPs that purchase wholesale FTTP services. While ComReg will respect the confidentiality of this data, the fact that it will be readily available to ComReg should help expedite any future assessment of the extent that the pricing behaviour of other wholesale operators might warrant a reduction to the FTTC VUA-based price floor for Eircom's FTTP VUA services.

9.487 Eircom also raises a concern that it is unclear how price reductions for FTTP would interplay with the additional remedy proposed by ComReg that the FTTP VUA price could not go below the FTTC VUA price floor. For the avoidance of doubt, a proposed price reduction for the FTTP VUA price to be below the prevailing FTTC VUA price would automatically require that the prevailing FTTC VUA price is also reduced to the new price floor.

9.488 As outlined in paragraph 9.346, ComReg's primary purpose when setting a cost oriented FTTC VUA price was to inform the 'build-or-buy' signals that would support FTTP investment. In adopting a bottom-up modelling approach to set FTTC prices ComReg modelled the costs of a newly deployed copper access network to act as a reference point for the costs that might apply in respect of a newly deployed fibre access network. This anchor technology approach meant that the prices of existing services would be 'anchored' by the legacy technology (in this case FTTC), even if the services were actually provided over a new technology (such as FTTP).

9.489 Consequently, the cost modelling was based on the costs and demand of a network comprising recently deployed access cables and front loaded with all the investment required to upgrade and replace the poles and ducts consistent with all Civil Engineering Infrastructure being 100% ready to accommodate the deployment of new access cables. As a result, the modelled costs were consistent with a newly deployed access network operated by a HEO rather than the actual costs of Eircom's heavily depreciated copper access network as recorded in Eircom's top-down accounts.[1246]

9.490 It is also the case that, despite Eircom's statements to the contrary, the derived FTTC prices have enabled Eircom to recover the historical costs it has incurred to date in providing NGA broadband services as noted in paragraph 9.469.

9.491 Furthermore, maintaining a higher price for the FTTC-based service is at odds with Eircom's position that a *"slight price premium"* should apply for the Emulated FTTC-like service on FTTP compared to the FTTC VUA price.[1247] ComReg would expect that the Emulated FTTC-like service on FTTP would be the service with the lowest speed profile on FTTP. As Eircom is of the view that the Emulated FTTC-like service on FTTP should be offered at a slight premium to the FTTC VUA price, then it also seems reasonable that higher speed profiles on FTTP would not be priced below the FTTC price. Hence, any reduction to the FTTP VUA price floor will require that the FTTC VUA price is also lowered to the revised price floor.

9.492 The fact that Eircom cannot lower the price floor for FTTP without also lowering the associated FTTC VUA price means that Eircom will have to give greater consideration to the extent that network costs are actually increasing compared with the CPI-0 price cap, when deciding to increase FTTC VUA prices. For example, if Eircom were to opt to increase the FTTC VUA price by the maximum allowed under the CPI-0 ceiling in a period when observed network costs increases were less than CPI-0, there is a risk that its price floor would rise above a rival network operator's cost, which could hinder Eircom's ability to price as competitively as its rivals.

[1246] See paragraphs 9.309 to 9.311.

[1247] Eircom Non-confidential Submission, paragraph 134.

9.493 For these reasons, ComReg remains of the view that the FTTC VUA price should always act as a price floor for FTTP VUA. Furthermore, ComReg is of the view that there should be no geographic differentiation in the FTTC VUA-based price floor for FTTP VUA services (i.e. the FTTC VUA price should remain a national price) unless Eircom can demonstrate that there is a material and sustained difference in the average unit costs for FTTP services between significant geographic areas on Eircom's network.

9.494 For the avoidance of doubt, Eircom has (and retains through this Decision) the ability to lower (or indeed raise) its FTTP prices whenever it wants (even if not in direct response to a reduction in prices from competition) as long as these FTTP prices are above the price floor, and the price change has been notified appropriately to ComReg. Given that the FTTC VUA price always acts as a price floor for FTTP VUA, the principles set out above in respect of FTTC VUA price reductions applies also to lowering the FTTP VUA price floor. Hence, in applying for approval to lower the price floor for FTTP VUA services on a geographically differentiated basis, Eircom should demonstrate that:

(a) it is not in the position to compete on the basis of applicable prices, providing evidence of loss of market share in a significant geographic area concerned; and

(b) the FTTP VUA price floor (including any Connection/Migration Charges) in the area concerned is not less than the higher of either: (i) an alternative SP's wholesale VUA price or equivalent VUA price (e.g. its retail price minus retail costs and relevant network costs); or (ii) Eircom's full deployment costs for NGA VUA in the specific geographic area concerned (including, for the avoidance of doubt, customer specific connection costs), calculated on the basis of a BU-LRAIC+ costing methodology (while recognising that the BU-LRAIC+ costs for FTTP can be informed by Eircom's TD HCA costs, given the fact Eircom is still deploying FTTP) and with Eircom's RAB applied to Reusable Assets.

9.495 It is also possible that, at some point in the market review period, Eircom may wish to introduce an FTTP VUA price that is lower than the equivalent FTTC VUA price in order to encourage migration from copper-based to fibre-based services and facilitate CSO. However, as noted in paragraph 9.385, migration off copper should be already facilitated to some extent by the introduction of an emulated FTTC-like service on the FTTP network. It is also the case that FTTP is generally considered to be a more reliable technology than FTTC as FTTP tends to have lower fault rates than FTTC and is less prone to variations in achieved speeds. This reliability would support the view that having an emulated FTTC-like service on FTTP that provides at least an equivalent level of service typical of a FTTC-based VUA service for the same price as the regulated FTTC VUA service should be an attractive option for both end users and RSPs without the need for a lower relative price for the FTTP-based service. Consequently, ComReg considers that it should not be necessary to price the emulated FTTC-like service on FTTP below the regulated FTTC VUA price that applies to the copper-based service.

9.496 In the absence of a robust cost model for FTTP VUA, ComReg would accept FTTC VUA cost modelling, calculated on the basis of a BU-LRAIC+ costing methodology and with Eircom's RAB applied to Reusable Assets in a significant geographic region, to be an acceptable proxy for the costs of the FTTP VUA service. Furthermore, as discussed in paragraphs 9.481 to 9.484, ComReg also recognises that Eircom's experience to date in deploying FTTP networks means that it now has access to more robust data on FTTP costs in its HCA accounts which could be used to inform a BU-LRAIC+ cost assessment of FTTP VUA. ComReg has also separately been advancing a FTTP Cost Model which should assist ComReg in conducting any review of a submission from Eircom in this regard.

9.497 ComReg's assessment of Eircom's proposed amendment to the national FTTP VUA price floor will be on a case-by-case basis and will be subject to a number of conditions including the following:

(a) The reduction to the price floor for FTTP VUA is not to be a short-term measure;

(b) The reduction to the price floor for FTTP VUA will not dissuade new investment by alternative operators;

(c) The reduction to the price floor for FTTP VUA should apply to a substantial geographic region and not just to a very select number of exchanges chosen by Eircom;

(d) Any move from a national to a geographic differentiated price floor will require Eircom to demonstrate to ComReg's satisfaction that there are material and sustained differences in NGA VUA unit costs between significant geographic areas;

(e) The FTTP VUA price will continue to be the wholesale input used by all FTTP services that are provided in the specific geographic area; and

(f) FTTC VUA will continue to serve as a price floor for FTTP VUA, such that an FTTP VUA service cannot be offered at a price that is lower than the FTTC VUA price in the specific geographic area.

Regulatory approval mechanism for wholesale promotions and discounts

9.498 ComReg permits Eircom to continue to have pricing flexibility to set wholesale prices for FTTP VUA at or above the FTTC-based price floor. To date, Eircom has offered wholesale FTTP VUA services at national prices above the price of the FTTC VUA service. While the 2018 Pricing Decision provided Eircom with pricing flexibility for FTTP services, it also imposed a ban on all wholesale promotions and discounts including for FTTP. ComReg recognised that, although wholesale promotions and discounts could help stimulate demand and benefit end users in the form of lower prices, they could also create uncertainty for Access Seekers and could give rise to difficulties in terms of compliance with other regulatory obligations (e.g., the non-discrimination obligation). In general terms, wholesale discounts can be defined as offers of reductions on the standard price based on one (or more) condition(s) (e.g. volume threshold requirements, etc.) and are not of a time limited duration. In contrast wholesale promotions are offers that are time limited reductions on the standard price which may include conditions.

9.499 In 2018, ComReg was concerned in particular that wholesale promotions and discounts could be implemented in a way that could discriminate in favour of some Access Seekers more than others or that would, for reasons that are not cost related, result in lower prices being targeted at one geographic area in such a way as to foreclose economically efficient alternative investment by other operators that are either investing or planning to invest in VHCN in specific areas.

9.500 Since 2018, there has been material FTTP network deployment in competition with Eircom, which is likely to continue during this market review period. In this context, maintaining an outright prohibition on wholesale promotions and discounts may no longer be appropriate. In particular, the fact that rival operators may offer wholesale promotions and discounts may leave Eircom at an unfair commercial disadvantage or limit price competition to the detriment of Access Seekers and ultimately end users in downstream markets.

9.501 To date, the ban on wholesale promotions and discounts does not appear to have hampered Eircom's ability to compete for FTTP subscribers - Eircom's FTTP market share has been extremely stable since Q3 2019 **[✂ [redacted] ✂]** standing at Q1 2023 at **[✂ [redacted] ✂],** while FTTP coverage has continued to expand. After adjusting for NBI, Eircom's market share of FTTP services has been increasing steadily from **[✂ [redacted] ✂]** in Q3 2019 to **[✂ [redacted] ✂]** as at Q1 2023.

9.502 Discounts and promotions may also have a role to play in encouraging future network investments. The EC sees discounts and promotions as allowing risk sharing which, in turn, may boost investment, rather than protecting market positions. The 2013 EC Recommendation notes that permitting pricing flexibility in the form of discounts *"would allow SMP operators and access seekers to share some of the investment risk by differentiating wholesale access prices according to the access seekers' level of commitment. This could result in lower prices for long-term agreements with volume guarantees, which could reflect access seekers taking on some of the risks associated with uncertain demand."* ComReg notes that Recital 25 of the EC's draft 2023 Gigabit Recommendation[1248] indicates the Commission's intention to continue its 2013 recommendation that certain discounts are permitted to reduce investment risk related to VHCNs.

9.503 Wholesale promotions and discounts on FTTP VUA from Eircom could be of benefit in supporting a timely transition off copper and onto fibre, which is one of ComReg's objectives.

9.504 Against this background, ComReg is of the view that it is appropriate to relax the prohibition on wholesale discounts and promotions for FTTP.[1249] ComReg is, however, conscious of the competitive concerns which arise with their use, given Eircom's SMP position. As a result, wholesale discounts and promotions require ComReg's prior approval in order to ensure that they do not enable foreclosure strategies, e.g. a geographic differentiation of FTTP prices that would materially impact existing and/or emerging competition.

[1248] Draft Commission Recommendation on the regulatory promotion of Gigabit connectivity https://ec.europa.eu/newsroom/dae/redirection/document/93961

[1249] Wholesale promotions and discounts are not appropriate for a cost-based price such as FTTC VUA.

9.505 BEREC,[1250] reflecting on the aims of the guidance provided through the 2013 EC Recommendation (noting in particular Recitals 19, 49, but also 62), considered that it is important that, in allowing wholesale commercial offers, NRAs do not permit SMP SPs to abuse such pricing flexibility in order to exclude potential competitors from the market. The Oxera Part 1 Report also considers that while a total ban on promotions and discounts may be too restrictive as reductions to wholesale prices could be welfare-enhancing for consumers, removing the ban without imposing any case-by-case review/approval mechanism could result in the introduction of promotions and discounts by the SMP operator that may have the effect of undermining alternative operator investment. Oxera is of the view in this regard that granting Eircom complete freedom to offer targeted discounts, promotions and/or geographic pricing subject only to an *ex post* assessment under competition law would not strike the right balance to achieve ComReg's objectives.[1251]

9.506 A number of Submissions argued that ComReg should maintain the existing ban. VMI expressed concerns that the proposed relaxation *"…is premature and could harm the evolution of network-based competition"*,[1252] and *"… that it would be better to maintain the current arrangements that have worked well for stakeholders (including Eircom)."*[1253] VMI added that lifting the ban could lead to foreclosing competition, and that ComReg had not put forward evidence that the existing ban had harmed Eircom's ability to compete, and also suggested that Eircom should be required to demonstrate that a promotion/discount is needed to enable Eircom to compete fairly.[1254]

[1250] BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. *ex ante*/sector specific margin squeeze tests – BOR 14 (190) 2014 (the '**BEREC Guidance**')).

[1251] Oxera Updated Part 1 Report, paragraph 6.6.

[1252] VMI Non-confidential Submission, page 6.

[1253] VMI Non-confidential Submission, page 14.

[1254] VMI Non-confidential Submission, pages 29 – 30.

9.507 In its Submission, SIRO similarly considered that there was no need to change the current approach which *"… provides sufficient and transparent mechanisms for Eircom to drive demand for their FTTH offering without impacting on the rollout of alternative networks."* SIRO added that lifting the ban could distort the market, as the *"promotional price can become the established price. In the absence of a cost-based pricing environment, long-term promotions are likely to be unsustainable without incurring losses and therefore can hide anti-competitive pricing."*[1255] SIRO shared its view of the potential for Eircom's abuse of its incumbent advantages, which could discourage Access Seekers from moving demand to alternative operators thereby undermining the investment plans of alternative operators, and "*that there is no benefit to the market or consumers in providing additional incentives to Eircom, who have already committed to this build*".[1256]

9.508 SIRO detailed a number of concerns that relaxing the ban might give rise to, including: Eircom could use geographic targeting of discounts to undermine sub-national competition; Eircom offering volume discounts could influence both the decision making and business plans of Access Seekers and alternative networks;[1257] Eircom's discounts *"will bring a level of 'smoke and mirrors' to the true costs of providing FTTH into the retail market by an ISP"*, with the reduction in price transparency likely to inhibit new retail market entrants.[1258]

[1255] SIRO Non-confidential Submission, pages 21 – 22.

[1256] SIRO Non-confidential Submission, pages 24 - 25.

[1257] SIRO Non-confidential Submission, page 25.

[1258] SIRO Non-confidential Submission, page 26.

9.509 SIRO more widely expressed its concerns that Eircom's zero charge for FTTP connections and the signalling of discounts through Eircom's product forum was part of an *"overarching exclusionary strategy"* to create uncertainty for Access Seekers and alternative networks and, should the ban be lifted, Eircom could be in a position to *"leverage price signalling to foreclose network-based competition"*.[1259] In a related point on price signalling, SIRO expressed its concern that Eircom could abuse its product forum process by *"publishing a product request that would not be allowed for under regulations… to signal pricing initiatives, or red herrings, that might distort the market or allow them to leverage their market incumbency in an anti-competitive way."*[1260] SIRO also expressed doubts that permitting discounts would accelerate copper switch-off or that the purported benefits would flow to end users.[1261]

9.510 In its Submission, Eircom, in contrast, welcomed ComReg's proposal to remove the outright ban, but also considered ComReg's proposals to pre-approve Eircom's wholesale promotion/discounts were not consistent with the 2013 EC Recommendation which, in Eircom's opinion, *"recommends that the SMP operator be granted full pricing flexibility for FTTH wholesale prices and that promotions/discounts are an effective way to share the investment risk associated with FTTH roll-outs"*.[1262]

9.511 ComReg notes that it is not the case that the 2013 EC Recommendation recommends that the SMP operator be granted 'full pricing flexibility'. Rather the 2013 EC Recommendation aims to *"allow those operators investing in NGA networks* ***a certain degree of pricing flexibility*** *to test price points and conduct appropriate penetration pricing"*[1263]. The 2013 EC Recommendation also notes that any pricing flexibility needs to be balanced with the associated risks and is also concerned *"that SMP operators do not abuse this pricing flexibility in order to exclude (potential) competitors from the market."*[1264]

[1259] SIRO Non-confidential Submission, pages 27 – 28.

[1260] SIRO Non-confidential Submission, page 19.

[1261] SIRO Non-confidential Submission, pages 26 – 27.

[1262] Eircom Non-confidential Submission Paragraph 9(ii).

[1263] 2013 EC Recommendation, recital 49

[1264] 2013 EC Recommendation, recital 62

9.512 Furthermore, it is not ComReg's intention that Eircom will be prevented from offering promotions/discounts that share the investment risk (as catered for within the 2013 EC Recommendation). ComReg recognises that continuing the ban over the lifetime of this price control could be overly restrictive and unfair on Eircom given on-going competitive deployments. ComReg also considers that relaxing the ban could assist in the accomplishment of a timely transition to FTTP (a ComReg objective) which is supported in the EECC as well as the draft EC Gigabit Recommendation.

9.513 However, ComReg is also cognisant of the concerns highlighted by VMI and SIRO. Network operators are still deploying FTTP networks and a complete removal of the ban in the manner proposed by Eircom has the potential to exclude potential competitors from the market or to distort existing competition. ComReg has to balance the benefits that derive from allowing Eircom to offer wholesale promotions and discounts in addition to Pricing Flexibility for FTTP rental, with the need to ensure that Eircom does not use that additional freedom to undermine viable network competition.

9.514 Oxera also recognises that the concerns expressed by VMI and SIRO about relaxing the ban need to be considered in light of the fact that ComReg is not giving Eircom complete commercial freedom, and *"is subject to certain safeguards constructed based on the lessons learned from ex-post competition law cases regarding the types of practices which are designed specifically to ensure that no offer that would likely create foreclosing and/or distortive effects on competition would be allowed. Protecting infrastructure rivals and giving them space to grow is a key consideration of this proposal, and we consider the protections in place will still prevent behaviour that could foreclose economically efficient alternative investment."*[1265]

9.515 In relation to SIRO's concern, as noted in paragraph 9.508, that wholesale discounts could remove price transparency in the retail market, Oxera also considered that it was important for stakeholders to note as the relaxation of the ban is *"coupled with the 'price floor' proposals, Eircom is prevented from pricing below its costs and thus an efficient alternative network operator should not be prevented from also pricing at that level. We do not consider it possible for Eircom to 'hide anti-competitive pricing' (as suggested by SIRO) under the rules proposed."*[1266]

[1265] Oxera Updated Part 1 Report, paragraph 6.6.

[1266] Oxera Updated Part 1 Report, paragraph 6.7.

9.516 Other Respondents were in general agreement with the proposal to allow wholesale promotions and discounts in tandem with a pre-approval mechanism. Vodafone, for example, supported ComReg's proposal to relax the ban but highlighted the need for ComReg to *"carefully assess the implications of the discount scheme on competition, as there is a clear risk that Eir could structure prices in such a way that undermines competition in both wholesale and retail markets."*[1267]

9.517 A case by case assessment of proposals from Eircom related to wholesale promotions and discounts, against a set of principles will also ComReg to ensure that any wholesale promotions and discounts will not work contrary to its key objectives including promoting competition and encouraging investment.

9.518 Accordingly, Eircom is required, prior to introducing any wholesale discounts or promotions in respect of FTTP, to obtain ComReg's prior approval, which shall only be granted where ComReg is satisfied, on the basis of the information provided by Eircom, that the promotions or discounts, individually and in aggregate, will not have a material impact on economically efficient alternative investment by Network Operators that are either investing or planning to invest in VHCNs.

9.519 Eircom in its Submission was opposed to an approval mechanism and argued that imposing such restrictions on Eircom would undermine competition in the market. In particular, ComReg's proposed approval mechanism would *"unduly restrict the flexibility of eir to operate freely and efficiently"* and prevent Eircom *"from meeting competition on the merits because at all times ComReg has sought to shield SIRO (and Virgin Media) from price competition"*.[1268] The pre-approval mechanism will not prevent Eircom from competing on the merits. Rather, it is intended to ensure that Eircom does not introduce wholesale discount and promotion offers which undermine viable network competition.

9.520 While Oxera's Part 1 Report did not attempt to specify all possible factors that may be relevant to an *ex ante* assessment of a future wholesale offer from Eircom, it noted that pricing strategies which have a loyalty inducing effect are more likely to undermine the investment case of alternative Network Operators. For example, in respect of loyalty rebates, Oxera noted that retroactive rebates, which are granted on all purchases ('back to unit one'),

> *"have greater potential to harm competition, as they make it less attractive for customers to switch incremental amounts of demand to alternative sellers given that the customers would 'lose' the discount*

[1267] Vodafone Non-confidential Submission, page 23.

[1268] Eircom Non-confidential Submission, paragraph 9(ii).

on all other volumes. The alternative operator would therefore need to offer a much larger discount on the incremental demand, which may not be sustainable, particularly if the level of discount required is below the costs of provision."[1269]

9.521 Similarly, Oxera noted that:

"exclusivity discounts (which are available only if the customer buys exclusively or quasi-exclusively from the dominant firm) would incentivise access seekers to avoid multi-supplier arrangements, with potentially significant detrimental effects on alternative wholesale network operator investment. Such discounts are harder to justify for cost reasons and raise stronger potential concerns about foreclosure of new/smaller competitors."[1270]

9.522 As the promotion of viable investment is a key policy objective, in any future case-by-case assessment of Eircom's wholesale offers, ComReg will pay particular attention to ensuring that promotions and discounts are only permitted when it is clear that they do not prevent new investment by alternative operators or undermine competition through conditional or loyalty enhancing offers that would undermine an efficient operator's incentive invest and to compete. Specifically, wholesale offers including discounts or rebates tied to terms or conditions that are likely to unfairly inhibit off-net migration by RSPs would not be permissible.

9.523 Oxera also highlighted the potential for wholesale promotions and discounts to have conditions attached that could have loyalty enhancing or exclusionary effects and / or result in discriminatory prices. For example, the Oxera Part 1 Report notes:

"In particular, as the discount is linked to the volume purchased by the customer, it can have loyalty-enhancing effects-the larger the volumes required to achieve a given level of discount, the greater the loyalty-enhancing effect. This could strengthen Eircom's market power at the wholesale level by making it harder for alternative network operators to acquire wholesale customers to their networks.

Any Eircom wholesale discounts should be non-discriminatory and transparent (e.g. available to all retailers on its network) in line with other regulatory obligations. Therefore the volume thresholds at which the discounts apply should not be targeted such that, in practice, they can be met only by Eircom's downstream arm. If Eircom were able to favour its downstream arm (for example, by setting the volume threshold to obtain a discount at a level that only Eircom's retail arm is able to achieve), it could

[1269] Paragraph 5.34 of the Oxera Part 1 Report.

[1270] Paragraph 5.31 of the Oxera Part 1 Report.

leverage its wholesale market power at the retail level, which could adversely affect competition to the detriment of consumers."[1271]

9.524 ComReg agrees that for a wholesale promotion or discount offer to be acceptable, it must not favour Eircom's retail arm and must be accessible in practical terms to other Access Seekers. In addition, ComReg considers that a wholesale offer should not be predicated on volume thresholds that can only be achieved if the Access Seeker switches a substantial proportion of its demand on to Eircom's network, as such offers would make it more difficult for rival networks to compete. ComReg also considers that long-term volume discounts that have the purpose or potential effect of restricting migration between networks risk undermining competition and would not be in the long term interests of end users.

9.525 SPC Network[1272] in its Submission suggested, noting that ComReg's approach is likely to go a long way towards reducing some of the concerns of alternative networks, that it could be strengthened, by either banning any promotions or discounts based on volume thresholds as well as making clear that volume discounts would be prohibited if the discounts can only be achieved by an Access Seeker switching not necessarily all of its demand but a substantial proportion of it. SPC Network also proposed that ComReg should make it clear for Eircom and stakeholders that discounts that raise the costs of switching are prohibited.

9.526 Similarly, VMI considered it right to pay particular attention to the principles above as part of the pre-launch assessment, but was concerned that they *"…lack specificity"*, and could be strengthened by also banning loyalty inducing schemes such as volume commitments.[1273]

9.527 However, ComReg considers that an outright ban on volume related discounts would not be appropriate, as volume commitments can reduce demand uncertainty for network operators and discounting of wholesale prices that allow SMP operators and Access Seekers to share some of the investment risk is consistent the 2013 EC Recommendation. Nonetheless, it is the case that discounts that raise the costs of switching for Access Seekers (as discussed in paragraphs 9.533 to 9.536) will not be permitted.

[1271] Paragraphs 5.29 and 5.30 of the Oxera Part 1 Report.

[1272] SPC Network Non-confidential Submission, paragraphs 107 to 109.

[1273] VMI Non-confidential Submission page 31.

9.528 Similarly, ComReg accepts that a volume discount may have anti-competitive effects where an Access Seeker is in effect required to switch, not necessarily all, but a substantial proportion of its demand. However, ComReg also considers that specifying a particular percentage (e.g., SPC Network proposes 60%) is too restrictive. ComReg intends to undertake a case by case assessment of each offer and any assessment of offers including volume threshold type conditions needs to consider the specific implications those threshold conditions might have in terms of foreclosure of rival operators. It is also important to recognise that Eircom as the SMP operator tends to have more demand on its network than its network rivals, so imposing such a requirement (or focusing on a specific value) could effectively eliminate volume-based discounts ever being proposed by Eircom, which is not ComReg's intention. Eircom's offers should be designed to compete on their merits, and not take undue advantage of its base that it has been able to attain as an incumbent operator to foreclose sustainable network competition.

9.529 SIRO, notwithstanding its view that the ban should not be relaxed at this time, did consider that ComReg's initial proposals provide *"the necessary guiderails that removing the ban would require"*.[1274] Vodafone also agreed with ComReg's proposed pre-conditions and provided examples of how Eircom could use the relaxation of the ban to distort competition at the retail and wholesale level and urged ComReg to carefully balance providing greater investment incentives to Eircom with mitigating the risk of competition being undermined.[1275]

9.530 In contrast, Eircom submitted that the conditions for approval leave "*significant room for interpretation, can be difficult to assess and reflect a degree of intervention that is unwarranted*".[1276] Eircom also argued that the requirement that "*promotions or discounts, individually and in aggregate, are unlikely to have a material impact on economically efficient alternative investment by alternative network operators that are either investing or planning to invest in VHCNs*" is "*completely subjective*".[1277]

[1274] SIRO Non-confidential Submission, page 28.

[1275] Vodafone Non-confidential Submission, page 24.

[1276] Eircom Non-confidential Submission, paragraph 190.

[1277] Eircom Non-confidential Submission, paragraph 189.

9.531 While a case-by-case assessment will necessitate an element of judgement to be exercised by ComReg, this does not mean that it will be *"completely subjective"*. Rather it will be based on an economic analysis of the expected impact of the discount scheme having regard to its nature and terms and conditions and by reference to matters such as the price floor established by the published FTTC VUA wholesale price acting as a proxy for the costs of the FTTP VUA service. ComReg's analysis in this respect will be no different in nature to any of the economic analyses it regularly engages in as part of its statutory duties or that a competition authority would undertake. Economic tools such as the 'as-efficient competitor' test can be used to assess discount schemes.[1278] Oxera notes that ComReg's case by case assessment:

> *"…will need to take into account any particular conditions identified by Eircom, and the levels of the discount, guided by the overarching principles that, for such pricing practices to be allowed, they must not have a material impact on existing or nascent competition, and must generate clear benefits in terms of being a critical element of Eircom's fibre investment plans."*[1279]

9.532 Eircom, in seeking to highlight a risk of regulatory failure, noted that it "*is aware the SIRO has a number of active promotions which specifically target eir's copper base (including FTTC)*".[1280]

9.533 ComReg notes that Eircom offering a discount on FTTP services may not always be an appropriate way to counter the pricing strategy of a rival network operator. For example, if the rival's FTTP network is targeting premises in an area that is not currently served by Eircom's FTTP network, then the end users in those premises could not benefit from Eircom's discount offer on FTTP (but could have other potential impacts, such as limiting end user choice, innovation, and competition that benefits end users, etc.).

[1278] Oxera Updated Part 1 Report, paragraph 6.9 and footnote 89.

[1279] Oxera Updated Part 1 Report, paragraph 6.10.

[1280] Eircom Non-confidential Submission, paragraph 189.

9.534 For example, Eircom could design an FTTP discount offer which required an RSP to keep certain levels of aggregate (copper and fibre) demand on Eircom's broadband network. Such an offer could inhibit RSPs from availing of the only available FTTP service in an area because it happens to be on another operator's network. Continuing the example, the terms of the discount scheme could mean that an RSP that currently used an Eircom FTTC service to serve the premises in an area might be reluctant to switch to a rival FTTP network that passes those premises, even if that was the only FTTP network available. This could arise if switching to the other FTTP network risked the RSP's residual level of broadband demand on Eircom's network falling below the volume targets specified in the discount scheme, with the result that the RSP would not qualify for the wholesale price reductions stipulated in the offer.

9.535 Such an offer would increase the costs to the RSP of switching from Eircom to another Network Operator, as any benefits it gets from switching (i.e. the level of the discount) have to be offset against the potential 'cost' of the FTTP discounts it could jeopardise for all of its FTTP demand on Eircom's network. The cost to the RSP of missing out on a discount offer on Eircom's network tends to be higher because, as the established incumbent, most wholesale demand is on Eircom's network. Furthermore, the particular terms of the discount offer could also make it harder for new Network Operators to compete where a discount applies to FTTP demand back to year one on its network, than it would be if the discount only applies to new additions.[1281] Basing a discount offer on aggregate broadband demand could even inhibit copper switch-off as RSPs might be reluctant to switch their customer base from Eircom's copper-based broadband network in the IA to the FTTP service provided by NBI.

9.536 A discount scheme that increases the RSP's switching costs to the extent that it is compelled to stay on Eircom's legacy copper network rather than switch to an available FTTP network is unlikely to be consistent with risk sharing or meeting competition on the merits. Nor would it be to the benefit of the end user if the volume targets in Eircom's discount terms meant that RSPs were inhibited/discouraged from offering end users an available FTTP service from a rival to Eircom.

[1281] A further aspect to note, is whether an alternative network operator could set prices to sustainably compete for the contestable share (per the as-efficient competitor test). For example, it may be the case that an alternative network operator could not offer a discount/effective price that would compensate the RSP for this loss, in a way that would be sustainable to do so (i.e. not pricing below cost).

9.537 Eircom's notification of a proposed discount scheme in February 2023 illustrates these concerns. The proposed discount scheme included tiered tariff reductions to RSPs based on the aggregate growth of their consumption of broadband products (CGA, FTTC & FTTP) on Eircom's network.[1282] Maintaining its total broadband volumes secured the RSP a **[✂** [redacted] **✂]** discount per FTTP service (VUA or Bitstream) for all the RSP's FTTP services on the network, achieving **[✂** [redacted] **✂]** growth secured a **[✂** [redacted] **✂]** discount, while achieving **[✂** [redacted] **✂]** growth or over resulted in a **[✂** [redacted] **✂]** discount. Consequently, an RSP that switched its copper-based broadband demand to a rival FTTP network risked missing a target and losing the associated discount on all of its FTTP demand on Eircom's network.

9.538 ComReg found that Eircom's proposed discount scheme raised *"significant concerns as regards the impact it would have on investments and competition"*,[1283] noting in particular that it could have *"created significant uncertainty for alternative operators looking to invest in infrastructure rollout as regards their ability to attract wholesale customers onto their networks. In particular, the scheme includes features that are characteristics of retroactive loyalty-inducing rebate schemes that have clear anti-competitive effects and raises serious concerns under Competition Law."*[1284]

9.539 This illustrates that a pre-approval process is necessary, as it can be used to ensure that Eircom is prevented from introducing discount offers that could undermine investment incentives for rival operators and exclude potential competitors from the market.[1285]

9.540 Oxera notes that the principles of lifting the outright ban but also requiring principles to be adhered to *"… remain valid and represent a proportionate intervention—they relax the previous ban on promotions and discounts, but still ensure sufficient protection to avoid cases where Eircom can undermine competition from alternative network operators by, for example, loyalty enhancing offers or promotions such as exclusivity discounts or retroactive rebates."*[1286]

[1282] Eircom Wholesale Notification 23-003, see ComReg Information Notices 23/24 and 23/25.

[1283] Paragraph 5 of ComReg Information Notice 23/24.

[1284] Paragraph 7 of ComReg Information Notice 23/24.

[1285] **[✂** [redacted] **✂]**

[1286] Oxera Updated Part 1 Report, paragraph 6.5.

No geographically differentiated wholesale discounts and promotions

9.541 To date, Eircom's prices for FTTP VUA services have always been set nationally. However, different economies of scope and scale can exist across the access network, which could give rise to differences in the average cost per line across different geographic areas. In light of these potential cost differences, the Oxera Part 1 Report notes that,

> *"it would not be unreasonable for Eircom to set geographically different prices for FTTC VUA or FTTH VUA services in those different areas. We recognise that where the costs of provision differ, it would be legitimate to have different prices. Pricing in this way could be efficient and could lead to good outcomes for consumers if lower costs lead to lower prices."*[1287]

9.542 Nonetheless, the Oxera Part 1 Report also cautions that there is still a risk that Eircom could target promotions and discounts in relatively low cost areas where there may also be the prospect of competition, while leaving prices higher elsewhere. Such an outcome would deter alternative network rollout, which would not be in the long term interest of consumers in terms of choice, innovation and price.

9.543 Consequently, Oxera recommends that Eircom should only be allowed to set different prices in different geographic areas on the basis that, *"it can justify that the price differences are not larger than the difference in the costs of provision between the two areas. In the absence of a fully specified and agreed BU LRIC cost model, Eircom would need to justify its strategy with reference to the costs it is facing."*[1288] Oxera also notes that this would be a necessary (but not sufficient) condition for the approval of any such geographically differentiated wholesale offer by Eircom and other factors should also be considered, for example, in respect of how the differentiated price levels compare to a price floor.

9.544 While ComReg accepts the premise that different costs in different areas can justify geographically differentiated prices, there are also reasons to suggest that making the robust case that would be necessary to demonstrate the level of cost differences that would justify introducing differentiated FTTP VUA prices during the course of the market review will be challenging. For example, the fact that Eircom is still in the process of deploying its FTTP network means that there is still uncertainty in respect of the future costs and demand for FTTP services on Eircom's network, such that any estimate of Eircom's FTTP costs and demand would still be heavily reliant on forecasts.

[1287] Paragraph 5.36 of the Oxera Part 1 Report.

[1288] Paragraph 5.40 of the Oxera Part 1 Report.

9.545 It is also the case that there are number of factors that are specific to Ireland that mean that any cost differential between different geographic areas may not be as significant for future FTTP services on Eircom's network as it would have been in the past for Eircom's copper-based services.

9.546 A key factor in this regard is that the implementation of the NBP will see the most expensive FTTP lines being provided on NBI's FTTP network rather than on Eircom's. This means that the subset of FTTP lines with the highest average cost will not be provided by Eircom. Therefore, even though Eircom's rural FTTP network is still likely to have a higher capex per premises passed than will be the case for Eircom's non-rural FTTP network, this cost differential is much lower than it would have been in the absence of the NBP.

9.547 It is also the case that service pricing is ultimately dependent on the relative cost per active premises connected rather than the cost per premises passed, as it is active premises that determine prices and drive revenues. Having a higher market share in an area can help reduce the cost per premises connected in that area, which should help reduce the key cost differences for Eircom between its higher cost rural FTTP network and lower cost non-rural FTTP network.

9.548 For instance, it is reasonable to expect that Eircom will have a higher proportion of premises connected in high cost rural areas than in the more urban areas where there is a greater prospect for rival network competition. Eircom has already established first mover advantage in the more costly rural areas for commercial FTTP deployment (it completed its Rural FTTP build in 2019), which significantly reduces the prospect of other commercial operators deploying rival FTTP networks to compete with Eircom's existing FTTP network in these areas. While NBI is deploying FTTP infrastructure in the rural FTTP footprint, NBI faces a number of constraints in terms of using its state-subsidised network to provide FTTP services outside the IA, which will limit its ability to compete with Eircom's commercial deployment in rural areas. Consequently, Eircom can expect to connect a higher proportion of the premises passed by its FTTP network in rural areas than it might in urban areas. This should help reduce the difference in terms of cost per premises connected between rural and urban areas.

9.549 ComReg also notes the significant extent of NBI's reliance on Eircom's ducts and poles to deploy its FTTP network throughout the IA. Given that the IA is contiguous with Eircom's rural FTTP network footprint, there is a significant degree of sharing of Eircom's ducts and poles between NBI's FTTP network and Eircom's rural FTTP network, as NBI must traverse Eircom's Rural FTTP network as it deploys fibre to the serve the premises in the IA footprint. Indeed, it is possible that NBI could end up sharing c.80% of Eircom's poles in the Rural FTTP network footprint. As a result, PIA revenues from NBI could ultimately contribute to the recovery of most of the incremental investment in PIA that Eircom originally incurred when deploying its Rural FTTP network.

9.550 In contrast, NBI's network's concentration in rural areas (NBI is not expected to make any material use of poles in urban areas) means that PIA revenues from NBI in urban areas are unlikely to be significant. As a result, the contribution of PIA revenues from NBI to funding Eircom's rural FTTP investments will further reduce any cost differential between rural and urban areas for Eircom's FTTP services.

9.551 Given the cumulative effect all these factors are likely to have in terms of reducing cost differences between rural and non-rural areas, ComReg considers that it is reasonable to expect that Eircom should be able to maintain its existing policy of national FTTP VUA prices for the market review period without compromising its ability to recover the efficient costs it incurs in providing those services.

9.552 In its Submission, SPC Network was in agreement that Eircom should not be allowed to introduce wholesale discounts and promotions that differ on the basis of geography to target specific areas, as *"Eircom could use them to target rival operators, such as Virgin Media, and would thus be a major barrier to entry and expansion, affecting competition in the long run"*.[1289] SIRO however remarked that there is no way to construct a transparent and efficient mechanism to effectively prevent the geographic targeting of discounts: *"Eircom may seek to offer discounts linked to phases of network roll-out, such as pre-sales discounts, early-life discounts, or refarming discounts, which are functionally equivalent to geographically targeted discounts"*.[1290]

[1289] SPC Network Non-confidential Submission, paragraph 110.

[1290] SIRO Non-confidential Submission, page 25.

9.553 In contrast, Eircom in its Submission, viewed it as unrealistic to suggest it has "*the ability or motivation to target geographic discounts at the wholesale level to discourage competing network investments. This assumes a level of foreknowledge of the deployment plans of other operators that is highly unlikely*".[1291]

9.554 The reference to *"foreknowledge of the deployment plans of other operators"* suggests that Eircom would only benefit from targeting discounts in those areas where rival operators were planning to deploy an FTTP network, but not in areas where rival operators either had recently deployed or were in the process of deploying an FTTP network. However, targeting discounts in an area where a rival had just deployed or was in the process of deploying a network could also foreclose efficient investment. For example, were Eircom to adopt such a targeted discount strategy in an area where a rival network operator has started to deploy an FTTP network, it could signal to the rival operator that, every time it started to expand its network into an area, it could expect Eircom to respond by offering discounts to secure the majority of customers in that area before the rival operator would be in a position to secure a viable customer base.

9.555 By geographically targeting discounts in this way, Eircom might make the business case for rival network investment much more challenging, which could foreclose viable network expansion and undermine the prospect of economically efficient network competition. As noted by SIRO, *"The marginal impact on FTTH business cases of lower market prices is substantial and the ability for Eircom to turn on discounts and then turn them off once market entrants have been squeezed out is an appreciable risk."*[1292]

9.556 Eircom accordingly is not permitted to introduce geographically differentiated wholesale promotions and discounts that target specific areas.

[1291] Eircom Non-confidential Submission, paragraph 191.

[1292] SIRO Non-confidential Submission, page 23.

Conclusion

9.557 The extent of recent FTTP network investment by commercial operators indicates that the regulatory regime in place since 2018 has been successful in promoting competition by encouraging rival network deployment. Throughout this period Eircom has had pricing flexibility for FTTP rental services, which meant that it could amend the level of FTTP rental prices, provided the prices were above a price floor. At the same time, Eircom was prevented from offering wholesale promotions and discounts. However, ComReg now considers that maintaining the outright ban on wholesale promotions and discounts for FTTP over the period of this market review may be overly restrictive, particularly as viable network competition evolves and rival networks become more established and start to gain market share.

9.558 In light of these developments and having considered the recommendations in the Oxera Updated Part 1 Report following on from the Oxera Part 1 Report, ComReg is relaxing the outright ban on wholesale promotions and discounts, and will allow Eircom to introduce wholesale promotions and discounts for FTTP services. However, this is subject to case-by-case prior approval by ComReg, to be granted where ComReg is satisfied that the proposed discount or promotion will not have a detrimental impact on actual or potential economically efficient alternative investment in VHCN, which ComReg will assess having regard, in particular, to the following:

(a) The cumulative effect of the wholesale promotions and discounts should not result in a price that is lower than the price floor for FTTP VUA, the FTTC anchor regulated price;

(b) Promotions and discounts for FTTP VUA should not prevent new investment by alternative operators or undermine competition through any conditional or loyalty enhancing effects arising from offers such as retroactive rebates, exclusivity discounts, long-term commitments or volume thresholds undermining an equally efficient operator’s incentive to compete or prevent offnet migration;

(c) Promotions and discounts for FTTP VUA are not targeted at Eircom retail and can be achieved by a range of Access Seekers; and

(d) Promotions and discounts for FTTP-based VUA are not targeted at a specific geographic area. In particular, the wholesale promotions and discounts should not give rise to geographic differentiation of prices.

9.559 In relation to notifications by Eircom of proposed wholesale promotions and discounts, a similar process should be followed to that set out in paragraphs 9.569 to 9.570. However, prior to this notification to industry ComReg's assessment period should be at least three months. Eircom suggested that rather than having an assessment period of three months, ComReg could develop a set of standard FTTP promotions that could be implemented with minimal scrutiny.

9.560 ComReg also sought stakeholders' views as to whether there may be merit in ComReg consulting with industry on any proposed wholesale promotions and discounts as part of ComReg's assessment. ComReg considers that an assessment period of three months is reasonable given the potential range and variety of offers which may be notified by Eircom. Within this freedom of range Eircom may propose complex offers that require time to understand, get responses to queries, and conduct a thorough assessment. ComReg considers that a more detailed and prescriptive process could undermine the case-by-case assessment already indicated.

9.561 Setting a shorter assessment period may result in insufficient time to consider any proposals from Eircom. Given the concerns expressed by stakeholders in relation to relaxing the ban and being conscious of the guidance from the 2013 EC Recommendation, and draft 2023 EC Recommendation, ComReg considers that it is more appropriate to reduce this risk by not shortening its assessment period.

9.562 ComReg's experience of assessing Eircom's pricing notifications has informed the proposed timeframe. Past experience confirms that it is important to permit sufficient time to review and understand clarifications from Eircom (including but not limited to corrections and providing supporting information, etc.). On balance, ComReg considers that the potential upside of a shortened assessment period with minimal scrutiny for Eircom does not in any way outweigh the significant downside that could be created in permitting an offer that could cause very serious harm in the market.

9.563 ComReg also notes that Ofcom makes use of a three month assessment window in conducting its assessment. ComReg does recognise that not all proposed offers from Eircom may require the full three months assessment, and in such instances will endeavour to undertake its assessment as quickly as is practicable.

9.564 Eircom will only be permitted to publicise offers which have received ComReg's approval. For the avoidance of doubt, this means that Eircom is not permitted to launch an offer, or inform the market (or industry fora such as Eircom's PDW, etc.) or an individual Access Seeker or Access Seekers of any proposed offer either under review by ComReg or within Eircom's contemplation until said offer has been notified to ComReg and which has received a formal approval by ComReg.

9.565 VMI and its advisers, SPC Network, considered that the decision-making process would be improved by being more transparent, and suggested that ComReg should seek information from stakeholders more widely than just relying on Eircom. VMI also suggested that when *"interested stakeholders (in addition to Eircom) were consulted via public consultation, there should be no stepped notification process for ComReg and other interested parties (such as Virgin Media) – it would make more sense for Eircom to make the request and justify that request to all parties at the same time"*.[1293] SIRO suggested adopting a similar approach to that followed by Ofcom in the UK, where it consults with industry on any proposed wholesale promotions and discounts and that the public consultation should last no less than four weeks. This would be in addition to the three month notification to ComReg, and the two-month industry notification, *"to provide for due time to make considered responses and to allow retailers to deal with the commercial fall-out."*[1294]

9.566 ComReg agrees with Oxera's recommendation[1295] that there is merit in seeking information from other market participants as part of the assessment process of Eircom notifications *"where they may not be in clear breach of the guidance above, nor clearly acceptable"*. ComReg will exercise its discretion and carry out a consultation where it considers it necessary, for example, to assess the impact of the offer. ComReg will not consult on offers that either obviously fail or pass the assessment as this is not required and would create an unnecessary process.

9.567 ComReg therefore considers that each submission of an offer by Eircom should follow this process:

(a) Notification by Eircom of a proposed discount initiates a three month assessment period which may be paused where complete information has not been provided, or additional information is required, in which case it will resume on provision of the relevant information by Eircom;

[1293] VMI Non-confidential Submission, p.32, and SPC Network Submission, at paragraphs 102 to 103.

[1294] SIRO Non-confidential Submission, pp.28-29.

[1295] Paragraph 6.16 of Oxera's Updated Part 1 Report.

(b) ComReg will conduct its assessment guided by competition law principles. There will be three potential outcomes – the proposal will be deemed acceptable (i.e. Eircom can launch it); or not acceptable (i.e. Eircom cannot launch it); or the proposal may contain aspects of concern to ComReg where the impact on competition is unclear and may require input to be sought from stakeholders;

(c) If a proposal requires input to be sought from stakeholders, then Eircom will be informed of such without delay, and ComReg will publish the offer on its website for consultation with stakeholders. During this period of consultation, the three month assessment period will be paused, and subsequently may be extended if necessary. ComReg will inform Eircom and stakeholders at the same time of its final assessment of the relevant offer at the end of the assessment period.

9.568 Where ComReg deems it necessary to launch a public consultation, the particular form of the consultation may vary depending on the context and substance of the particular offer. However, ComReg expects that such consultations would at least cover aspects tied to the conditions being proposed by Eircom within an offer, and ComReg would provide its preliminary views as to why these may raise competition concerns.

Pre-notification and publication requirements in respect of pricing

9.569 The notification of price changes to ComReg and industry is essential to the proper functioning of the wholesale market and is necessary in order to protect competition. ComReg maintains in place the existing regime, whereby Eircom is required to give Access Seekers advance notice of any price amendment, having pre-notified ComReg of same one month in advance of publication and submitted a pricing statement of compliance, including a full and true disclosure of all material facts, and demonstrating compliance with the applicable price control. ComReg also requires that the advance publication timelines to industry should be two months for either a price decrease or a price increase, to align with the timelines specified in paragraph 9.229, and six months where 'the 1 + 6 advance notification rule' set out in paragraph 9.230 applies. As discussed earlier a longer notification period is needed to protect competition, for example, when a new service is offered by Eircom, Access Seekers may need sufficient time to prepare IT systems, or source and purchase new equipment to avail of the new service. Any previous variation of timelines between pricing and non-pricing notifications is removed.

9.570 As regards notifications related to the approval mechanism for lowering the price floors in a geographic area or wholesale promotions or discounts, ComReg's prior approval must be sought at least three months in advance of Eircom's proposed publication date, given the assessment required by ComReg. Where approval is granted following ComReg's assessment, this is to be followed by a two month advance publication period to industry. This should give industry sufficient time to prepare for the wholesale promotion or discount, for example by altering their retail offers / advertising.

9.3.5 Margin Squeeze Tests

9.571 {ComReg maintains Eircom's obligation not to cause a margin squeeze by reference to a specified MST but amends the MST that applies under the 2018 Bundles Decision so that it applies only in respect of Eircom's FTTP 'flagship' products. 'Flagship' products are the highest volume FTTP retail offerings which together account for at least 75% of total FTTP retail product volumes. Given the continuation of pricing flexibility at the wholesale level for FTTP VUA rental, a MST between FTTP wholesale inputs and FTTP retail services will guard against the potential adverse effects for both downstream competition and retail customers that could arise from a margin squeeze. The imposition of an *ex ante* MST in the presence of wholesale price flexibility for FTTP is consistent with the 2013 EC Recommendation.

9.572 The assessment at Section 8 has identified that, absent regulation, Eircom would have the ability and incentive to inhibit sustainable competition in the Commercial NG WLA Market by increasing wholesale access prices, or decreasing retail prices, or a combination of both actions. This would create a margin squeeze, such that SPs in the downstream retail market cannot replicate the services provided by Eircom and are forced out of the market.

9.573 ComReg considered the recommendations of the Oxera Part 3 Report[1296] for the consultation phase ('**Oxera Part 3 Report**') and its Updated Part 3 Report ('**Oxera Updated Part 3 Report**') as part of the Decision phase[1297]. The remaining part of this sub-section is set out as follows:

(a) Margin Squeeze and Competition problems,

(b) Existing Price Control for Bundles and Standalone Broadband,

(c) Assessment of the need for a MST for specific retail services,

(d) Components of the Margin Squeeze Obligation for FTTP Retail Offerings,

[1296] Oxera Part 3 Report, document 23/03E / Link: ComReg 23 03 Oxera Part 3.

[1297] Oxera Updated Part 3 Report, [document 23/XX / Link: TBC]

(e) Details of FTTP MST,

(f) MST on Bitstream prices, and

(g) *Ex ante* and *ex post* assessment of offers.

Margin Squeeze and Competition problems

What is a Margin Squeeze?

9.574 In defining a Margin Squeeze, the BEREC Guidance[1298] (in referencing an earlier ERG report)[1299] states that:

> *"..a margin squeeze takes place when the difference between the retail and wholesale price imposed by a vertically integrated undertaking for a given product is not sufficient to cover the product's retail cost by an efficient competitor, thus making it not possible for the competitor to recover all of its retail costs if it wants to compete profitably in the same retail market."*

9.575 A margin squeeze occurs when an SMP SP, active in both the wholesale and retail markets, sets prices in such a way as to prevent an RSP from replicating the retail service provided by the SMP SP at the same price (which covers its downstream costs and generates a profit).

9.576 A margin squeeze can flow not only from setting the wholesale price, but it can also result from the retail price set by the SMP SP. The concern is not with the absolute wholesale or retail price, but rather with the difference created by an SMP SP between such prices, i.e. the price or margin squeeze.

9.577 There are three ways in which an SMP SP can achieve a margin squeeze:

(a) increasing the wholesale charge to Access Seekers for its access product (in the upstream market),

(b) decreasing the price of its retail product (in the downstream market), or

(c) A combination of both.

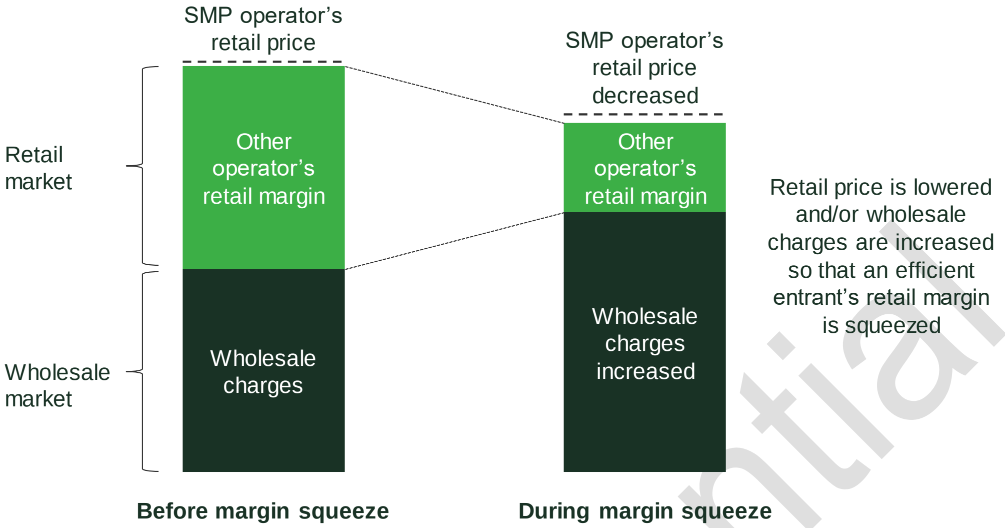
No Wholesale or Retail Price Controls

9.578 In the absence of regulation, where no wholesale price control is imposed for certain wholesale inputs (particularly in areas where no alternative Network Operator is present), the SMP SP would be free to implement a margin squeeze by increasing wholesale charges to Access Seekers, as set out at Figure 35 below:

[1298] BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests, 5 December 2014, p.38.

[1299] ERG Report on the Discussion on the application of margin squeeze test to bundles (March 2009). The ERG was BEREC's predecessor.

Figure 35: Mechanics of a margin squeeze with no wholesale price controls[1300]



9.579 The Oxera Part 3 Report notes (in Section 3.12) if Eircom had the flexibility to implement a margin squeeze through an increase in its wholesale prices, this would allow it to:

> *"…engage in a squeeze without incurring losses on an end-to-end basis. This is because any margin lost at the retail level would be covered through excess profits at the wholesale level, provided that retail prices are set at or above total end-to-end costs. In this regard, the margin squeeze can be said to be 'costless' for Eircom."*

9.580 This margin squeeze (created by an increase in wholesale charges) is said to be 'costless' to Eircom, as any change in the wholesale price does not affect the profitability of the service on an end-to-end basis (as an increase in margin in the wholesale market, due to increase wholesale prices, will be offset by a reduction in margin in the retail market due to an increase in wholesale input costs). This is on the assumption that Eircom Retail relies on Eircom's wholesale access product and not another Network Operator.

9.581 From the perspective of Access Seekers, an increase in wholesale charges will raise the costs associated with providing a (standalone or bundled) retail service in the downstream market. Assuming a fixed retail price, this may lead to a tightening of their margin to a level which prevents them from competing with Eircom, and they may be forced from the market.

[1300] Oxera Part 3 Report, Figure 3.1 (ComReg document 23/03e).

9.582 Section 3.1.6 of the Oxera Part 3 Report concludes that, all else being equal, compared with a scenario with a wholesale price control in place *"Eircom will have a stronger ability and incentive—or weaker disincentives—to impose a margin squeeze without a wholesale price control in place."*

9.583 In other words, Eircom can foreclose RSPs that are dependent on its wholesale products by preventing them from profitably replicating Eircom's retail offerings. In addition to increasing wholesale access prices, Eircom can reduce its retail prices (for example, through promotions and discounts) which can lead to a margin squeeze, as set out at Figure 35 above.

9.584 The lowering of retail prices could also have the impact of tightening the margins of RSPs to such a level that they are forced from the market as they cannot compete with the wholesale SMP SP in the downstream market.

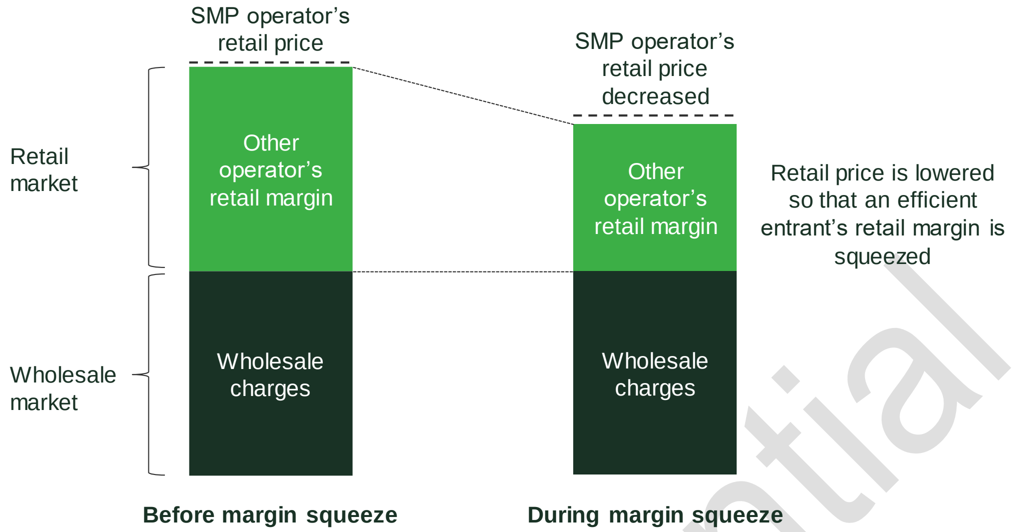
9.585 In the long term this practice creates consumer harm through lack of competition and excessive retail prices. As noted in Section 5.6 of the Oxera Part 3 Report it,

> *"….could enable Eircom to secure an entrenched position of market power at the retail level with potentially significant negative effects on consumers, in terms of reduced consumer choice, less innovation, lower quality of service (e.g. regarding customer service), and reduced price competition, among other aspects."*

<u>Wholesale Price Control but no Retail Price Control</u>

9.586 Where a wholesale price control exists (such as cost orientation) but there is no requirement to ensure replicability in the downstream market by means of a MST, a margin squeeze may be brought about through a reduction in retail prices by the SMP SP, as set out at Figure 36 below.

Figure 36: Mechanics of a margin squeeze with wholesale price control[1301]



9.587 Assuming all underlying wholesale and retail costs remain unchanged, a reduction in retail prices will result in a reduction in the associated margin, which could lead to a margin squeeze. The SMP SP will only have an incentive to engage in such a squeeze (as it reduces retail revenues and profits) if there is potential to recoup such losses after successfully implementing the margin squeeze through, for example, an increase in its subscriber base.

9.588 For the RSP, a reduction in the retail price charged by the SMP SP could lead to the RSP exiting the market as it cannot achieve a positive margin (at such prices) on the retail services, whether they are sold on a standalone basis or as part of a bundle.

9.589 Section 3.21 of the Oxera Part 3 Report notes that:

> *"Eircom could in theory sustain a margin squeeze by pricing down to the level of its variable costs, as it continues to earn profits (or, at a minimum, recover its variable costs) during the squeeze. Translating this to the LRIC+ price control, this means that Eircom could set its retail price below its LRIC+ (and even below its LRIC) plus its incremental downstream costs, and continue to earn end-to-end (short-run) profits on each and every sale."*

9.590 As a result, an SMP SP has the ability to engage in a squeeze, at least in the short run, recovering its variable costs and earning a profit.

[1301] See Section 3.2 of the Oxera Part 3 Report (ComReg document 23/03e).

The existence of competing NGA networks

9.591 The potential for SMP SPs to create a margin squeeze may be influenced by the presence of alternative Network Operators. The BEREC Guidance[1302] states in this respect that:

> *"The roll-out of NGA networks by alternative operators, or the signing of co-investment agreements, could in this regard lead to increased infrastructure competition in some areas and thus, ultimately, to effective competition on the retail markets"*

9.592 Where alternative Network Operators are present, the incentive of the SMP SP to engage in a margin squeeze at the wholesale or retail level may be weakened. The impact of the presence of alternative Network Operators on the SMP SP will be dependent on whether they are wholesale providers of access services or whether they are providers of an end-to-end service (including a retail service) and also on the margin squeeze strategy employed by the SMP SP, i.e. whether it is through an increase in wholesale access charges or a decrease in the retail prices of standalone and bundled products.

9.593 If the SMP SP engages in a margin squeeze by increasing its wholesale access prices, Access Seekers may switch to an alternative Network Operator which is offering an access service at a lower price. The impact of this in preventing the SMP SP from engaging in a margin squeeze will be dependent on the presence and scale of the alternative network and the services offered. The greater the substitutability of the alternative network infrastructure is to the SMP network, the lower the incentive for the SMP SP to apply a margin squeeze by increasing wholesale access prices.

9.594 If the SMP SP engages in a price squeeze by reducing its retail price (given the existence of a wholesale price control), the alternative Network Operator may try to compete with the SMP SP for Access Seekers by offering a lower priced wholesale access service than the SMP SP and so offset the impact of the reduction in the retail margin (if the alternative Network Operator considers that this would be beneficial in the longer term).

9.595 The success of the alternative Network Operator in minimising the impact of a squeeze by an SMP SP will, as set out in Section 3.31 of the Oxera Part 3 Report, be dependent on a number of factors, including the ability of the alternative wholesale Network Operator to offer:

> *"…. a credible substitute to Eircom's network; ….meet the technical needs of the access seekers and/or if the network coverage is unsuitable……, if the alternative network operator has sub-national coverage, the access seeker may be able to switch only in certain*

[1302] At p. 40.

> *areas and would still need to rely, in part, on Eircom's wholesale inputs to maintain the same coverage…... Access seekers must also be able to easily switch away from Eircom's network; this may not be the case if switching is technically complex, slow and/or costly."*

9.596 While Eircom faces some competition from alternative wholesale Network Operators e.g. SIRO, Oxera (in Section 3.33 of the Oxera Part 3 Report) is of the opinion that, *"…not all access seekers are likely to have a credible alternative to Eircom to fully undermine its incentives to engage in a margin squeeze."*

9.597 SPs who self-supply wholesale services and compete at the retail level may also affect the incentive and ability of the SMP SP to engage in a margin squeeze. As noted in Section 3.34 – 3.36 of the Oxera Part 3 Report, while this will not change an SMP SP's incentives and ability to engage in a squeeze at the wholesale level through an increase in wholesale prices, its incentives and ability to margin squeeze at the retail level through a reduction in retail prices would be weakened, as it could lead to a retail price war with the alternative end-to-end Network Operator. This could impede the SMP SP's ability to capture the retail customer of the Access Seekers disadvantaged by the margin squeeze, as those retail customers may instead divert to the alternative end-to-end Network Operator that lowers its retail prices on equivalent services to match the SMP SP's lower retail prices.

9.598 However, for the reasons set out in Section 6, ComReg does not believe any alternative end-to-end Network Operator will constrain Eircom on the Commercial NG WLA Market to a sufficient level over the market review period. Therefore, it is necessary to maintain Eircom's obligation not to cause a margin squeeze and specify such an obligation by reference to a MST.

Existing Price Control for Bundles and Standalone Broadband

9.599 The 2018 Decision imposed on Eircom an obligation not to cause margin squeezes[1303] in the WLA Market and Revised Regional WCA Market, and this obligation was further specified by way of MSTs set out in the 2018 Pricing Decision[1304] and the 2018 Bundles Decision.[1305]

[1303] Under Regulation 56 ECC Regulations.

[1304] Pricing of wholesale broadband services Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets Response to Consultation Document 17/26 and Final DecisionD11/18. Link –ComReg-1895.pdf

[1305] Response to Consultation and Decision on price control obligations relating to retail bundles Further specification of the wholesale price control obligation not to cause a margin squeeze in the WLA, and WCA Markets (Decision D12/18, document no 18/96). Link ComReg-1896.pdf

9.600 Figure 37 below sets out the market share of Eircom and OAOs on the retail broadband market (sold in a bundle or on a standalone basis) in the presence of regulation. For Q1 2023, Eircom held a **[✂ [redacted] ✂]** market share, followed by VMI at **[✂ [redacted] ✂]**, Vodafone at **[✂ [redacted] ✂]**, Sky at **[✂ [redacted] ✂]** and the rest of OAOs accounting for **[✂ [redacted] ✂]**.

Figure 37: Retail broadband SP market share 2018-2023 [✂REDACTED✂][1306]

[redacted]

9.601 The relatively stable market shares on the retail broadband market (sold on a standalone or bundled basis) over the 2018-2023 period suggest that SPs have been able to replicate Eircom's retail offerings in the presence of the existing MSTs. Vodafone[1307] in its Submission disagrees arguing that the relatively stable market share from 2018-2022 is not an indicator that it has been able to replicate Eircom's retail offerings.

[1306] Up to Q4 2022 operator market share was based on number of subscribers with all broadband products sold on a standalone basis or in a bundle with one or more unregulated services e.g. fixed voice, mobile and TV. Since Q 1 2023 this is now based on number of lines.

[1307] Vodafone Non-confidential Submission, p.25.

9.602 The graph from the 2023 Consultation has been updated to include the three additional quarters, Q3 2022, Q4 2022 and Q1 2023. As discussed above, the purpose of an *ex ante* MST is to ensure that RSP's can replicate the retail offerings of Eircom and promote sustainable competition. Absent regulation, there is a possibility that Eircom could exert its market power and engage in a squeeze to, for example, maintain or gain market share. ComReg is of the view that the stable market shares (as displayed in the figure above) suggest that RSPs have been able to replicate the retail offers of Eircom in the presence of the MST and there is no evidence that harm has been caused to competition due to the launch of retail offers by Eircom.

9.603 In the absence of a direct wholesale price control, it remains appropriate to apply *ex ante* margin squeeze obligations and to specify those further by reference to a MST that recognises the EC Recommendation, market developments since the 2018 Decision and recommendations from Oxera.

Assessment of the need for a MST for specific retail services

9.604 Access Seekers who purchase FTTC VUA or FTTP VUA at the wholesale level (from Eircom or another Network Operator) can offer a variety of retail services. These services include Standalone Broadband (FTTC or FTTP at varying speeds) and bundled services which include broadband plus another service e.g. RFTS, mobile telephony and TV.

9.605 Based on QKDR data for Q1 2023, retail customers who purchase broadband alone account for **[✂ [redacted] ✂]** of the market, customers who purchase broadband and RFTS (i.e. a dual play bundle) account for **[✂ [redacted] ✂]** whereas customers who purchase broadband, RFTS and TV (i.e. a triple play bundle) account for **[✂ [redacted] ✂]** and customers who purchase broadband, RFTS, Mobile and TV (i.e. a quad play bundle) account for **[✂ [redacted] ✂]**. BEREC Guidance recognises that non-regulated costs *"… given the importance of bundles, they can represent a material proportion of downstream costs and therefore should be considered a relevant parameter in the margin squeeze test."*[1308]

9.606 Accordingly, the costs (and revenues) associated with any unregulated service(s) included in a bundle should be included in the MST assessment. paragraphs 9.778 to 9.784 below discusses this in greater depth.

[1308] At p.13, paragraph 2.2.5.2.

Risk of Margin Squeeze for retail services using FTTC VUA

9.607 As set out in paragraph 9.343 to 9.376 above, ComReg maintains Eircom's cost orientation obligation for FTTC VUA, specified by reference to the applicable regulated price for FTTC VUA at the time of this Decision, subject to maximum annual increases in line with CPI. This means that the only way Eircom could create a squeeze for FTTC services would be to reduce the FTTC retail price.

9.608 SFG[1309] in its Submission suggests that there is a link between the ability of Eircom to increase prices of FTTC VUA by CPI-0% and [✂ [redacted] ✂]

9.609 Section 4.29 – 4.30 of the Oxera Part 3 Report (and paragraph 2.15 of the Oxera Updated Part 3 Report) notes that, based on the proposals for price continuity for FTTC VUA (with the price allowed to increase in future by no more than CPI), Eircom's ability to engage in a margin squeeze does not materially differ from its ability to do so with a cost oriented price control. In noting that the recommended price control is the current price from the BU-LRIC model and the fact that the price continuity approach (of CPI + 0%) would produce a slightly higher price path for FTTC prices compared with a continuation of the BU-LRIC+ model, it still limits the extent to which prices can rise above general inflation level (as no explicit efficiency assumptions are included). Oxera concludes that the ability of Eircom to create a margin squeeze would mainly be through reductions in the retail prices of FTTC. Recently a number of operators have implemented a policy of annual price increases linked to CPI plus an additional percentage – Eircom for example increased retail prices in April 2023 by approximately 8% (representing CPI only). If retail prices and wholesale prices both increase with inflation, then the margin is not being squeezed. Only if the retail prices did not change at all and the wholesale prices increased at a faster rate could margins be squeezed.

9.610 However, as discussed below, given the ongoing migration from FTTC to FTTP, Eircom's motivation to encourage this migration, and the resultant difficulty in recouping the related costs, the risk of a margin squeeze on FTTC has diminished to the extent that a MST on FTTC is no longer justified.

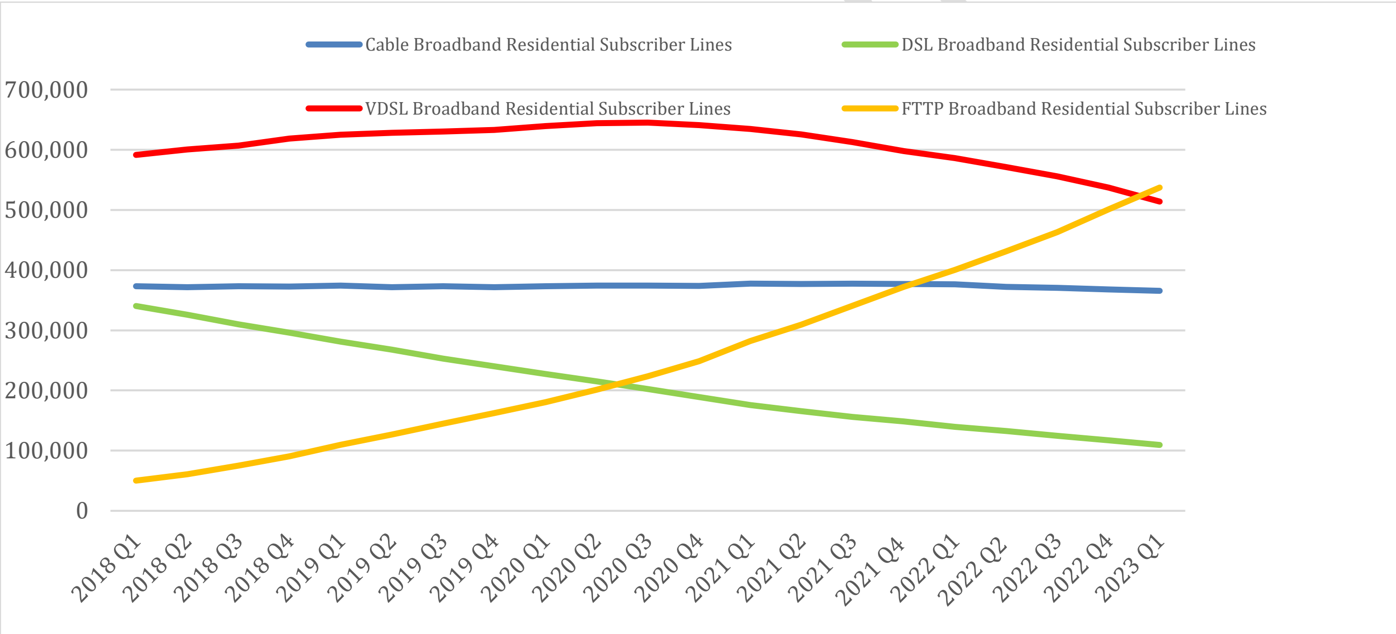
[1309] SFG Non-confidential Submission, p.28.

Migration from FTTC to FTTP

9.611 FTTC is no longer the most popular form of broadband service, with the number of subscribers on FTTP now exceeding FTTC. Figure 38 below highlights that the FTTC service (labelled as VDSL) peaked at 645,125 subscribers in Q3 2020 and has since declined to 513,916 subscribers at Q1 2023. In contrast there has been a steady growth in FTTP for the same period (i.e. from 223,754 subscribers in Q3 2020 to 537,244 subscribers in Q1 2023).

9.612 This trend is expected to continue over the review period given the deployment plans of Network Operators, e.g. Eircom has the objective of bringing full fibre broadband to 1.9 million premises (by 2026), with over 1,083,000[1310] homes and businesses already passed (at the end of June 2023) and SIRO expected to reach 770,000 homes and premises.

Figure 38: Subscriber Lines by Technology (Q1 2018 – Q1 2023)[1311]



9.613 As Eircom continues to build out FTTP in the footprint it currently serves with FTTC over the review period, there will be, as identified by Oxera (in Section 4.7) of the Oxera Part 3 Report, *"strong incentives to encourage subscribers to migrate to its FTTH service offerings, and thereby to contribute to the recovery of the fixed and sunk costs associated with the investment."*

[1310] At end June 2023 – see EHIL (eir.ie) p.22.

[1311] QKDR - Internet Data, excluding satellite, FWA and mobile broadband.

9.614 In their Submissions, Sky and SFG expressed concern with the impact of any potential slowdown of FTTP rollout by Eircom. Sky[1312] was concerned that if FTTP rollout was not completed at the pace that Eircom is suggesting, given that *"FTTC…remains a significant technology platform with a large number of uses",* Eircom may be in a position to engage in a FTTC margin squeeze.

9.615 SFG[1313] expressed similar concerns in its Submission stating that the removal of the current MSTs on FTTC is not justified and is based on the assumption that Eircom will achieve complete overlay of the existing FTTC network with FTTP. While noting Eircom's own position that the network upgrade will be completed no sooner than 2026, it stated that there is no guarantee that this will materialise.

9.616 ComReg notes that FTTP rollout is continuing at pace, with recent evidence indicating that Eircom is passing c.216,000 premises per annum and has (as noted in paragraph 5.66 above) passed over one million premises with its FTTP network. In addition, Figure 38 and paragraph 9.611 provides further evidence that migration to FTTP is continuing and as noted in paragraph 2.7 of the Oxera Updated Part 3 Report *"…has now become the dominant technology used to provide retail broadband in Ireland"*.

9.617 This trend as noted in paragraph 2.8 of the Oxera Updated Part 3 Report "*…is consistent with the expectation that Eircom will continue to roll out its fibre network and seek to encourage migration from FTTC services to FTTH over the review period, where FTTH will be the focus of competition*". ComReg does not therefore agree with Sky that Eircom may be in a position to engage in a margin squeeze particularly as a policy of engaging in a margin squeeze of FTTC-based retail services by lowering FTTC-based retail prices could delay the migration of customers onto FTTP. Contrary to the view of SFG, the removal of the FTTC MST obligation is not based on the assumption that Eircom will achieve complete overlay of the existing FTTC network with FTTP but as noted in paragraph 2.9 of the Oxera Updated Part 3 Report is based on the "*…relative trade-offs for Eircom associated with a margin squeeze on FTTC VUA, taking into account the actual and expected presence of its FTTH network rollout (which need not reach 100% FTTH coverage)*".

[1312] Sky Non-confidential Submission, p.4.

[1313] SFG Non-confidential Submission, p.2.

9.618 Even if Eircom's FTTP rollout is slower than expected and there is no prospect of Eircom FTTP in some areas (as discussed in 9.622 to 9.629 below) a strategy of engaging in a squeeze through reducing retail prices would require Eircom incurring a loss, which it will have to recoup eventually, through future higher retail prices. This could only be achieved by the elimination of competition from the provision of such retail services. ComReg is of the opinion that the success of Eircom in driving out competition will be dependent on how long it can sustain the losses (from a price reduction) so that it can later increase retail prices without the threat of re-entry of competitors. The scale of retail services providers is such that ComReg is of the opinion that they could withstand an attempt by Eircom to drive them out of the market (via a margin squeeze on FTTC), such that if a squeeze on FTTC does occur and is identified early, it can still be reviewed *ex post* and rectified, including reviewing the need for re-introducing an *ex ante* obligation, without this having caused material harm in terms of the exit of players. ComReg's view is that it is not justified or proportionate to maintain the MST for FTTC given the low incentives and consequent low risk of a margin squeeze on FTTC as identified by Oxera in paragraph 2.16 of the Oxera Updated Part 3 Report.

9.619 The Oxera Part 3 Report (in Section 4.7) identified that a key driver of migration from FTTC to FTTP will be the relative prices of FTTC-based and FTTP-based retail services. A high price differential may deter customers from switching from FTTC to FTTP (where services are available in parallel). Eircom will be motivated to encourage customers to upgrade to FTTP and may set the retail prices of FTTP and FTTC to stimulate such migration.

9.620 Furthermore, and as noted by Oxera (in Section 4.10 of the Oxera Part 3 Report), imposing a margin squeeze through a reduction in retail prices would mean that Eircom would incur short-run losses, relative to the scenario in which it does not engage in a margin squeeze. Eircom would have difficulty recouping these losses following a squeeze as customers migrate to FTTP. This, as noted by Oxera, will act as further disincentive on Eircom to engage in a margin squeeze on FTTC.

9.621 Sky[1314] while noting that ComReg correctly urges caution regarding VMI's planned FTTP rollout and SIRO's 'phase two' rollout, stated that ComReg should adopt the same position when it comes to Eircom's FTTP rollout plans. It went on to express its concerns that ComReg seem to have factored this into its *"…decision making with regard to the proposal to not introduce cost orientation for FTTH but has opted to not include it for consideration with regard to Eir's potential incentives to margin squeeze FTTC in certain scenarios."* ComReg's consideration on the incentives to margin squeeze on FTTC is partly based on the evidence of Eircom's FTTP rollout to date and as set out below even if its FTTP rollout was to slow down the ability for Eircom to recoup the costs of a margin squeeze on FTTC is limited.

Cost of a Margin Squeeze

9.622 If Eircom did decide to engage in a squeeze by reducing the price of FTTC-based retail services, the cost of the squeeze would have to be recouped at some stage through higher prices. The size of the cost to be recouped would be determined by the size of the price reduction and the period over which the reduced price is offered (so as to foreclose downstream competitors).

9.623 Both Sky and SFG expressed concern in their submissions with the impact of the margin squeeze on competitors. SFG[1315] noted that the *"relaxation of regulation with respect to FTTC poses a material risk to competition"* and Sky[1316] was of the opinion that other operators would be unable to compete without incurring a loss.

9.624 ComReg notes that larger and well-established SPs are more likely to be able to withstand a margin squeeze than smaller new entrants. Oxera (in Section 4.14 of the Oxera Part 3 Report) identified that well-established providers of retail FTTC services

> *"…may require less protection against a margin squeeze given the relatively low risk of them quickly exiting the market in response to Eircom's strategy".*

[1314] Sky Non-confidential submission, p.5.

[1315] SFG Non-confidential submission, p.2.

[1316] Sky Non-confidential submission, p.5.

9.625 On the other hand, while Eircom may be able to successfully squeeze out smaller and less-established SPs more easily, the potential benefits to Eircom are likely to be small. Oxera (in Section 4.15 of the Oxera Part 3 Report) notes that, given the focus of competition will be on FTTP-based retail services (over the review period), *"…on a forward-looking basis the foreclosure of smaller FTTC providers is of less concern due to the limited impact this would have on competitive dynamics over the review period."*

9.626 Paragraph 2.12 of the Oxera Updated Part 3 Report notes that given the presence of a number of well-established FTTC retail providers *"..Eircom may have to engage in a deep squeeze for a sustained period in order to materially undermine its rivals."* The issue therefore is how long Eircom would be willing to incur reduced revenues and margins in the hope of driving out competition. These reductions will have to be recouped by Eircom at some point through higher prices.

9.627 As explained by Oxera, there are two ways for Eircom to recoup losses (see Section 4.17 and 4.18 of the Oxera Part 3 Report).

9.628 **Firstly**, Eircom could try and leverage the position it has acquired through the margin squeeze in the retail market and increase the price of FTTC retail services. It may be challenging for Eircom to recoup such losses as RSPs may re-enter the market and resume providing FTTC retail services. The ability of Eircom to maintain such high prices may be eroded and /or customers may decide to switch to FTTP retail products offered by Eircom or another RSP. In addition, Oxera noted that, if copper switch-off takes place, the timeframe within which Eircom can recoup its losses through higher FTTC prices will be limited, as FTTC would be withdrawn.

9.629 **Secondly**, if Eircom were successful in gaining an increased share of FTTC retail services, it could seek to recoup losses and upgrade such customers to its FTTP retail products. The challenge here (as identified by Oxera) is whether Eircom would in future face competition for such services which inhibits it from earning higher margins than on FTTC retail services. In addition, the size of the price differential between FTTC and FTTP retail services or products (even after FTTC retail prices have increased) may dissuade customers from migrating to FTTP, particularly in the short term.

The existence of alternative Network Operators

9.630 While Oxera (in Section 4.22 of the Oxera Part 3 Report) notes that the only alternative end-to-end network with a material presence in Ireland is VMI's network, covering c.41% of premises in the State,[1317] it could, however, potentially weaken Eircom's incentives to engage in a margin squeeze of FTTC services through lowering retail FTTC prices, given the risk that VMI may respond by reducing its retail prices. Oxera however noted that, consistent with the final conclusions from the market review, the competitive impact of VMI may be immaterial.

9.631 While alternative Network Operators could discourage Eircom from engaging in a margin squeeze, ComReg notes that no alternative network provides an FTTC service, so any attempt by Eircom to engage in a squeeze of FTTC is not restricted in this way. Also, even though an alternative Network Operator (SIRO) provides a wholesale FTTP service, Oxera (in Section 4.24 of the Oxera Part 3 Report) notes that it may be unlikely to offer a sufficiently strong alternative that enables Access Seekers to mitigate Eircom's attempted margin squeeze by quickly transferring a large share of its FTTC customers to an FTTP service provided on an alternative wholesale network.

9.632 In light of the above, Oxera (in Section 4.25 of the Oxera Part 3 Report) notes that, despite the presence of alternative Network Operators, they are unlikely to reduce Eircom's incentives *"to engage in a squeeze".* However, for the reasons outlined in the sub-sections above the incentive to margin squeeze on FTTC is *"…likely to be low".*

Conclusion

9.633 ComReg, having considered the Submissions to Consultation, is of the view that Eircom is unlikely to engage in a margin squeeze for FTTC retail offerings (in the presence of the proposed price continuity for FTTC VUA services) so that no *ex ante* MST applies in respect of Eircom's FTTC retail offerings. However, Eircom continues to be subject to *ex post* competition law obligations and ComReg may investigate Eircom if it were to engage in a margin squeeze on FTTC VUA.

<u>Risk of Margin Squeeze for retail services using FTTP VUA</u>

9.634 As set out in paragraphs 9.318 to 9.342 above, ComReg continues to allow Eircom pricing flexibility for FTTP VUA services (subject to a price floor).

[1317] VMI's Q2 2023 Fixed Income Release reports a figure of 970,200 'homes passed', which includes both its CATV network and more recently its FTTP network, including both its existing RFoG technology and new XGS-PON technology. Expressed as a percentage of 2,369,716 premises in the State, measured by postal addresses. ComReg's internal data reports VMI's coverage to be at 42%, [✂ [redacted] ✂]

9.635 ComReg considers below whether there is a risk that Eircom could, in the absence of a wholesale price ceiling, leverage its position into the downstream market in the provision of FTTP retail offerings (broadband services sold on a standalone or bundled basis) and create a margin squeeze.

Migration from FTTC to FTTP

9.636 As set out above, the trend of increasing FTTP subscribers and declining FTTC and copper is expected to continue over the review period.

9.637 As Eircom rolls out its FTTP network, it may rely on RSPs to assist in the transition from FTTC VUA to FTTP VUA. Such RSPs can, as identified by Oxera (in Section 5.16 of the Oxera Part 3 Report), *"offer a valuable route to gaining FTTH subscribers and generating the associated wholesale revenues for Eircom."* Oxera suggests that, in the short term, as the FTTP network is rolled out, Eircom may have little incentive to foreclose such RSPs by creating a margin squeeze.

9.638 As further noted by Oxera (in Section 5.17 of the Oxera Part 3 Report) there does not appear to be any attempt by Eircom to squeeze RSPs' margins at present and a significant share of Eircom's wholesale FTTP lines are sold to Access Seekers. This is evident firstly in the market shares of FTTP Broadband Subscriber Lines, with Vodafone holding 34% of FTTP lines, Sky, 20% and Eircom, 33% in Q1 2023.[1318] Vodafone[1319] argues that the fact that ComReg has not found any margin squeeze infringements in respect of FTTP products should not be regarded as *"definitive proof that the existing MSTs on FTTH are fit for purpose"*. ComReg is of the view that these FTTP retail market shares show that under the existing MSTs (as per the 2018 Pricing Decision and the 2018 Bundles Decision) Access Seekers have been able to replicate Eircom's FTTP retail offerings and so fulfilling the objective of the MST. While this may be attributed to the fact that Eircom has an obligation not to margin squeeze, Eircom is earning Average Total Cost ('**ATC**') margins on both standalone and bundled FTTP products of **[✂** [redacted] **✂]** in Q1 2023. This, as noted by Oxera (in Section 5.18 of the Oxera Part 3 Report), indicates that Eircom's margins are *"above the level that would indicate a desire to squeeze margins to the minimum allowed amount."*

[1318] Source - 5.-Internet-Data-Q1-2023_.xlsx (live.com)

[1319] Vodafone Non-confidential submission, p.25.

9.639 Secondly, it is also evident in the proportion of FTTP lines sold by Eircom to Access Seekers, with almost **[✂ [redacted] ✂]** of FTTP lines being sold to Access Seekers (between Q2 2021 and Q1 2023) and the remainder being self-supply to Eircom's retail arm. This continues the trend noted by Oxera (in Section 5.19 of the Oxera Part 3 Report), suggesting that wholesale access volumes are a key part of Eircom's FTTP portfolio and therefore, in the short run, Eircom may not have the incentive to margin squeeze.

9.640 Copenhagen Economics[1320] submitted that this was not indicative of Eircom *"making the most of"* existing regulatory constraints with an attempt to foreclose downstream rivals and strongly suggested that the risk of margin squeeze is low, undermining the economic case for an MST.

9.641 While ComReg agrees that the risk of margin squeeze is low at present (and the evidence above confirms this), there is however uncertainty as to whether Eircom would engage in a margin squeeze during the review period and notes that the potential adverse effects on RSPs, Network Operators and customers could be significant. Oxera (in paragraph 3.6 of the Oxera Updated Part 3 Report) notes that *"..looking at past behaviour is not necessarily an accurate predictor of future behaviour, particularly when Eircom's conduct may have been driven by its obligation not to engage in a margin squeeze"* and states (in Section 5.36 of the Oxera Part 3 Report) that, *"If such a situation were to arise, the significant benefits from decades of promoting retail competition through ex ante regulation could be lost, as the SMP operator's position becomes entrenched and re-monopolisation of the retail market during the transition to the next generation of technology becomes a real possibility."* This is discussed further at paragraphs 9.653 to 9.663 below.

9.642 ComReg notes that the increasing presence of other wholesale providers (e.g., SIRO and, on a forward looking basis, VMI as its network is rolled out) may mean that Eircom will set its wholesale prices in such a way so as to attract Access Seekers onto its network so as to assist in the rollout of FTTP. Copenhagen Economics[1321] argues that Eircom has *"…become increasingly reliant on its wholesale customers, which does not support……concerns over foreclosure."* ComReg is of the view however that in the longer term and as the FTTP network fills up and Eircom becomes less reliant on Access Seekers to achieve payback on its investment cost, Eircom's incentive to engage in a margin squeeze to foreclose Access Seekers and increase its retail market share may increase.

[1320] Copenhagen Economics Non-confidential submission, paragraph 4.55.

[1321] Copenhagen Economics Non-confidential submission, paragraph 4.4.

9.643 It is unclear how quickly this may happen, but according to Oxera (in Section 5.23 of the Oxera Part 3 Report), this *"…may happen within the market review period and has the potential to do so reasonably quickly"* and would be dependent *"...on the extent to which Eircom is able to migrate a critical mass of its own downstream retail customers onto its FTTH network, and, more generally, how quickly customers migrate to FTTH, such that Eircom is no longer reliant on the support from access seekers to aid the migration."*

9.644 Copenhagen Economics submitted that Oxera's reasoning with regard to incentives to foreclose is *"…speculative and not consistent with standard theories of harm"*[1322] and states that from an economic perspective, a margin squeeze is likely to occur when the FTTP market is growing and less so when the market has already matured. It concludes however that the risk of a margin squeeze, does not appear to hold in the Irish FTTP segment. Oxera (in paragraph 3.9 – 3.10 of the Oxera Updated Part 3 Report) notes that while *"… Eircom may have low incentives to foreclose access seekers through a margin squeeze during the earlier stages of its fibre rollout, since … access seekers can help Eircom fill its FTTH network".* However once Eircom has gained sufficient volumes on its network, it may *"... have the incentive to engage in a margin squeeze to increase its retail FTTH share…"* which could enable Eircom secure an entrenched position of market power at the retail level which could be costly to competition and consumers.

Cost of a Margin Squeeze

9.645 Oxera notes (in Section 5.10 of the Oxera Part 3 Report) that Eircom could engage in a 'costless' margin squeeze by increasing its FTTP wholesale prices (and leaving its retail prices unchanged). Unlike the position with FTTC, Eircom would not incur losses that would need to be recouped following the implementation of the margin squeeze. This increases the risk of Eircom engaging in such a margin squeeze, absent regulation.

9.646 ComReg also notes that an *ex ante* MST can have a role in providing additional safeguards for Access Seekers where as is the case with FTTP there is pricing flexibility on the wholesale input, in line with the EC Recommendations. Recital 50 of the EC Recommendation notes that:

> *"…to prevent such pricing flexibility leading to excessive prices in markets where SMP has been found, it should be accompanied by additional safeguards to protect competition."*

and should also include an *"…economic replicability of downstream products",* the purpose being, as set out in Recital 62:

[1322] Copenhagen Economics Non-confidential submission, paragraph 4.60.

> *"to ensure, in combination with the other competitive safeguards introduced such as EoI, the technical replicability test, and a demonstrable retail price constraint resulting from a copper anchor or alternative infrastructures, that **SMP operators do not abuse this pricing flexibility in order to exclude (potential) competitors from the market**".*

The existence of alternative Network Operators

9.647 As set out in paragraphs 9.630 to 9.632 above, the incentive of the SMP SP to engage in a margin squeeze will be weakened by the presence of alternative Network Operators. If Access Seekers are able to switch to an alternative Network Operator quickly and at a low cost and at a wholesale access price which is more favourable to them (compared with that offered by the SMP SP) and allow them to generate a reasonable margin at the retail level, any attempt by Eircom to increase its wholesale access charges (leading to a margin squeeze) would be therefore hindered.

9.648 In Section 6 above ComReg concluded that the presence of rival wholesale FTTP infrastructure operators including SIRO (and, on a forward-looking basis, VMI) in the Commercial NG WLA Market over the review period will not sufficiently constrain Eircom's behaviour in the Commercial NG WLA Geographic Market.

9.649 As set out in paragraphs 9.591 to 9.598 above providers of an end-to-end service i.e. operators who self-supply wholesale services and compete with RSPs at the retail level may also affect the ability of the SMP SP to engage in a margin squeeze. As noted by Oxera (in Section 5.27 of the Oxera Part 3 Report), there are no end-to-end operators offering wholesale access at a material scale other than Eircom. At Q1 2023 Eircom had **[✂** [redacted] **✂]**[1323] FTTP lines (supplying to Access Seekers and self-supplying to its retail arm) whereas VMI had **[✂** [redacted] **✂]** (all self-supply) lines.

9.650 Copenhagen Economics[1324] submits that the basis for ComReg's reasoning, namely an alleged lack of direct and indirect pricing constraints, is questionable and notes that ComReg has failed to provide any evidence of the strength (or lack of) these constraints.

[1323] SP Quarterly Submissions to ComReg.

[1324] Copenhagen Economics Submission, paragraph 4.58.

9.651 However, ComReg notes, conversely, that there is no evidence to suggest that Eircom's retail or wholesale prices have been constrained by (for example) retail competition from other operators or that they would be constrained during the review period. The ability of Eircom to implement price increases based on CPI since April 2023 and its indication of further increases up to CPI + 3% going forward is evidence of a lack of retail pricing constraint.

9.652 Accordingly, while Eircom's incentive to engage in a margin squeeze may be reduced by the presence of alternative Network Operators, such presence is not yet, sufficiently ubiquitous to deter Eircom once it has gained volume on its FTTP network.

Conclusion

9.653 While the risk that Eircom would engage in a margin squeeze on FTTP retail offerings during the review period is uncertain, the potential adverse effects on Network Operators, RSPs and customers could be significant. This is because a margin squeeze could have a negative impact on network investment and sustainable competition which could lead to consumer harm due, for example, to less choice, less incentive to provide good QoS, and less price competition.

9.654 ComReg is of the view that *ex post* competition law enforcement will be insufficient as it will be limited to protecting remaining competition and may be too late as alternative Access Seekers may have already left the market.

9.655 Oxera (in section 5.39 of the Oxera Part 3 Report) notes with respect to the risk at this critical juncture of FTTP take-up, that waiting to see if a competition issue arises before opening an *ex post* investigation, means *"…the SMP operator could already have secured an entrenched position before any resolution can be imposed, which would be difficult and time-consuming to unwind."*

9.656 Recital 61 of the EC Recommendation suggests that:

> *"to establish whether alternative access seekers can **economically replicate a downstream offer provided by the SMP operator** with the regulated wholesale input available, in cases where wholesale price regulation should not be imposed, an NRA should undertake an ERT"* [ComReg emphasis]

9.657 The BEREC Guidance also sees *ex ante* MSTs as a safeguard for competition, allowing efficient market entry and promoting efficient investment in NGA networks.

9.658 Oxera (in Section 5.38 of the Oxera Part 3 Report) noted for FTTP that "*The consequences of errors from choosing not to impose an MST and later observing a squeeze compared to imposing an MST and finding it may not have been necessary would suggest that, on balance, it would be proportionate to impose margin squeeze obligations, given the risks of not doing so*." Copenhagen Economics[1325] disagreed in its submission submitting that without evidence of a margin squeeze, the justification for a MST does not account for the risk of distortive effects of unwarranted regulation and that a "….*similar logic could be a justification for any remedies on any market under any circumstances, no matter how competitive*." As Oxera notes, however, (in paragraph 3.12 - 3.13 of the Oxera Updated Part 3 Report) such a risk cannot be adequately addressed by competition law in view of the "…*potentially significant harms that could arise if Eircom did engage in a successful margin squeeze strategy at this key stage in the transition to FTTH*."

9.659 ComReg also points out that the justification for the *ex ante* FTTP MST is based on the potential anti-competitive behaviours which may be exercised by Eircom and so restrict its ability to leverage market power from the wholesale market (where Eircom has been designated with SMP) into the retail market.

9.660 ComReg accordingly is of the view that it is necessary and justified to require that Eircom meet an *ex ante* MST for FTTP offerings (including both FTTP sold on a standalone basis or included in a bundle with one or more unregulated products). For the avoidance of doubt, the MST will not apply to the Emulated FTTC-like service on the FTTP network that Eircom would introduce, were it to withdraw FTTC in an EA. As this FTTC-like service is to replace FTTC, Eircom has little incentive to squeeze for the same reasons as outlined above for FTTC.

9.661 While Copenhagen Economics[1326] believes that the FTTP MST remedy is *"….intrusive and potentially conducive to distortions to competition",* ComReg is satisfied that the margin squeeze obligations are necessary to ensure a sufficient gap between retail and wholesale prices and that Access Seekers can compete on downstream markets and replicate the retail offers of Eircom and so promote sustainable competition.

[1325] Copenhagen Economics Non-confidential Submission, paragraph 4.63.

[1326] Copenhagen Economics Non-confidential Submission, paragraph 4.1.

9.662 Accordingly an MST is necessary to maintain the competitive safeguards given the price flexibility for FTTP VUA as per the EC Recommendation. It will also indirectly regulate the level of wholesale prices, to the extent that one way in which a MST can be passed is through reductions in the wholesale price. A MST can be thought of as a transmission mechanism of retail constraints to the wholesale level. For example, if an RSP's retail price for FTTP is €40 per month, then Eircom retail will be unlikely to charge above €40 for FTTP per month, as it would lose retail market share. Thus, in the presence of a Retail MST, the FTTP wholesale price may be restricted at the level of the retail price less retail margin.

9.663 Paragraphs 9.712 to 9.733 below discuss the relevant FTTP retail offerings further and paragraphs 9.852 to 9.868 discuss the administration aspects associated with the an *ex ante* (and *ex post* monitoring) test.

Components of the Margin Squeeze Obligation for FTTP Retail Offerings

Overview

9.664 The MST is passed if the relevant retail revenues are greater than or equal to the relevant wholesale input (access) costs plus the downstream costs. These components are considered in depth in this subsection.

Parameters to be applied in an *ex ante* test

9.665 Paragraph 56 of the 2013 EC Recommendation sets out the parameters that should be applied by an NRA in an *ex ante* economic replicability test (a MST):

(a) Relevant downstream costs;

(b) Relevant cost standard;

(c) Relevant regulated wholesale inputs concerned and the relevant reference prices;

(d) Relevant retail products; and

(e) Relevant time period.

9.666 In addition to the above, Oxera (in Section 6.2 of the Oxera Part 3 Report) identifies that the following need also to be considered:

(a) The level of aggregation of the tests;

(b) The benchmark operator;

(c) Revenue; and

(d) Profitability approach.

9.667 Each of the above are now discussed in turn below.

The relevant downstream costs

9.668 The 2013 EC Recommendation defines downstream costs as "*…the costs of retail operations, including marketing, customer acquisition, billing, and other network costs, incurred in addition to those network costs already included in the wholesale access service*."[1327] The Recommendation goes on to recommend that such costs be estimated on the basis of the SMP SP's own downstream business (an Equally Efficient Operator or '**EEO**' test), noting that adjustments for scale to the SMP SP's downstream costs can be made in order to ensure that economic replicability is a realistic prospect.

9.669 In considering the relevant downstream costs that need to be included in the **FTTP MST**, ComReg notes that all relevant costs should be included so that all RSPs which purchase a wholesale access product from Eircom (i.e., FTTP VUA) can replicate the retail service provided by Eircom in the downstream market and earn a sufficient margin.

9.670 The downstream costs can be analysed under the following categories:

(a) Retail costs;

(b) Own network costs;

(c) Common costs;

(d) Promotional and discount costs; and

(e) Other costs.

<u>Retail Costs</u>

9.671 Retail costs are the costs incurred by the SMP SP and RSPs to provide a specific service in the retail (downstream) market (e.g., retail broadband, fixed voice (including wholesale costs of calls), mobile telephony and TV). BEREC Guidance indicates that most NRAs use the SMP SP's categorisations as they are audited and therefore are a reliable base for determining the appropriate breakdown of retail costs. The BEREC Guidance[1328] identifies that the retail cost categories NRAs generally include are:

(a) Customer acquisition and retention,

(b) Customer care,

(c) Marketing and advertising,

(d) Billing,

[1327] Definitions Section 6(f).

[1328] At Section 3.2.3.

(e) Sales personnel salary/Sales commission,

(f) Bad debt,

(g) CPE/Distribution of CPE,

(h) Product development/management, and

(i) Common costs.

9.672 As noted by BEREC, the relevant cost categories may depend on the specific retail offer, e.g., a bundle of retail products may include additional cost categories compared with a Standalone Retail FTTP Product.

<u>Own network costs</u>

9.673 An RSP may incur additional network costs (over the wholesale access charges, as discussed below) to enable it to provide a retail service in the downstream market. These would include, for example, co-location, backhaul and in-home costs (i.e., cost of broadband installation at customer premises), wholesale connection/migration costs, call out charges, and voice service costs (where relevant) that would be incurred when using the FTTP VUA wholesale input to provide a FTTP Retail Offering. As noted by Oxera (in Section 6.90 of the Oxera Part 3 Report) a *"failure to include such costs would risk leaving insufficient headroom for the access seekers to compete at the retail level…"*.

9.674 Accordingly, all relevant network costs needed by the Access Seeker to provide the retail service should be included in the FTTP MST. With regard to the source of such costs, Oxera (in Section 6.91 of the Oxera Part 3 Report) notes that the relevant costs may be obtained from Eircom's regulated accounts.

<u>Common costs</u>

9.675 ComReg regards common costs as costs incurred across the whole organisation regardless of the product or service, so that the cost cannot be directly attributed to a particular product or service e.g. general finance function costs, personnel and administration costs, general corporate services costs, CEO salary, regulatory licence fees, redundancy costs/cost of voluntary leaving programmes.

9.676 Similarly, ComReg considers that additional common costs may be associated with certain product-related cost categories, such as billing and sales and marketing costs which may not be incremental to a specific Eircom product/service. However, it would be necessary for Eircom to demonstrate why it considers such costs to be a common/ indirect cost rather than a direct cost on a case-by-case basis.

9.677 Equi-proportional mark-up ('**EPMU**') is generally the approach used to calculate the ratio of total common costs to total incremental costs. Using this method, costs are distributed across the costs of all relevant services using a percentage calculated as the ratio of total common costs to total service costs.

Promotional and Discount costs

9.678 The costs associated with retail promotions and retail discounts also need to be included in the FTTP MST. Acquisition and retention promotion/discount costs on retail offerings (standalone or bundled) should be recovered from the revenues generated by the associated retail offering over its lifetime (referred to here as the Average Customer Life or 'ACL'[1329]). Please see paragraphs 9.793 to 9.828 below for further discussion.

Other costs

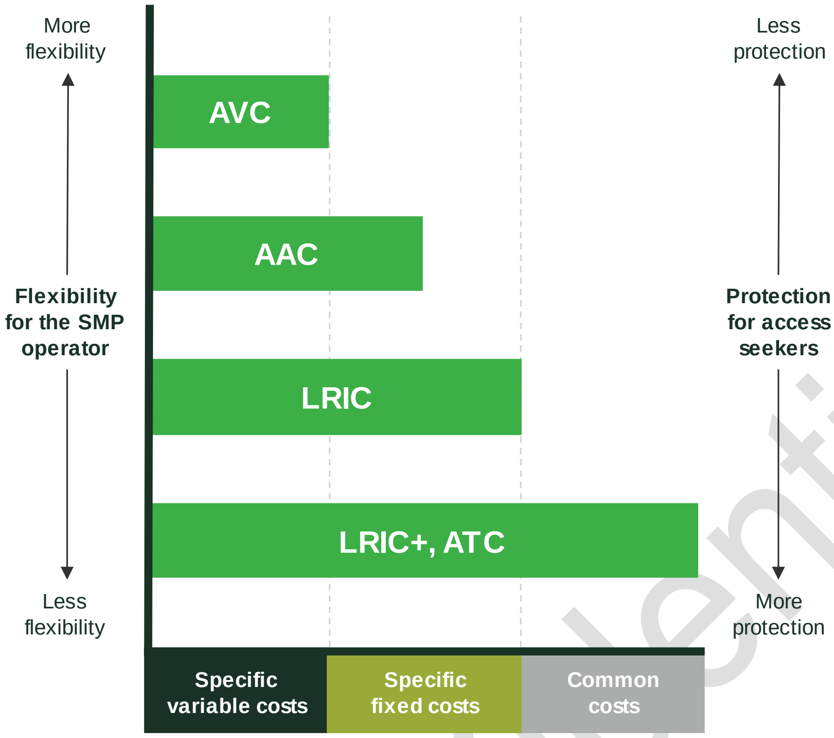
9.679 The costs of unregulated services (i.e. RFTS, mobile and TV) included in any bundle should also be included in the FTTP MST. As noted by Oxera (in Section 6.98 of the Oxera Part 3 Report), these unregulated services are deemed to be competitive since no SP has SMP, so the costs of these services should be included at the LRIC cost standard (discussed further at paragraphs 9.778 to 9.784 below).

The relevant cost standard

9.680 The cost standard refers to the approach used to measure the costs that are included in a MST to calculate the margin. As set out below, a range of cost standards may be adopted.

[1329] See section 'The relevant time period' below.

Figure 39: Cost Standard choice and the level of flexibility[1330]



(a) The **Average Variable Cost ('AVC') approach** measures the variable cost of producing an additional unit of output. AVC does not consider fixed costs. Fixed costs may, however, represent a significant cost component of the RSP costs that are relevant to the MST;

(b) The **Average Avoidable Cost ('AAC') approach** measures the costs that could be avoided if the firm concerned had not produced a discrete amount of extra output. It may include avoidable fixed cost elements in addition to variable costs, depending on the timescale over which AAC is assessed;

(c) A **Long Run Incremental Cost ('LRIC') approach** measures the costs that can be avoided in the long run if a given increment (e.g. fibre broadband) is not produced. It includes all fixed costs associated with the increment, as all costs are assumed to be variable in the long run;

1330 Oxera; European Commission (2009), 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings', 2009/C 45/02.

(d) A **'LRIC+' approach** comprises LRIC plus an allowance for the recovery of common costs (LRIC+ is a proxy for ATC/FAC) and allocates costs to a given increment (e.g. a product) based on whether such costs are directly caused by the provision of that increment in question. Top-down models can be used to calculate LRIC+; and

(e) An **Average Total Cost ('ATC') approach** is a Fully Allocated Cost ('**FAC**') approach which allocates all variable and fixed costs to the service, including common costs. ATC can be extracted directly from the regulatory accounts.

9.681 Oxera (as per Section 6.30 of the Oxera Part 3 Report) notes that consideration of the regulatory objectives is very important for this aspect of the MST and that the choice of cost standard will reflect the presence of competitive pressures.

9.682 As the **AVC** cost standard does not consider fixed costs, ComReg believes that applying a cost standard on this basis could significantly constrain the potential for entry by efficient entrants, and could lead to a medium to long term exit of SPs who cannot sustain an entry strategy that may, for example, not include recovery of their fixed costs. ComReg therefore considers that AVC would not be an appropriate measure of cost to be applied as it is too low a cost standard.

9.683 While the avoidable and incremental fixed costs of the additional sales of the product in question are included in an **AAC** approach, general fixed and overhead costs are excluded. ComReg believes that this may provide the SMP SP with an advantage, given the broad range of products and services over which it could conceivably recover such fixed and common costs. Entry/expansion by efficient OAOs, albeit with lower economies of scale and scope than Eircom, could therefore be impeded.

9.684 Furthermore, the level of sunk cost in Eircom's financial profile means that, in the short run, Eircom's cash outgoings may be lower than entrants paying monthly rentals to Eircom. Critically, ComReg believes that the decision to enter, and remain in, the market depends on the expectation that fixed and common costs will be recovered; not only additional avoidable costs incurred by the SMP SP. This is because an entrant would enter a market only if it considered that it would be profitable to do so, taking into account all the costs that it would have to incur in order to enter the market and sustain a competitive position i.e. the fixed, common, joint and variable costs. Cost measures such as AAC do not ensure this, as the total full costs of a SP are not covered.

9.685 While noting Oxera's comment (in Section 6.30 of the Oxera Part 3 Report) that the choice of AAC *"…ensures that the firm's profits are not reduced as a result of the sale of the increment incurring losses in the short run"*, ComReg considers that the application of an AAC cost standard in a MST context could lead to sub-optimal entry/expansion conditions. With little entry/expansion occurring, this would be to the detriment of competition and, in turn, consumers, which is not in line with ComReg's statutory objective to promote competition.

9.686 The **LRIC** approach is more consistent with that applied in competitive markets, where SPs make decisions on marginal retail offerings based on the avoidable costs of that retail offering. Since LRIC includes all costs (including costs that are not included in AAC, as they are fixed in the short run) related to the additional output it enables an analysis of incremental cost recovery and allows SPs to make an informed business decision on additional individual retail offerings.

9.687 SPC Network in its Submission[1331] agreed that LRIC does include fixed costs associated with the increment, it argued that ComReg’s definition neglects to state that the *“LRIC also includes all variable costs associated with cost blocks that span oth*er increments *in addition to the increment in question”.* ComReg disagrees, the only costs included in LRIC are those costs that are relevant to the increment in question. As noted by Oxera in paragraph 4.18 of the Oxera Updated Part 3 Report, costs that span other increments would, by definition, be categorised as common costs and would therefore be excluded from the LRIC. ComReg further notes that this does not mean that duct, fibre and backhaul/core equipment costs would almost all be excluded from the LRIC in a product-by-product MST. As noted in paragraph 4.22 of the Oxera Updated Part 3 Report these costs should be included in the downstream costs at LRIC if they are incremental to the provision of the retail FTTP product. In particular, other network costs are modelled in the MST on the basis that the RSP is purchasing wholesale inputs such as WEILs to backhaul traffic and, consequently, shared infrastructure costs, such as the costs of ducts and fibre cables, would already be factored into the price of the wholesale input and would, therefore, be included as part of the LRIC in the product-by-product assessment. ComReg’s intention is not so much, how SPC Network[1332] suggests, to provide Eircom with a relatively small degree of flexibility in the pricing of its FTTP retail services by allowing it to choose how and where to recover its broad overhead costs, but to afford Eircom flexibility over a reasonable share of common costs which is allocated to the FTTP portfolio not only those costs referred to as ‘overheads’ by SPC Network.

9.688 Oxera, in discussing LRIC (in Section 6.30 of the Oxera Part 3 Report) in the context of competitive implications, concludes that *“...adopting LRIC as the cost standard would ensure that equally efficient competitors cannot be foreclosed in the long run.”*

9.689 The **LRIC +** approach is regarded as a proxy for ATC/FAC. In addition to the LRIC cost, it includes a mark-up for common costs.

9.690 ComReg considers an **ATC/FAC** to be appropriate in circumstances where the promotion of efficient entry is a key *ex ante* regulatory objective. In areas where competition is more developed, NRAs may opt for LRIC, while in areas where competition is not mature or effective, NRAs may opt for ATC. LRIC generally provides a higher cost benchmark than AAC but, as inter-service common costs are not taken into account, provides a lower cost reference than ATC where multiple services are at issue.

[1331] SPC Network Non-confidential Submission, paragraph 186.

[1332] SPC Network Non-confidential Submission, paragraph 200.

9.691 An ATC approach requires an SMP SP to price at levels that include correct amounts of variable, fixed and common costs, which is the equation faced by any SP when deciding to enter or expand. For example, an SP will consider the current and future potential competitive environment (including price) when formulating its business plan when deciding to enter or expand in the market. Oxera in discussing the LRIC + approach (at Section 6.30 of its Part 3 Report) concludes that *"A LRIC + would ensure multi-product firms cannot be foreclosed across the portfolio of products in the long run",* and (at Section 6.33 of its Part 3 Report), notes that the NRA does not necessarily need to mandate the precise way in which these common costs are recovered across the range of products offered and concludes that the choice of cost standard will be dependent on the level of product aggregation in the MST.

9.692 Eircom[1333] in its Submission expressed concerns around the allocation of common costs, stating that there is no single correct mechanism for allocating common costs or establishing what a reasonable share is. Given allocation between products will largely be arbitrary, it suggested that an alternative way is to simply recognise that a positive margin above incremental cost is contributing to its common costs. ComReg does not agree and as noted by Oxera (in paragraph 4.40 of the Oxera Updated Part 3 Report) telecom operators are typically multi-product firms, so *"..the recovery of common costs is highly relevant."* It is therefore important that Eircom recover a reasonable share of its common costs across the portfolio of FTTP retail products. Failure to do so could create a margin squeeze leading to foreclosure of competitors as other RSP's would not be able to replicate the retail offers of Eircom due to the exclusion of such costs from the MST.

[1333] Eircom Non-confidential Submission p90, paragraphs 222-223.

9.693 Copenhagen Economics[1334] expressed concern as to why *" ...LRIC+ or average total costs (ATC) is required as the cost standard for bundled products."* While ComReg recognises that this (incorrect) interpretation may have been caused by the inclusion of ATC costs at the product level in Table 53 of the consultation, to clarify the LRIC+/ATC approach is required for the calculation of the margin for the portfolio of retail offers whereas the LRIC approach is required for the calculation of the margin for individual retail offers (sold on a standalone basis or in a bundle). ComReg is of the opinion that the LRIC+ standard is appropriate at the portfolio level given its objectives under Section 12 of the Communications Regulation Act 2012. While ComReg agrees with Copenhagen Economics[1335] that market share has already been achieved by Access Seekers, it does not agree that such market conditions *"..may not warrant a stringent ATC"*. To clarify, the role of ComReg is to promote sustainable competition and so the requirement to recover all costs (at the portfolio level) will ensure that Access Seekers can continue to replicate the portfolio of products by Eircom.

9.694 Given the 'product-by-product' tests and 'portfolio' tests (detailed in the section below entitled 'Level of aggregation of the Tests'), it is necessary to consider the appropriate cost standard that should be applied.

9.695 ComReg notes that the 2013 EC Recommendation, in relation to the economic replicability test states that:

> *"The incremental cost of providing the relevant downstream service is the appropriate standard. A LRIC + model should be used to calculate the incremental cost (including sunk costs) and to add a mark-up for common costs related to the downstream activities."*[1336]

9.696 While the 2013 EC Recommendation does not specify the aggregation level of the MSTs, ComReg believes that a LRIC+ or ATC approach (as in the 2018 Bundles Decision) is appropriate at the portfolio level, given its statutory objectives to promote entry, competition and protect the interests of end users. This approach ensures that all variable, fixed and common costs are covered.

[1334] Copenhagen Economics Non-confidential Submission, paragraph 4.64.

[1335] Copenhagen Economics Non-confidential Submission, paragraph 4.65.

[1336] Annex II (ii).

9.697 A lighter cost standard (LRIC) is applied for the calculation of downstream retail costs on a 'product-by-product' basis. For SPC Network[1337] using LRIC for the product-by-product tests is *"… counter to the 2013 EC Recommendation which states that LRIC+ should be used."* ComReg does not believe however that (and as noted by Oxera in paragraph 4.29 of the Oxera Updated Part 3 Report) the 2013 EC Recommendation explicitly recommends that the MST should be conducted using product-by-product tests based on the LRIC+ standard. The BEREC Guidance[1338] also notes that a margin squeeze can be conducted at different aggregation levels (e.g. product-by-product or aggregation of (a group) of products or both i.e. a combinatorial approach) and *"…it is appropriate for each NRA to decide what the appropriate level of aggregation should be when carrying out the margin squeeze test in the light of the assessment of competition problems identified in the market analysis."* Furthermore and as noted in Section 3.4.2 of the BEREC Guidance the majority of NRA's apply both a product-by-product and an aggregation of products approach and noted that *"…some NRAs use a lower cost standard when assessing the product-by-product than compared to that used in assessing the replicability of the aggregation of all products. This approach provides some pricing flexibility at the product level while ensuring that the overall "portfolio" is replicable."*

9.698 ComReg therefore considers that this approach is consistent with the EC Recommendation, the BEREC Guidance (its associated findings) and with that produced in competitive markets, where SPs make decisions on marginal retail offerings based on the avoidable costs of that retail offering. Since LRIC includes all costs related to additional outputs it enables an analysis of incremental cost recovery and allows SPs to make informed business decisions on that additional individual retail offering.

Relevant regulated wholesale inputs and the relevant reference prices

9.699 The 2013 EC Recommendation specifies that NRAs should identify *"…the most relevant regulated inputs used or expected to be used by access seekers at the NGA based wholesale layer…"*. Given that the FTTP MST is focused on ensuring that sufficient margins exist for RSPs purchasing FTTP VUA as an input to FTTP retail offerings, ComReg considers that the FTTP VUA wholesale product will be the wholesale input. Eircom will therefore be required to include in the FTTP MST the cost to an Access Seeker of buying the wholesale FTTP VUA access product. In considering how this cost should be determined, Oxera notes that (in Section 6.89 of its Part 3 Report):

[1337] SPC Network Non-confidential Submission, paragraph 141.

[1338] At paragraph 4.4.2.

> *"...the cost included in the test should be the wholesale input price published in Eircom's price list (or provided separately to ComReg as part of Eircom's regulatory obligations)."*

9.700 ComReg requires that the costs that should be included in the FTTP MST for the wholesale FTTP VUA product are those set out in the published Reference Offer of the SMP SP at the time the FTTP MST is being tested. This effectively requires Eircom to charge an equivalent wholesale input price to both its own downstream arm and Access Seekers. This equivalence is important to ensure the effectiveness of the FTTP MST and to ensure that the downstream retail services can be replicated by the RSP.

9.701 In identifying the relevant wholesale access cost to be included in the FTTP MST, the EC Recommendation notes that NRAs should also give due weight to the presence of volume discounts and/or long-term access pricing agreements between the SMP SP and Access Seekers. This would:

> *"...ensure the right balance in national circumstances between incentivising efficient and flexible pricing strategies at the wholesale level and at the same time ensuring a sufficient margin for access seekers to maintain sustainable competition…"* [1339]

9.702 As ComReg is relaxing the ban and may permit wholesale discounts and promotions on FTTP VUA once certain pre-conditions are met, consideration needs to be given to whether discounts should be included in the wholesale FTTP VUA cost (included in the FTTP MST), ComReg notes that there are advantages and disadvantages associated with each option (for Eircom, Access Seekers and customers), as summarised below.

Option 1 – Undiscounted Wholesale cost of FTTP VUA in MST

9.703 While the FTTP MST is simpler to operate for Eircom, as no discounts are accounted for, it will have a negative impact on short term retail prices and Eircom retail, as the costs included in the FTTP MST will be higher for any relevant FTTP retail offering. There would therefore be less scope for Eircom retail to offer promotions or discounts (due to a tightening of margins) in response to offers from RSPs who may be in receipt of a discount on the wholesale FTTP VUA product purchased from Eircom.

9.704 At the same time, smaller RSPs who may not be in a position to avail of discounts (due to insufficient volumes, for example) would be protected from competition from Eircom retail as the non-inclusion of wholesale discounts in the FTTP MST forces it to ensure that prices maintain margins.

[1339] See Annex II (iii).

9.705 Retail customers would not benefit from the omission of the discount, as the associated margin would be lower, leaving less scope for Eircom retail to offer promotions and discounts in compliance with the FTTP MST.

9.706 This approach, as noted by Oxera (in Section 6.94 of the Oxera Part 3 Report)

> *"..would take away Eircom's incentive to offer wholesale discounts as it would create a situation where it was rendered uncompetitive at the retail level. This would lead to the potential efficiency gains from discounts being foregone"*

Option 2 – Discounted wholesale cost of FTTP VUA in MST

9.707 The inclusion of discounts would mean that the calculation of the wholesale cost of FTTP VUA may be more complex, given that different Access Seekers may obtain different levels of discounts. As set out in Section 5 of the Oxera Part 1 Report, however, Eircom should not be able to access discounts that no other RSP can achieve. This is also consistent with the 2013 EC Recommendation, which notes that any volume discounts and/or long-term access pricing agreement discounts received by the downstream arm of the vertically-integrated SP should not exceed the highest volume discount offered to Access Seekers.[1340] Without this limitation in place, Eircom could, as noted by Oxera in Section 6.93 of the Oxera Part 3 Report, *"undermine the effectiveness of the MST if it were to offer its downstream arm lower wholesale prices than it offers to other access seekers, and thus were able to set retail prices that no access seeker could replicate".*

9.708 A study conducted by Visionary Analytics[1341] on behalf of the European Commission discussed the inclusion of long-term discounts or volume discounts in the wholesale input charge. It identified that the inclusion of wholesale discounts would imply a lower wholesale price for analysis, which means that some plans may pass the ERT (i.e., MST) that otherwise might fail (due to lower costs). This, Visionary Analytics noted, may lead to an inability of smaller alternative operators to replicate the offerings of the SMP SP and operate profitably. Visionary Analytics concluded that there is a need for a case-by-case analysis to determine the appropriate approach. It identified that, in circumstances where the discount structure is imposed by the NRA as a price control measure, or the market is such that most alternative operators achieve some level of wholesale discounts, it would be appropriate to reflect the discounts in the wholesale access charge used in the ERT or MST.

[1340] Recital 19.

[1341] Study on Regulatory Incentives for the Deployment of Very High Capacity Networks in the Context of the Revision of the Commission's Access Recommendations (the '**Visionary Analytics Study**') / VHCN_study_executive_summary_EN_2rPCtpelGkXn5jltVCGSy0pg_79466 (1).pdf

9.709 From the consumer perspective, the inclusion of any wholesale discount is regarded as pro-consumer as Eircom retail should be able to pass on this saving to its customers via promotions /discounts.

9.710 While noting that it would be simpler in most cases to base the FTTP MST on the non-discounted price of the wholesale access services, ComReg is of the view, in light of the above discussion and given the objective of the FTTP MST to promote sustainable competition and replicability of downstream operations, that all applicable wholesale input costs, based on Eircom's published price list (i.e., the reference offers) including any long-term or volume discounts, should be used in the FTTP MST. In line with the EC Recommendation requirement that discounts received by the downstream arm of the vertically-integrated SP should not exceed the highest volume discount offered to Access Seekers, the FTTP MST should be conducted using the discounted price paid by the retail (downstream) arm of Eircom. Oxera notes in Section 6.93 of the Oxera Part 3 Report that this approach *"…would be in line with the principles of the EEO test, under which the downstream arm of the incumbent is treated as though it were a separate company purchasing wholesale inputs on the same basis as competing downstream operators."* (see paragraphs 9.759 to 9.768 below for further discussion of efficiency levels).

9.711 In reaching this conclusion, ComReg also notes that the omission of such discounts would be inconsistent with the relaxation of the ban on wholesale promotions and discounts (as discussed in paragraphs 9.498 to 9.556 above) and would mean that one of the benefits of the relaxation of the ban, i.e. lower prices being passed on to end user, would not materialise.

The relevant retail products

9.712 Following on from ComReg's conclusion that an *ex ante* MST should be imposed for FTTP retail offerings, the next step is to consider whether this test should be applied to standalone FTTP retail products, to bundled FTTP retail products, or to both.

9.713 In circumstances where an RSP offers a standalone FTTP retail product at the retail level using FTTP VUA purchased from Eircom, there is a need for a FTTP MST to ensure that Eircom (which also offers a standalone FTTP broadband product in the downstream market) cannot create a squeeze leading to foreclosure of the RSPs and consumer harm (i.e. less choice, lower quality and potentially higher prices).

9.714 Similarly, if an RSP offers a bundled FTTP retail product with other (regulated or unregulated services such as RFTS, mobile and TV) using FTTP VUA, then, as noted by Oxera (in Section 6.8 of the Oxera Part 3 Report) *"…in the absence of a MST on bundled services, ComReg would have no way of determining whether the combination of FTTH VUA wholesale price offered by Eircom and Eircom's FTTH retail bundle prices would provide sufficient economic headroom for access seekers to offer bundled FTTH products at the retail level".*

9.715 While a large share of FTTP retail offerings are bundled products, a significant percentage of customers purchases standalone retail FTTP. Figure 40 below highlights that the split between SA and bundled FTTP retail products has remained fairly static since Q1 2021, with standalone plans accounting for **[✂** [redacted] **✂]** of all FTTP retail offerings (and bundled plans accounting for **[✂** [redacted] **✂]** of all FTTP retail offerings) in Q1 2023.

Figure 40: FTTP Distribution (Standalone v Bundled FTTP) Q1 2021- Q1 2023 [✂REDACTED✂][1342]

[redacted]

[1342] ComReg Quarterly Reports 2021-2023.

9.716 Given that FTTP is at an early stage of growth in the market, it is unclear how the importance of standalone and bundled FTTP retail products will evolve over the review period. In such circumstances, it is reasonable for ComReg to conclude that both standalone and bundled FTTP retail products should be included in the MSTs.

9.717 Oxera (at Section 6.1 of the Oxera Part 3 Report), notes that in addition to examining the popularity of standalone and bundled FTTP retail products, it is also necessary to consider the mix of such services across different SPs in the market. This, as explained by Oxera (in Section 6.11 of the Oxera Part 3 Report) can be *"informative in terms of assessing the competitive dynamics and the relative risk of Eircom seeking to engage in a margin squeeze on either type of product to undermine competition".*

9.718 An analysis of the FTTP services for Q1 2023 provided by the various SPs, as summarised in Figure 41 below highlights the importance of the standalone FTTP retail service to a number of operators.

Figure 41: Analysis of FTTP (Standalone/Bundled) by SP – Q1 2023 [✂REDACTED✂][1343]

[redacted]

[1343] ComReg Quarterly Report, Q1 2023.

9.719 Three SPs, Vodafone, Eircom and Sky account for **[✂** [redacted] **✂]** of total FTTP subscriber lines (standalone and bundled) market share in Q1 2023, Vodafone accounting for **[✂** [redacted] **✂]** subscriber lines, Eircom accounting for **[✂** [redacted] **✂]** subscriber lines and Sky accounting for **[✂** [redacted] **✂]** subscriber lines (of a total of **[✂** [redacted] **✂]**.

9.720 Of the **[✂** [redacted] **✂]** subscriber lines, **[✂** [redacted] **✂]** are standalone FTTP retail products and the remainder are bundled FTTP retail products (with RFTS and/or TV).

9.721 Of the **[✂** [redacted] **✂]** subscriber lines, **[✂** [redacted] **✂]** are standalone FTTP retail products and the remainder are bundled FTTP retail products (with RFTS, mobile and/or TV retail offerings).

9.722 Of the **[✂** [redacted] **✂]** subscriber lines, **[✂** [redacted] **✂]** are standalone FTTP retail products and the remainder are bundled FTTP retail products (with RFTS and/or TV retail offerings).

9.723 Of the remaining RSPs offering FTTP subscriber lines, a large percentage of FTTP subscribers purchase standalone FTTP retail products e.g. **[✂** [redacted] **✂]** of Digiweb subscribers; **[✂** [redacted] **✂]** of Pure Telecom subscribers; **[✂** [redacted] **✂]** of Magnet subscribers; **[✂** [redacted] **✂]** of Prepay Power subscribers and **[✂** [redacted] **✂]** of VMI subscribers. While a number of SPs have a large market share of standalone FTTP retail products compared with Eircom, ComReg considers that in order to ensure sustainable competition in downstream markets, it is important that SPs generate a sufficient margin on both standalone and bundled FTTP retail products, bearing in mind that broadband delivered as part of a bundle accounts for 73% of all retail broadband subscriptions, as set out above. The FTTP market is continuing to develop (with volumes surpassing FTTC in Q1 2023) and given it is unclear how it will evolve over the market review period, ComReg is of the view that both standalone and bundled FTTP retail products should be included in the FTTP MST.

9.724 The 2013 Recommendation noted that an NRA does not need to run a MST for each and every new retail offer but rather should assess the margin earned for the 'most relevant retail products', that is, for flagship products.

9.725 In determining which retail products/plans should be considered as flagship products, the EC[1344] stated that the NRA should consider current and forward-looking observations, particularly the relevance of the retail product/plan for current and future competition, which should include an assessment of:

[1344] Annex II (iv)

(a) retail market shares in terms of the volume and value of products and, where available, advertising expenditure;

(b) innovative variations of bundles, if they are likely to replace the flagship product; and

(c) whether there is a retail product/plan which may not be among the most relevant retail products/plans of the SMP SP but is attractive to other SPs who may focus on a certain niche, or lower quality retail products.

9.726 ComReg recognises that this is a departure from its approach under the 2018 Pricing Decisions, where all retail offerings (including all FTTP retail offerings) are included in one or more MSTs. Oxera at Section 6.23 of the Oxera Part 3 Report notes a concern that a flagship approach would exclude certain FTTP products (e.g. a standalone FTTP service or a FTTP service bundled with other unregulated services) which could leave these products/plans exposed to a risk of margin squeeze by Eircom leading to possible foreclosure of competitors (depending on the importance of the retail offering). Vodafone[1345] and SFG echoed the concerns of Oxera. Vodafone argued that the flagship approach *"creates space to cause a margin squeeze and gain unfair competitive advantage, particularly if new product releases are not subject to MST assessment".* Vodafone[1345] went on to question as to why *"any new offerings would be excluded"* as this in its view *"limits the effectiveness of the …test"*. ComReg is however of the opinion that its approach (detailed below) mitigates such concerns.

9.727 ComReg is of the opinion that applying a MST for every retail offerings including those with very low volumes, would be excessive and would generate a considerable burden for both Eircom and ComReg. SFG[1346] submitted that this was not an adequate reason not to maintain the FTTP MST for 100% of offers and expressed concerns that Eircom could target the 25% not included as flagships. As noted above, the flagship approach is consistent with the EC Recommendation and using flagship products ensure that it is those offers that are most relevant to the market and competition that are tested. As further detail below, what is a flagship product is not set in stone and what was not a flagship product may become one, thereby limiting the value of anti-competitive targeting. As set out in paragraph 9.732, ComReg may identify other FTTP retail offerings which may be regarded as flagship, e.g. a new FTTP retail offering which is expected to have a significant impact on the market.

[1345] Vodafone Non-confidential Submission, p.26.

[1346] SFG Non-confidential Submission, p.28-29.

9.728 In determining which of Eircom's FTTP retail offerings should be considered as 'flagship products', Eircom must identify the highest volume FTTP retail offerings, which together account for at least 75% of its total retail FTTP volumes. In addition, the flagship products must include the highest volume standalone FTTP retail offering and the highest volume bundled FTTP retail offering, if not identified as part of the 75%.

9.729 SFG[1347] was concerned that the flagship approach would allow a level of pricing freedom that would *"pose a significant risk to competition…especially where the wholesale pricing controls are equally lax"*. SPC Network[1348] emphasised the importance of understanding *"...the products that comprise the set of flagship products, how these will be selected, and how the set will be kept sufficiently relevant".* Eircom[1349] submitted that a 75% approach will bring within the test low/immaterial volumes and proposed instead that Eircom report on the *"top 10 most popular eir bundles and the most popular eir stand-alone broadband product, with a minimum threshold of 50% of the overall FTTH base".*

9.730 ComReg notes that the lowest volume bundle included in the 75% threshold accounts for **[✂** [redacted] **✂]** subscribers,[1350] which ComReg does not regard as low/ immaterial. In addition, ComReg understands that Eircom would not include at this time in a Top 10 bundles a 150 Mb FTTP broadband product accounting for **[✂** [redacted] **✂]** subscribers but would include as a standalone broadband product a 500 Mb FTTP broadband product with **[✂** [redacted] **✂]** subscribers and not a 150 Mb FTTP broadband product with higher volumes of **[✂** [redacted] **✂]** subscribers. In light of this, ComReg is concerned that Eircom's approach is arbitrary and create significant uncertainty. In contrast a Flagship approach whereby flagship products are defined by reference to volume is clearer and much more objective and will ensure that the most significant, volume-wise, of Eircom's retail FTTP offers are tested under the MST.

[1347] SFG Non-confidential Submission, p.28.

[1348] SPC Network Non-confidential Submission, paragraph 146.

[1349] Eircom Non-confidential Submission, paragraph 214.

[1350] At December 2022.

9.731 While it is true that there will be, by definition, a percentage of FTTP retail offers that will not be tested on an *ex ante* basis, no material benefit arising from testing 100% of retail offers would in ComReg's view outweigh the additional burden to Eircom. ComReg notes in this regard that flagship products will be reviewed on a quarterly basis with the submission by Eircom of its quarterly monitoring statements and modified monitoring statements (see paragraphs 9.865 to 9.868), which will identify any movements in volume and revenue on all FTTP retail offerings. This means that the most commercially attractive products should at all times be included in the FTTP MST assessments going forward (i.e. for current and subsequent quarters), allowing the MST to keep up with an evolving market (e.g. products with new speeds), consistent with the EC Recommendation that the flagships represent the 'most relevant retail products'.

9.732 In addition, as envisaged in the EC Recommendation, ComReg may identify other FTTP retail offerings which should be regarded as flagship products (and existing flagship products which should be excluded from any MST) if, for example:

(a) there has been a downward/upward trend in subscriber numbers e.g. switching of subscribers from lower speed (150/300 Mb) to higher speed (500 Mb+) FTTP broadband products/plans,

(b) a new FTTP retail product/plan is launched or launched with promotions and is expected to have a significant impact on the market, and

(c) an FTTP retail product/plan which is not a flagship but is nevertheless relevant to another SP.

9.733 In addition to the above, where complaints are received from RSPs regarding compliance with the MSTs of specific FTTP retail offerings (other than the Top 75% FTTP retail offerings and other offerings specifically identified for inclusion in MST), ComReg may request Eircom to demonstrate its compliance with the MST.

9.734 SPC Network[1351] noted that "*as long as the…safeguards are retained and seen by stakeholders to be adequately taken into account*", it supported the flagship approach. Eircom[1352] on the other hand noted that it "*fails to see why RSP's should have the option to request Eir demonstrate compliance for products that have few subscribers*" and finds this "…*wholly inappropriate, unnecessary and contrary to the concept of a flagship product*".[1353] It should be noted that it is not the number of subscribers on a retail offer that is relevant, but rather whether there are concerns with regard to the ability of the RSP to replicate the retail offer provided by Eircom. The EC Recommendation recognises the importance of making sure that a particular retail product, which may not be among the most relevant retail products of the SMP operator, is protected by the MST (for instance by being included amongst flagship products) where it is particularly attractive to alternative operators that may focus on a certain niche or lower quality retail products.

The relevant time period

9.735 According to the 2013 EC Recommendation, NRAs should identify an appropriate reference timeframe for the MST. The Recommendation identifies that the relevant period *"should be set in accordance with the estimated average customer lifetime"*.[1354]

9.736 The 2013 EC Recommendation (based on the multi-period profitability assessment, as set out in detail at paragraphs 9.788 to 9.792 below) goes on to clarify that this period of time is one over which the customer contributes to the recovery of:

(a) downstream costs that are annualised according to a depreciation method that is appropriate to the asset in question and the economic lifetime of the corresponding assets required for the retail operations (including network costs that are not included in the wholesale NGA access service), and

(b) other downstream costs that are normally not annualised (typically, subscriber acquisition costs) and which the SP incurs to gain customers and should seek to recover over the latter's average lifetime.

[1351] SPC Network Non-confidential Submission, paragraph 148.

[1352] Eircom Non-confidential Submission, paragraph 231.

[1353] Eircom Non-confidential Submission, paragraph 230.

[1354] Annex II (v).

9.737 The Recommendation also states that, when estimating the Average Customer Lifetime (‘**ACL**’), NRAs should recognise the different characteristic and competitive conditions in the provision of services over NGA networks compared to legacy copper networks which can impact the length of ACL.

9.738 Under the 2018 Bundles Decision, which noted that the 2013 EC Recommendation does not specify how the ACL is to be calculated and recognised the difficulty in determining the ACL for fibre-based services, the ACL was set at 42 months and used as the time period over which to amortise costs such as promotions/discounts, connection and acquisition costs etc. In the context of the MST, the ACL is the length of time a customer remains on a specific (standalone or bundled) retail offering, rather than how long a customer stays with a particular SP. For this Decision, the ACL is used to determine the net present values of the FTTP Flagship Products and for that purpose a period of 42 months continues to be appropriate. The ACL is based on industry data on the actual ACL of Eircom’s and other operators’ customers. Oxera at paragraph 4.89 of the Oxera Updated Part 3, agrees that using the ACL is the appropriate basis to allow Eircom recover its costs to ensure replicability as *“this will reflect the average customer based on the typical structure of prices charged in practice (which may include retention offers), and the fact that customers are free to switch providers after their minimum term.”*

9.739 While Eircom[1355] disagreed with the 42 month ACL on the basis that **[✂** [redacted] **✂]**, SPC Network[1356] on the other hand agreed that an ACL of 42 months is not an unreasonable time period to use for the MST although it should be kept under review during the market review period. NBI[1357] expressed concern as to how it compared with the ACL of 44 months generated by ComReg’s market research.

9.740 Eircom provided no data to support its claim **[✂** [redacted] **✂]** and ComReg notes that the ACL of 42 months refers to the average customer life on a bundle, not the average customer life with an operator. Some customers will have shorter customer lives whereas other customers will have longer customer lives, but on average a customer is assumed to stay on a bundle/retail offer for 42 months. Please see paragraphs 9.793 to 9.828 below for further discussion.

[1355] Eircom Confidential Submission, paragraph 220.

[1356] SPC Network Non-confidential Submission, paragraph 205.

[1357] NBI Non-confidential Submission, p.10.

9.741 As set out above, Oxera (in Section 6.2 of its Part 3 Report), identified that the **following additional parameters** need to be considered in designing a MST:

(a) The level of aggregation of the tests;

(b) The benchmark operator;

(c) Revenue; and

(d) Profitability approach.

9.742 These are now discussed in turn below.

Level of Aggregation of the Tests

9.743 While the 2013 EC Recommendation is silent on the level of aggregation when carrying out the MST, BEREC Guidance[1358] suggests that each NRA should determine what the appropriate level of aggregation should be in the light of the assessment of competition problems identified in the market analysis.

9.744 A MST can be conducted on a product-by-product (i.e. standalone and bundled) basis or on a group of products (i.e. portfolio) basis or a combination of both.

9.745 A product-by-product approach ensures that each bundle or standalone FTTP product does not generate a negative margin. A product-by-product approach may be appropriate in circumstances where it may not be realistic to require a new entrant to replicate all, or a large part, of Eircom's retail product mix or, at the extreme, its entire product portfolio. Oxera notes (in Section 6.37 – 6.38 of the Oxera Part 3 Report) that, while this approach will provide the SP with less flexibility, it may be suitable if an NRA considers it appropriate to ensure the economic replicability of every product offering.

9.746 A portfolio approach ensures that the portfolio/group of products does not generate a negative margin overall. This approach would, however, allow individual products to generate a negative margin. Oxera, (in Section 6.38 of the Oxera Part 3 Report) while noting that this approach may be appropriate where the SMP SP faces greater competition at the retail level, identifies that there is a concern that it provides too much flexibility for the SMP SP.

9.747 A combinatorial approach combines both the product-by-product test and the portfolio test. BEREC noted that the flexibility of this approach is determined by the parameters of the product-by-product approach and stated that:

[1358] Section 4.4.2.

> *"…some NRAs use a lower cost standard when assessing the product-by-product than compared to that used in assessing the replicability of the aggregation of all products. This approach provides some pricing flexibility at the product level while ensuring that the overall "portfolio" is replicable."*[1359]

9.748 Oxera (in Section 6.39 of the Oxera Part 3 Report) noted this and stated that "*…under a typical combinatorial approach, the LRIC cost standard is applied to the product-by-product tests, and the LRIC+/ATC cost standard is applied to the portfolio-level test*". This would therefore allow the SMP SP flexibility in the allocation of common costs across the products in different proportions, while limiting cross-subsidisation between products, as they must still cover their incremental costs.

9.749 The level of aggregation will be dependent on the level of competition in the market; the greater the competition, the greater the level of flexibility. Given the level of competition in the market for FTTP retail products (as set out in paragraph 9.718 above), a portfolio assessment may be sufficient. However, as noted above, take-up of FTTP retail products is at a very early stage and the relative importance of different FTTP products could therefore vary across the period of the market review. There is therefore a risk (as noted by Oxera, in Section 6.42 of the Oxera Part 3 Report) that providing Eircom with too much flexibility could allow it to engage in a margin squeeze on products that are important to competitive dynamics.

9.750 In light of the above, ComReg is of the opinion that a combinatorial approach should be applied, that is:

(a) Product-by-product tests (based on a LRIC cost standard), and

(b) Portfolio test (based on a LRIC+/ATC cost standard).

9.751 Under the flagship approach, all products that are included in the portfolio should receive an appropriate allocation of common costs. This should not be based solely on the costs that are common across the set of flagship products, but rather on Eircom's total common costs. As noted above, these common costs would typically be allocated to the relevant services based on an EPMU approach. Eircom[1360] sought clarification with regard to the above, stating that in its view there is *"no change from the 2018 Bundles Decision"*.

9.752 ComReg is not changing the treatment of common costs. Cost allocations per the Separated Accounts can continue to inform the categorisation of incremental and common costs inputting to the DCF/NPV model.

[1359] BEREC Guidance, p.25, paragraph 3.4.2.

[1360] Eircom Non-confidential Submission, paragraph 238.

9.753 With regard to the portfolio test ComReg considers whether there should be:

(a) Separate portfolio tests for standalone FTTP and for bundled FTTP products, or

(b) One portfolio (termed a ‘grand portfolio’ by Oxera) for all standalone FTTP and bundled FTTP products.

9.754 Oxera, (in Section 6.50 of the Oxera Part 3 Report) identified that a key factor in deciding which option to choose depends on whether there is a concern about cross-subsidisation between standalone and bundled FTTP products, if all FTTP products are included in one portfolio.

9.755 This, Oxera explained (in Section 6.51 of the Oxera Part 3 Report), could arise, for example, in the way in which common costs are allocated between SA and Bundled FTTP products, with more costs being allocated to higher margin SA FTTP products and less to lower margin Bundled FTTP products. So, while the FTTP MST at the portfolio level (based on ATC/LRIC+) is positive, the margin on Bundled FTTP products is low. If the focus of competition were on such Bundled FTTP products, Access Seekers would find it hard to replicate such a strategy and compete effectively with lower margin bundled products. In such circumstances separate portfolio tests (for SA FTTP products and Bundled FTTP products) may be more appropriate.

9.756 There is no evidence to suggest that there is an increasing trend in the share of one group of products over the other to justify the need for separate portfolio tests, or that this might change over the review period. In fact, Figure 40 above demonstrates that the share of standalone and bundled FTTP products has remained stable over the period.

9.757 In addition, as discussed by Oxera in Section 6.55 of the Oxera Part 3 Report, Eircom is earning positive margins on both standalone and bundled FTTP retail products – based on Eircom’s Quarterly Monitoring Reports at Q1 2023, the weighted average ATC margins were **[✂** [redacted] **✂]** for standalone and **[✂** [redacted] **✂]** for bundled FTTP retail products. While Eircom has the ability to cross-subsidise the recovery of common costs, based on the high positive margins for both types of product Eircom does not appear to have utilised this opportunity.

9.758 ComReg is therefore of the view that the one portfolio approach (combined with a product-by-product test) is appropriate as it provides a balance between the need to protect Access Seekers while allowing some flexibility for Eircom.

The Benchmark Operator

9.759 In designing a MST there is a need for ComReg to consider the choice of the level of efficiency of the alternative operator that will be used to calculate the downstream costs (as detailed above, and include retail costs and other network costs etc.) that are included in the MST. Three different approaches have been considered by ComReg:

(a) Equally efficient operator (‘**EEO**’),

(b) Similarly efficient operator (‘**SEO**’), and

(c) Reasonably efficient operator (‘**REO**’).

9.760 The **EEO approach** assumes that the alternative efficient operator has the same efficiency as the SMP SP (i.e., same scale and scope). The data of the SMP SP would therefore be used in the test.

9.761 The **SEO approach** (or an adjusted EEO approach) uses the EEO approach as a starting point but allows for adjustment of the SMP SP’s data. The adjustment could, for example, reflect differences in the scale and scope of an efficient alternative operator compared to the SMP SP. This may be due to OAOs serving fewer customers and/or offering fewer services, so that their unit retail costs may be higher than the SMP SP.

9.762 The **REO approach** is similar to the SEO standard given that both reflect the fact that OAOs have not achieved the same economies of scope and scale as the SMP SP. The main difference is the market share that is used in the test.

9.763 As noted by Oxera (in Section 6.64 of the Oxera Part 3 Report) *“…the choice of benchmark operator has implications for the degree of flexibility afforded to Eircom”*. In particular, moving from an EEO basis to an SEO basis means (due to lower economies of scale and scope of the efficient alternative operator compared to Eircom) that the estimated costs will be greater, so a larger margin will be available than is needed by Eircom to recover its own downstream costs.

9.764 The 2013 EC Recommendation[1361] recommends an EEO approach using the SMP SP’s audited downstream costs for *ex ante* replicability tests. It does, however, note that where market conditions do not favour the acquisition of scale by alternative operators, e.g., where market entry or expansion has been frustrated in the past, or where there is very low volumes of lines and limited geographic reach (compared to the SMP SP’s network), an EEO approach is not appropriate.

[1361] Annex II (i)

9.765 As noted by Oxera (in Section 6.67 of the Oxera Part 3 Report) there may also be justification for departing from an EEO approach when pursuing for instance the objective of promoting Access Seeker entry with smaller scale and lower efficiency at the retail level (and so ensure they generate sufficient margin).

9.766 Regulation 56(5) of the ECC Regulations provides that ComReg "*…shall ensure that any cost recovery mechanism or pricing methodology that it imposes under this Regulation serves to promote efficiency* ***and sustainable competition*** *and maximise consumer benefits*". ComReg has the objective to promote 'sustainable competition' to the benefit of end users without compromising efficient entry, and this means promoting new efficient entrants, rather than all entrants. An EEO benchmark would therefore be more in line with ComReg's objectives.

9.767 ComReg also notes the observations from Oxera regarding the appropriateness of an EEO (as set out in Section 6.70 of the Oxera Part 3 Report):

> *"Eircom is competing with well-established access seekers that are active in the retail market, are present across Ireland, and have material market shares which have been stable or increasing since the previous market review…. Many of these access seekers are offering a range of FTTH products … and therefore should also be benefiting from economies of scale and scope. The MST is not intended to protect inefficient entry by smaller operators. Given the efficiencies (i.e. economies of scale and scope) that access seekers are in a position to enjoy, the EEO cost benchmark is appropriate."*

9.768 Eircom[1362] in its Submission stated that it "*agrees with ComReg's proposed (continued) use of EEO*".

9.769 In light of the above, ComReg considers that an EEO approach should continue to be applied in the calculation of downstream costs for the *ex ante* MSTs for the relevant FTTP flagship products.

Revenue

9.770 The MSTs must include the effective revenues generated by the relevant retail products.

[1362] Eircom Non-confidential Submission, paragraph 226.

9.771 ComReg considers that the retail revenue which should be taken into account in the FTTP MST is the retail monthly price for the standalone or bundled FTTP retail product published by Eircom (net of VAT). In addition, any out of bundle revenue (e.g., charges associated with excess broadband usage) or associated revenues directly attributable to the FTTP retail offering (e.g., broadband connection/activation fees) should also be included if they can be replicated by other RSPs.

9.772 Discounts/promotions can be recognised as either a reduction in revenues or an increase in the downstream costs included in the FTTP MST.

9.773 As noted by Oxera (in Section 6.75 of the Oxera Part 3 Report), SPs can generate additional revenues over and above the retail price from the sale of out of bundle services. For example, a dual play bundle of RFTS and broadband could be sold with a cap on the number of calls and/or the amount of data. If the customer exceeds these caps, additional charges will be levied which will generate additional revenue for the operator. This revenue (and any associated costs) should be included in the FTTP MSTs. SPC Network[1363] in its Submission noted that OOB call revenue includes for example *"telephone calls that fall outside of any monthly "free" allowance, which currently would include all telephone calls made to mobile phones."* While ComReg agrees that OOB revenue includes *"(…) telephone calls that fall outside any monthly free allowance (…)"* it does not include all calls made to mobile phones. Eircom, for example offers an 'Anytime Landline plan' which covers local, national and Irish mobile calls together with select international landlines and mobiles. Under the plan only calls over 60 minutes are charged separately.

[1363] SPC Network Non-confidential Submission, p.54, paragraph 210.

9.774 SPC Network[1364] argued that OOB revenues (and costs) could significantly impact the outcome of the MST and questioned whether its inclusion in the MST is sending the right signals to the market. ComReg recognised that unlike the monthly retail price, there is uncertainty around the value of out of bundle ('**OOB**') revenues and there is therefore a need for the SP to estimate such. While ComReg sees no issue from an economic perspective with a bundle passing an MST when OOB revenues are included and failing when they are excluded, there is a need given the transparency concerns of SPC Network[1365] and as noted in paragraph 4.59 (of the Oxera Updated Part 3 Report) for Eircom to substantiate the OOB revenues included so as to ensure the integrity of the MST. While Oxera proposed that an average OOB be calculated based on for example the past 6 -12 months, ComReg having reviewed four reports (i.e. Q2 2022 – Q1 2023) has not identified any significant variation in average OOB revenue associated with call or broadband usage to justify the need for an average calculation. Average OOB call revenues ranging from a high of **[✂** [redacted] **✂]** to a low of **[✂** [redacted] **✂]** whereas average OOB broadband revenues ranging from a high of **[✂** [redacted] **✂]** to a low of **[✂** [redacted] **✂]** over the four reports examined. The out of bundle call and broadband data usage revenue should be traceable to data available in the most recently reported actual out of bundle call and data usage revenue (which is received every three months).On the other hand, a review of average OOB mobile revenues (i.e., the last four reports) identified peaks and troughs over the periods examined. An average OOB mobile revenue should therefore be traceable to the last two reports (which are received every six months). This will as noted by Oxera prevent a systematic over or under statement, given that the month used could be above or below the typical average.[1366]

9.775 SPC Network also expressed concern that customers on a bundle that generates OOB revenues could in effect subsidise customers on bundles that do not generate OOB revenues.[1367] However, as set out in paragraph 9.758, Eircom is required to conduct a product-by-product test and a portfolio test. A product-by-product test will ensure that bundles without any (or low) OOB revenues must individually pass the MST so there is no risk of cross-subsidisation.

[1364] SPC Network Non-confidential Submission, p.54, paragraph 211.

[1365] SPC Network Non-confidential Submission, p.54, paragraph 212.

[1366] Costs relevant to any of the OOB revenues should also be disclosed.

[1367] SPC Network Non-confidential Submission, p.54, paragraph 211.

9.776 The existing MSTs include revenues and costs for such services based on the most recent Quarterly Monitoring Report (see 'Monitoring Statement' below). If actual revenues and costs are significantly different, it will be evident in the next Quarterly Monitoring Report, and this would also identify if there is any risk to compliance with the FTTP MST for any product. If non-compliance with the FTTP MSTs is identified, Eircom would be required to remove the product offering, increase retail price and/or reduce wholesale input charge.

9.777 One-off revenues, such as the broadband connection/activation fees should also be included in the FTTP MSTs as a revenue item and in accordance with a DCF/NPV approach be allocated to the relevant period in which the revenue is generated. Under the existing MST, one-off revenues are distributed over the ACL.

Unregulated Services

9.778 ComReg recognises that, in addition to regulated services, unregulated services can also be sold as part of a bundle e.g., TV, mobile and RFTS. The BEREC Guidance, while recognising that the 2013 EC Recommendation is silent on the treatment of unregulated services included in a bundle, states that *"…, given the importance of bundles, they can represent a material proportion of downstream costs and therefore should be considered a relevant parameter in the margin squeeze test"*.[1368]

9.779 BEREC, in its response[1369] to the consultation on the revision of the EC's Access Recommendation, noted that, sometimes, information on the non-regulated components included in a bundle is essential to determine whether a broadband bundle is replicable and to identify (unfair) cross-subsidies between regulated and non-regulated services or other anticompetitive practices affecting the regulated service. Given the reluctance of some SMP SPs to provide solid information on the non-regulated component of bundles, including arguing that they are not obliged to do so, BEREC:

> *"….would welcome the Commission to provide explicit support for the gathering of information (especially the information related to the costs of the non-regulated components) ….. as this is essential to carry out the replicability analysis of broadband bundles."*

[1368] BEREC Guidance, paragraph 2.2.5.2.

[1369] BEREC Response to the Targeted consultation on the revision of the Commission's access recommendations / BoR (20) 169 p. 20-21.

9.780 ComReg also notes the comments made in Visionary Analytics Study[1370] that the successor access recommendation should clarify that information needed to allocate the price of a flagship retail bundle across regulated elements and any non-regulated elements of the retail bundle for purposes of the ERT constitutes *"information, necessary for national regulatory authorities, other competent authorities and BEREC to ensure conformity with the provisions of…"* the EECC, and thus falls within the scope of Article 20(1) EECC. It goes on to clarify that the SMP SP must respond to these information requests, even where they involve non-regulated services.

9.781 While recognising that Eircom has provided cost models for unregulated services (i.e., mobile and TV) to support the margin squeeze assessment of relevant retail offerings which include one or more of such unregulated services, ComReg may ask for more evidence relating to assumptions used by Eircom to derive non-regulated costs/revenues, where relevant.

9.782 The 2018 Bundles Decision set out that LRIC was the most appropriate cost standard, given that the unregulated services represent markets where competition has evolved sufficiently that an approach similar to competition law was warranted.

9.783 As regards the issue of cross-subsidisation within a bundle, the 2018 Bundles Decision set out that cross-subsidisation is allowed within a bundle between regulated and unregulated services. ComReg determined that, once the bundle covers or exceeds the LRIC cost of the bundle with or without unregulated services included, the bundle-by-bundle MST would be satisfied.

9.784 The position regarding unregulated services, as outlined above and set out in detail in the 2018 Bundles Decision, continues to apply, i.e. costs at LRIC and the headline price for the bundle including unregulated services (plus other add-on and out of plan revenues separately disclosed).

Profitability approach

9.785 The profitability approach refers to the way in which the MSTs will be conducted, i.e. a period-by-period approach or a multiple period approach.

9.786 A **period-by-period approach** compares actual revenues and costs as they arise for separate periods e.g., a specific month or year (generally obtained from the most recent accounts of the SMP SP). Non-recurring costs, such as broadband connection costs will be included in the period when the cost is incurred regardless of whether such costs are relevant to several periods. Under this approach, the test is performed when a new product or promotion/discount offer is launched.

[1370] p.17.

9.787 The BEREC Guidance[1371] notes that the main advantage of a period-by-period approach is that it is based on actual data which means the reliance on forecasts and assumptions is limited, and that it shows whether or not the SMP SP's offerings have been profitable in the short run. One drawback identified by BEREC is that, irrespective of the development stage of the market, it does not discount cash flows in future periods and so does not take into account the time value of money. Costs such as subscriber acquisition costs are typically allocated on a straight line basis over the life of the customer. This, it says, can lead to distortions where profitability is being assessed in fast growing markets as larger costs are allocated to initial years rather than later years due to lower subscriber volumes in earlier years and the failure of this option to consider the time value of money. There is also a concern around the lack of transparency if customers leave a bundle (but stay with the SMP SP) as it is no longer contributing to the recovery of the promotional costs on the original standalone/bundled product. While the 2018 Bundles Decision set out specific post-launch monitoring requirements to ensure ongoing compliance with the MSTs, ComReg is of the opinion that a multi-period/DCF approach would be able to capture such movements and ensure that the bundle recovers all relevant costs.

9.788 A multi-period approach using a discounted cash flow ('**DCF**') calculates the Net Present Value over a period of time usually the ACL. Unlike the period-by-period approach, a **DCF approach** discounts the expected or forecasted future cashflows of a relevant retail offering (i.e. a FTTP flagship product) to present day terms, to derive a Net Present Value ('**NPV**'), being future revenues less costs. The time value of money, as recommended by Oxera (in Section 6.83 of the Oxera Part 3 Report), can be achieved by the use of an appropriate discount factor equal to Eircom's WACC. This, as identified by Oxera, will ensure that Eircom can earn a reasonable rate of economic return. While a DCF approach allows a negative margin in any period, the overall NPV (over the ACL) must be positive when all the cashflows over the ACL have been aggregated for the FTTP flagship product to pass the MST.

[1371] At p.23 thereof.

9.789 The 2013 EC Recommendation[1372] recommends that NRAs should evaluate the profitability of the flagship products on the basis of a dynamic multi-period analysis, such as the DCF approach, and that NRAs should identify an adequate reference time period in accordance with the estimated ACL. As set out in the Oxera Updated Part 3 Report,[1373] the DCF profitability approach uses a forecast of the stream of revenues and costs of supplying the retail product in each month over the duration of the ACL. From this, the total margin should be estimated across the ACL[1374] in NPV terms, to reflect the time value of money. This differs from the accounting DCF approach, which is based on actual flows of cash, in terms of costs and revenues. We refer to our approach as DCF/NPV in the remainder of this report. This approach, as discussed by Oxera in Section 6.83 of the Oxera Part 3 Report, will ensure that a sufficient margin can be generated across the average lifetime of a customer. As explained by Oxera, if a period different to the ACL is used, it may allow a margin that is larger or smaller than is necessary to ensure economic replicability.

9.790 The BEREC Guidance[1375], in discussing the DCF approach, notes that its main advantage is that it recognises changes in unit costs and revenues (i.e., profitability) over an appropriate period of time. This, as identified by Oxera (in Section 6.80 of the Oxera Part 3 Report), could arise due to introductory discounts and promotions or other acquisition costs. BEREC explains that the DCF approach can be useful in assessing profitability in growing markets where it is considered reasonable for a firm to set prices that do not cover the full costs of serving early customers, but which would be economically sustainable over the longer term as cost reductions materialise. On the other hand, it notes that a potential drawback of the DCF approach is that it requires forecasts and assumptions, the primary source of which is the SMP SP. In addition (and as noted above), the DCF/NPV approach allows the SMP SP to incur losses in earlier years (which would be recovered in later years), which competitors may not be able to absorb and may lead to foreclosure. The NPV must not, however, be negative over the entire period under review for it to pass the FTTP MST.

[1372] Annex II (v)

[1373] See footnote 88.

[1374] See section entitled 'The relevant time period' above for further discussion of ACL.

[1375] p.23.

9.791 Eircom, under the 2018 Pricing Decision and the 2018 Bundles Decision, must demonstrate compliance with the MSTs for the relevant retail products on a period-by-period basis, with revenues and costs being obtained from Eircom's annual Regulatory Accounts and Quarterly Monitoring Statements. While this approach does spread non-recurring costs e.g., acquisition, broadband connections and promotional costs over the ACL on a straight-line basis, it does not recognise the time value of money (i.e., by discounting). ComReg notes the concerns of Oxera (in Section 6.82 of the Oxera Part 3 Report) that an approach which does not reflect the time value of money could be more favourable to the SMP SP in the presence of introductory promotions and discounts as it fails to recognise that earlier revenues and costs should receive a greater weight than revenues and costs incurred later in the ACL due to the time value of money. This means that the lower revenues (and lower margin) due to, for example, an introductory promotion or discount should receive greater weight under a DCF approach than a test without discounting.

9.792 In light of the above discussion and the 2013 EC Recommendation, ComReg requires Eircom to use a DCF/NPV approach to demonstrate that the flagship FTTP products (as detailed above and other FTTP products as detailed in paragraph 9.732 and 9.733) are compliant with the *ex ante* MST (e.g. in advance of proposed launch of new products, promotions and discounts).

Details of the FTTP MST Model

9.793 The tables below (i.e. Table 80: and Table 81) set out the revenues and costs to be included in the DCF/NPV Model to demonstrate compliance with the MSTs for the FTTP flagship products (product and portfolio tests). The revenues and costs listed are forecasted over the ACL, i.e., 42 months and Eircom is required to pass the MST for each Flagship FTTP retail offer on a LRIC basis and on an ATC basis at the portfolio level ensuring that each Flagship FTTP retail offer can be replicated by other SP's.

9.794 In the Consultation ComReg indicated that it would hold a workshop with Eircom to discuss and finalise the DCF Model which would be used to implement the MST for both the product and portfolio tests. Following submission by Eircom of a draft Excel-based DCF Model, a workshop was held on 30 May 2023 where Eircom explained the mechanics of its proposed Model ('the **Eircom Draft DCF model**'), including Eircom's proposed FTTP Flagship retail offers included in the model, the basis of calculation of revenues and costs (including for unregulated services e.g., mobile and TV), wholesale and other network costs (that should be included) and the treatment of promotional offers, namely acquisition and retention costs.[1376]

9.795 Insofar as the treatment of acquisition and retention promotion costs is concerned, Eircom applied an approach to model these costs in period 1 of its draft DCF model that is similar to the approach that has been used under the period-by-period approach under the 2018 Bundles Decision, whereby the average cost of promotions is calculated using the entire customer base that is active in a base month (on the relevant retail offer(s)) and not just the customer base that the promotion is available to.

9.796 ComReg discusses Eircom's approach in more detail in paragraphs 9.811 to 9.828 but notes here that it considers that Eircom's approach to modelling promotions in the Eircom Draft DCF model does not test fully whether Eircom's offers are replicable. ComReg notes in this regard that the matter of the treatment of acquisition and retention promotion costs was raised by several Respondents in their Submissions.

[1376] In its Submission (SPC Network Non-confidential Submission, paragraphs 149-150), SPC Network questioned the lack of transparency and highlighted the visibility other stakeholders should have as to *"...how the model functions and has been populated"* and stated that these issues would have to be addressed if *"other stakeholders are to have any real level of confidence in the model outputs and subsequent decisions made".* SPC Network proposed that transparency could be improved through the provision by Eircom of additional reports, operating manual, dummy model and audits conducted by ComReg. ComReg notes that the *ex ante* and *ex post* assessments detailed in paragraph 9.852 to 9.864 below includes a detailed internal review of Eircom's calculations and assumptions. ComReg is satisfied that the further detailed reporting suggested by SPC Network is not justified or necessary to provide stakeholders with the confidence that Eircom's retail offers are replicable by other SP's.

9.797 Vodafone agreed with the need for an *ex ante* MST for FTTP retail offerings noting that it raised concern previously with ComReg around the "*adequacy of the MST and the inability to replicate the Eircom retail offering*".[1377] SPC Network while recognising that Eircom's basic broadband offers are either on a 12 or 24 months minimum term contracts, questioned how retention offers should be dealt with in the MST, in particular *"..what retail price should be included in the MST from the end of the minimum term up to the end of the ACL".*[1378] It noted that customers could either revert to the full retail price of the retail offer or could re-contract at a lower discounted price and which *"could easily result in a different MST outcome"*. SPC Network also noted Eircom's intention to impose annual price rises of inflation +3% in April of each year. It highlighted that depending on the time when a customer joins Eircom, the NPV could be very different. NBI highlighted that the period for which retention offers are allowed seems unclear.[1379]

9.798 It is ComReg's view that as noted by Oxera (in paragraph 4.72 of the Oxera Updated Part 3 Report), in assessing the NPV of an FTTP Flagship retail offer, all promotional costs, in respect both of acquisition and retention activities, should be included, and recovered from the revenues generated by the associated retail offering over the ACL. Planned price increases will be reflected in the forecast revenues. For example, if a price increase is planned to be introduced in 12 months, then this increase would be factored into the DCF/NPV calculations in the MST by applying the price increase to the forecast revenues for all months from month 12 onwards in the ACL. The levels of promotions and discounts can also be forecast to change over the course of the ACL.

[1377] Vodafone Non-confidential Submission, p.25.

[1378] SPC Network Non-confidential Submission, paragraph 205.

[1379] NBI Non-confidential Submission, p.10.

9.799 An acquisition promotion may have a 12 month or 24 month duration (for example) and after that acquisition contract has expired one or more retention promotions can be offered for 6 months, 12 months etc depending on the acquisition and retention promotions that are available on the retail offer at that time. Given the levels of competition to win over new customers, the average level of acquisition promotions would generally be significantly higher than the average levels of retention promotions. In light of these costs and other once off connection costs (for example), the margin would likely be low, possibly negative in the early months of the customer life but would be positive in the later part of the customer ACL. All that is necessary to ensure replicability of the retail offer by other SP's is that the NPV of all margins over the ACL should not be negative.

9.800 A key objective of a MST is to ensure that competitors can replicate Eircom's current flagship retail offers and contest for those customers that are available to sign-up to these retail offers at the point in time when the DCF/NPV analysis is being conducted.

9.801 In this regard, a key advantage of the DCF/NPV approach over the period-by-period approach is that it allows consideration of how costs and revenues evolve as the customer progresses over the ACL. Under a properly implemented DCF/NPV approach revenues and costs that are relevant to a newly acquired customer are modelled as occurring in the early months of the ACL whereas the revenues and costs that are relevant at the later stages of the ACL are modelled in the later months of the ACL. For example, costs that are incurred by the RSP on acquiring a customer (such as acquisition promotions/discounts or on-site remediation costs incurred by the RSP) would be modelled in the early months of the ACL (i.e. when incurred) alongside any revenues associated with once-off retail connection charges. Similarly, revenues and costs that arise later in the customer life (such as retention promotions/discounts) are only modelled in the later months.

9.802 This means that the FTTP MST needs to reflect the average acquisition discount or promotion costs that are availed of by customers that are first subscribing to the retail offering during the acquisition phase, while the post-acquisition phase needs to reflect the average retention discount or promotion costs for those customers that are expected to remain active on the retail offer for the period after the initial acquisition contract (until the end of the ACL). This also means that the average acquisition promotion/discount cost can only be derived with reference to the number of new customers on the retail offering that are in a position to avail of acquisition promotion/discounts. The average retention discount cost can only be derived with reference to the number of active post-acquisition customers on the retail offering as once a customer ceases it can no longer generate monthly revenues or costs for a retail offer.

9.803 Typically, all retail customers are first acquired on the basis of an acquisition promotion or discount applying to a retail offering. Normally a sub-set of customers will subsequently avail of a retention promotion or discount; others will transition to pay the full undiscounted price when their acquisition promotion or discount expires. For example, for a retail offering where all customers initially subscribe to a contract with an acquisition discount of €30 per month, but then only 50% of customers who resubscribe do so on the basis of a retention discount of €20 per month with the other 50% transitioning to pay the full undiscounted price, the average cost of acquisition discounts is €30 per month while the average cost of retention discounts is €10 per month.

9.804 Oxera at Table 4.2 of the Oxera Updated Part 3 Report provided an example of the treatment of acquisition and retention promotional costs under the product- by-product test – see extract below.

Table 78: Stylised example of the treatment of acquisition and retention costs under the product-by-product test[1380]

	Initial contract term Month 1 – 24	Forecast retention period Month 25 – 36	Remaining months in ACL Month 37 – 42
Headline price	€61.78	€61.78	€61.78
(Average) acquisition discount	€29.27	-	-
(Average) forecast retention promotion	-	€10.00	€10.00
Cost (wholesale price + downstream costs at LRIC)	€35.00	€35.00	€35.00
Monthly margin	-€2.49	€16.78	€16.78

9.805 This simplified example (net of VAT) as presented by Oxera (and is on a per average customer basis).

9.806 It assumes the following:

(a) Headline Price of €75.99 (inc. VAT) / €61.78 (net of VAT);

(b) Initial contract duration of 24 months;

[1380] Source: Oxera analysis.

(c) Discounted Headline Price €39.99 (inc. VAT) / €32.51 (net of VAT) for initial 24 months;

(d) Acquisition Promotion of €29.27 (i.e. €61.78 - €32.51) – assume 100% take-up;

(e) Wholesale and retail costs of €35.00 (at LRIC); and

(f) Retention promotion of €20 (net of VAT) for 12 months – assume 50% take-up = €10.

9.807 In this example an average customer will pay €32.51 net of VAT (i.e. Headline price of €61.78 less discount of €29.27) for months 1-24. After this period, the contract will expire. The customer may decide to recontract, and if there are no retention discounts available, the price of the retail offer will revert to the full headline price i.e. €61.78 net of VAT. If however Eircom decides to offer a retention promotion of €20 net of VAT for 12 months which is availed of by 50% of such customers, the average customer will receive a weighted average discount of €10 between months 25 and 36 (paying €51.78 net of VAT for this retail offer on average). This means that after the initial contract term, the price may not necessarily revert to the full headline price or 'double'[1381] as customers may avail of a retention offer for a further fixed term.

9.808 After the initial retention period, the relevant customer can be offered a further retention discount (if available) or the price of the retail offer can revert to the full undiscounted price (i.e. €61.78 net of VAT). As this example assumes that the same retention offer on the same terms is taken up by the same proportion of customers, the same weighted average retention cost of €10 is applied for the remainder of the ACL (i.e. months 37-42) and the customer pays €51.78 net of VAT for this retail offer on average. Oxera notes that while the present value (PV) of the margin is negative in the initial contract period, the NPV over the ACL is positive at €208.16 (across the 42-month ACL) and so the retail offer would pass the MST.

[1381] Vodafone Non–confidential submission p. 26 paragraph 2. Vodafone in its submission expressed concern with the 42 month ACL stating that based on *"its real wholesale cost an Access Seeker, could not risk competing at negative margins, on an economic assumption that the customer is likely to stay for 42 months, even when the price of their service doubles and the customer is free to move when that price increase takes effect"* and it suggested that the MST should be adapted *"to take account that a sufficient gap must exist between retail and wholesale prices to allow Access Seekers to compete in the downstream market at the point when a competitive response is required".*

9.809 This is a simplified example as to how acquisition and retention promotions would be treated. In practice a retail offer could have a number of acquisition and retention promotions, with different terms and discount values and as noted by Oxera (in paragraph 4.83 of the Oxera Updated Part 3 Report) in relation to retention promotions *"…the principle remains that the (weighted) average value of retention promotions should be taken to enable the estimation of the NPV margin of the average customer".*[1382]

9.810 Given this example, Oxera (paragraph 4.85 of the Oxera Updated Part 3 Report) disagreed with Vodafone's characterisation of the DCF approach in particular that a margin must exist *"...at the point when a competitive response is required"*. Oxera clarified that while a DCF approach allows the margin to be negative in a given sub-period (reflecting more intensive price competition in the form of promotions and discounts) for new customers in the early months of the ACL, "*The DCF Approach ensures that the overall margin of a retail product is positive when all the costs and revenues are assessed across the ACL"*.[1383] This, as noted by Oxera, could be achieved by higher prices later in the ACL.

9.811 Eircom in a letter of 18 September 2023[1384] following written engagement with ComReg after the workshop held on 30 May 2023, outlined its understanding of the DCF/NPV approach that was proposed in the 2023 Consultation as follows:

> *"The DCF/NPV approach involves calculating the margin for each bundle using forecasts of revenues and costs for those customers purchasing the product at the point when the NPV analysis is conducted. The forecasts cover the average customer lifetime (ACL) for customers in the cohort. The forecast cashflows are converted into a margin NPV using eir's regulatory WACC."*[1385]

[1382] Footnote 98 and 102 of the Oxera Updated Part 3 Report also refers to weighted average acquisition promotions/ discounts.

[1383] Paragraph 4.86 of the Oxera Updated Part 3 Report.

[1384] Eircom Letter, 18 September 2023 see submissions received to the consultation document.

[1385] Eircom Letter, 18 September 2023, page 3.

9.812 Eircom further elaborated that "…*the use of financial forecasts is central to the DCF approach. These forecasts capture the costs and revenues for those customers from the cohort purchasing the bundle at the point the NPV analysis is conducted, and are forecast over those customers' ACL… By forecasting costs and revenues over the ACL, the DCF approach covers the entire typical customer journey for each bundle. This includes customers benefitting from acquisition discounts at the beginning of their customer life, and then moving to any retention offers later in their customer life*."[1386]

9.813 ComReg agrees that this is an accurate summation of what the DCF/NPV approach does; ComReg however notes that the Eircom Draft DCF model that Eircom shared with ComReg is not consistent with this understanding. In particular, Eircom modelled the customer receiving both acquisition and retention discounts in month 1 of the ACL, even though it accepted that *"…in reality, customers will not benefit from retention discounts from the beginning of their customer life. In practice, typically any retention discounts would start at the end of the initial minimum term (i.e. at the end of acquisition discounts). Based on the current acquisition promotions, this means retention promotions, where available, would start after 12 or 24 months."*[1387]

9.814 Eircom argued that its "*assumption that all retention promotions start at the beginning of the customer life is a reasonable simplification given the complexity of modelling the full set of combinations of acquisition and retention promotions currently available*", and that its proposed approach *"… is based on a snapshot in a single period of time, it does not provide information on where the underlying customers are in their customer lifetime. It therefore does not provide us with information to map average discounts to specific months in the ACL."*[1388]

9.815 However, modelling retention discounts in month 1 of the ACL is clearly not consistent with the use of financial forecasts that Eircom accepts is central to the DCF/NPV approach. Furthermore, ComReg does not agree that modelling the average level of acquisition discount and retention discount that a customer would be expected to receive over the course of the ACL is as complex as Eircom suggests.

[1386] Ibid, page 4.

[1387] Ibid, p. 5.

[1388] Ibid, p 5-6.

9.816 The fact that the DCF/NPV approach is based on forecasts means the level of promotions and discounts that is modelled for each month of the ACL will have to reflect the typical customer journey for the average customer on the retail offer. As noted in paragraph 9.802, this has to recognise that all customers start by benefitting from acquisition discounts at the beginning of their customer life, before being in a position to benefit from retention discounts later in their customer life. Therefore, the customer journey can be considered as comprising of at least two distinct phases in respect of promotions and discounts:

(a) An acquisition phase where the average customer is modelled as benefiting from an acquisition discount; and

(b) A post-acquisition phase where the average customer is modelled as benefiting from a retention discount.

9.817 As outlined in paragraph 9.803, the modelled level of acquisition discounts in the acquisition phase of the ACL needs to reflect the average discounts that are availed of by customers that are first subscribing to the retail offer, while the post-acquisition phase needs to reflect the average retention discount costs for those customers that are expected to remain active on the retail offer for the period after the initial acquisition contract.[1389]

9.818 The length of the acquisition phase can be informed by the different contract lengths that new customers are expected to subscribe to. For example, if 66.7% of customers who subscribe are expected to enter into a 24 month contract and 33.3% to a 12 month contract, then the length of the acquisition phase can be modelled to include the recurring average acquisition discount cost for the first 20 months of the ACL on the basis of the weighted average of 24 month and 12 month subscriptions. The residual 22 months of the ACL would then be modelled to allocate the month-by-month average retention discount cost.

[1389] The forecasted acquisition and retention promotion costs being based on the observed level and take-up of such promotions to derive the 'average' acquisition and retention promotions costs.

9.819 Such an approach to modelling discounts is consistent with the key attributes of the DCF/NPV approach that Eircom identifies in its letter. Specifically, the DCF/NPV approach "*does not treat cohorts of 'acquisition customers' and 'retention customers' as separate groups of customers to be considered separately*". Rather, it models "*customers benefitting from acquisition discounts at the beginning of their customer life, and then moving to any retention offers later in their customer life*" and "*considers these different phases in the customer life within an overall customer journey assessment*".[1390] It also is consistent with the assumption *"that the cohort of customers purchasing the bundle when the NPV is conducted remain on the same bundle over their customer lifetime."*[1391]

9.820 However, this is not the case with the approach that Eircom adopted to derive the average discount costs applicable to the early months of the ACL in its draft model, which it summarises as follows:

> "*Our approach takes data on the incidence of each type of discount across the entire base in month zero (split by bundle) to estimate the expected value of each type of promotion. By basing the calculation on the base as a whole (not just new customers), it reflects customers at different points in their customer life, and therefore, the full range of discounts an average customer would expect to receive over their ACL. It also captures that some customers will pay full price for at least part of their customer life*."[1392]

9.821 However, contrary to Eircom's contention that this approach would "*ensure that the modelling further errs on the side of understating the margin*",[1393] it in fact tends to underestimate the cost when compared to the average costs of discounts that are currently available to new customers to sign-up to the offer. As such, it does not ensure that the purpose of the DCF MST is met, which Eircom notes *"is to ensure that competitors can replicate eir's current offers and contest customers available to sign-up to bundles at the point in time when the NPV analysis is conducted."*[1394]

9.822 This can be demonstrated by reference to the following example:

[1390] Ibid, page 4.

[1391] Ibid, page 9.

[1392] Ibid, page 6.

[1393] Ibid, page 7.

[1394] Ibid, page 8.

Table 79: Active customers in Sample Month

Category	Customer Numbers	Average Discount	Monthly Cost
	#	EURO	EURO
Acquisition base	*10,000*	*€30.00*	*€300,000*
Post-Acquisition base			
Retention Discount	5,000	€20.00	€100,000
No discount	5,000	-	-
Subtotal Post-Acquisition Base	*10,000*	*€10.00*	*€100,000*
Entire Base	**20,000**	**€20.00**	**€400,000**

9.823 In the example, we assume that there are 20,000 customers on the bundle, 10,000 of which are still subscribed to an acquisition discount at an average cost of €30 a month, a further 5,000 that are active on a retention contract at an average cost of €20 a month with the remaining 5,000 having transitioned to pay the full undiscounted price. Under ComReg's approach the average acquisition cost per month is estimated to be €30 and this would apply for all months in the acquisition phase (20 months per the example in paragraph 9.818) while the average retention cost per month that would be relevant to the months in the post-acquisition phase is estimated to be €10.

9.824 However, under Eircom's approach the average cost is derived across the entire base resulting in a cost of €20 a month, which would then be used as the average cost in the initial months of the ACL, even though the average cost of acquiring a new customer is actually €30 a month. Modelling an average cost of €20 in month 1 of the ACL does not support replicability when rival operators would have to offer a €30 discount to compete against the level of acquisition discounts that Eircom is actually offering to new customers.

9.825 The underestimation arising from modelling the level of average acquisition discounts in the early months of the ACL is compounded by the approach that Eircom has taken to forecasting discounts in the later months of the ACL. Eircom's approach is to forecast the level of discounts in month 1 using the assumption that the cohort of customers that are in retention and acquisition contracts at month 1 are all starting their contract and remain on that contract for the full contract duration (6 months, 12 months, 24 months). This means that the average discount cost included for each month of the ACL is forecast to decline after month 6, month 12 and month 24 as only a small fraction of the customers exiting these contracts are assumed to subscribe to a new retention contract.

9.826 The most significant declines are modelled after months 12 and 24 of the ACL as most customers are observed to be on 12 and 24 month contracts. While Eircom does model a 'forecast retention' cost to be included as "*separate and additional costs from months 13 and 25*"[1395] when customers are assumed to exit 12 month and 24 month contracts respectively, the level of costs added is significantly less than the average level of retention discounts. In particular, using the data included in Eircom's Draft Model, the level of discounts that Eircom forecasts for each of the months after month 24 are circa 90% lower than the levels modelled for the first 12 months of the ACL. Reductions of this level are not consistent with that the fact that retention discounts only come into effect after the initial acquisition contract expires, e.g., after month 24 in the case of an initial 24 month acquisition contract.

9.827 ComReg notes that recognising the different timelines and values for acquisition and retention promotion costs across the ACL (including maintaining retention promotion values consistent across the entire post-acquisition period)[1396] will not necessarily lead to an offer which meets the MST under the approach used by Eircom, to fail. For instance, applying the correct approach to the calculation of acquisition and retention costs to the data used by Eircom in the Eircom Draft DCF Model, leads to an increase in the NPV of the discount/promotion costs compared to Eircom's estimates in the Eircom Draft DCF model. However, it is still the case that Eircom would currently pass the MST for all the FTTH offers modelled at the individual bundle level on a LRIC basis and at the portfolio level on an ATC basis, as submitted in the Eircom Draft DCF Model. ComReg believes however that it is essential in order that the model that is used for the purpose of the DCF MST adequately calculates whether the 'average customer' (represented by the ACL and the average acquisition discount/period and the average retention discount/period) generates a positive NPV to ensure replicability for SPs and sustainable competition.

[1395] Ibid, page 7.

[1396] ComReg recognises that this may not always be warranted, depending on evidence. ComReg has made this assumption on the basis that the Eircom Draft DCF Model indicates that some customers coming to the end of a 24 month acquisition contract will subscribe to another 24 month contract, thereby committing to a minimum 48 month customer life, while others either transition to the full rental price or possibly even cease at 24 months, and also that the majority of acquisition and retention contract terms are for 24 months. In those circumstances it is appropriate that the same retention discount should apply for all months of the post-acquisition phase up to month 42 of the ACL.

9.828 ComReg notes Eircom's comments in its letter of 18 September 2023 that this approach represents a departure from the principles and proposed DCF approach as consulted on by ComReg, and that it was "*critical that eir is granted full visibility of that approach and an opportunity to meaningfully comment on it before any final decision is made".*[1397] "*It would be*, Eircom contends, *highly inappropriate and procedurally unfair for ComReg to impose an alternative methodology in the final decision without giving eir a proper opportunity to provide its views on that methodology".*[1398] However ComReg does not accept that the manner in which acquisition and retention promotions are to be dealt with under the DCF approach as set out above represents an alternative methodology to the methodology the subject of consultation. ComReg notes in this regard that a number of respondents called for further clarity as regards the application of the DCF approach and this is what ComReg has done in this regard. Furthermore, although the Eircom Draft DCF Model does not adequately implement them, Eircom's letter accurately summarises the principles which underpin ComReg's approach to acquisition and retention promotions over the ACL under the DCF approach. Eircom's 10 page letter of 18 September 2023, of which ComReg has taken full account, shows that Eircom has had the opportunity to provide its views.

[1397] Ibid page 9.

[1398] Ibid page 9-10.

Assessment of Relevant FTTP Retail Offerings

Table 80: FTTP Flagship Products - Revenues

Reference	Title	Description
R1	Forecasted monthly headline price of the FTTP flagship products. This should reflect expected future price changes, e.g., annual price increases linked to CPI.	This is the full monthly contract price of the FTTP flagship products during the ACL. In circumstances where the FTTP BB service is bundled with other unregulated services (i.e. fixed voice, mobile and/or TV), the contract price should be the price inclusive of all services. The price should be reported net of VAT.
R2	Forecasted average monthly out of bundle ('**OOB**') calls revenue of the FTTP flagship products (with fixed voice).	This is the forecasted additional monthly revenue for fixed voice traffic/calls consumed outside the plan (i.e. where the customer exceeds the fixed voice traffic/call allowance included in the relevant plan). This should be traceable to data available in the most recently reported actual OOB call revenues (which is received every three months).
R3	Forecasted average monthly out of bundle ('**OOB**') other revenue of the FTTP flagship products	This is forecasted additional monthly revenue for other out of bundle revenue, e.g. excess data usage on fixed data allowance contracts and, out of plan revenues on unregulated mobile contracts. The out of bundle data usage revenue should be traceable to data available in the most recently reported actual out of bundle data usage revenue (which is received

		every three months). The out of bundle mobile revenue should be traceable to the data available in the last two reports of actual out of bundle mobile revenue (which are received every six months).
R4	Forecasted non-recurring revenues of the FTTP flagship products.	This is the forecasted non-recurring revenues, e.g. FTTP connection charges~~,~~ broadband activation fees etc. This should be recognised in full in the month in which it is expected to arise (i.e. it should not be allocated over the ACL).
R5	Total forecasted revenue for each FTTP flagship products (per month over the ACL).	This is the sum of **R1** plus **R2** plus **R3** plus **R4** (as relevant).
R6	Present value of the forecasted monthly revenue for each of the FTTP flagship products.	This is the sum of the discounted **R5** to present day terms using the WACC rate.
R7	Forecasted average monthly NGA Portfolio revenue (i.e. for the FTTP flagship products) per subscriber.	This is the weighted average of **R6** (weighted by the expected number of subscribers associated with each FTTP flagship product).

Table 81: FTTP Flagship Products - Costs

Reference	Title	Description
C1	Forecasted Wholesale Network Input (‘**WNI**’) for FTTP VUA.	This is the forecasted monthly price (based on Eircom’s published reference offers) less the forecasted wholesale discounts provided to the retail arm of Eircom for FTTP VUA (for each month of the ACL).
C2	Forecasted Other Network costs (incurred by Access Seekers) to provide the FTTP flagship products.	This is all other relevant forecasted wholesale costs necessary to provide FTTP flagship products (for each month of the ACL). All other relevant forecasted wholesale costs’ include co-location, backhaul and in-home costs (i.e., cost of broadband installation at customer premises) that would be incurred when using the FTTP VUA wholesale input to provide a FTTP Retail Offering. Costs associated with connections migrations and call out charges should also be included here. This would also include a Voice MEA charge for VOBB bundles.
C3	Forecasted ATC retail costs associated with retail line rental for the relevant FTTP flagship products (with fixed voice)	This is the forecasted ATC retail costs associated with line rental for fixed voice for the relevant flagship product (for each month of the ACL). Prior year costs can be derived from Eircom’s most recent Regulatory Accounts and may be used as a basis (with adjustments) for the forecasts.

C4	Forecasted LRIC retail costs associated with retail line rental for the relevant FTTP flagship products (with fixed voice)	This is the forecasted LRIC retail costs associated with line rental for fixed voice for the relevant flagship product (for each month of the ACL).
C5	Forecasted ATC costs of calls for the relevant FTTP flagship products (with fixed voice).	This is the forecasted ATC call costs (wholesale and retail) per call type (for each month of the ACL) e.g. domestic national landline; domestic mobile on/off net.
C6	Forecasted LRIC cost of calls for each of the FTTP flagship products (with fixed voice)	This is the forecasted LRIC cost of calls (for each month of the ACL). This will include the forecasted cost associated with out of bundle calls (which should be separately disclosed).
C7	Forecasted ATC retail costs associated with FTTP retail broadband for each of the FTTP flagship products.	This is the forecasted ATC retail costs associated with FTTP retail broadband (for each month of the ACL). Eircom's Regulated Accounts, which includes retail cost for all BB types, can be used as a starting point for the forecast.
C8	Forecasted LRIC retail costs associated with FTTP retail broadband for each of the FTTP flagship products.	This is the forecasted LRIC retail cost associated with FTTP retail broadband for the FTTP flagship products (for each month of the ACL). This will include the forecasted cost associated with out of bundle broadband (data) usage (which should be separately disclosed).
C9	Forecast average promotion/discount costs associated with the relevant FTTP flagship products.	This is the forecasted average acquisition and average retention costs (promotions and discounts for the relevant FTTP flagship products

		provided to retail customers. The average acquisition cost can be calculated with reference to the range of promotion/discount offers that are available to new customers and the expected uptake of those acquisition offers by all new customers. The average retention cost can be calculated with reference to the range of promotion/discount offers that are available to existing customers that are no longer availing of an acquisition discount/promotion and the expected uptake of those promotional offers by all non-acquisition customers (i.e. those not on an acquisition promotion). The average acquisition and average retention costs will be allocated to the number of months in the ACL that correspond to the average period a customer is in receipt of an acquisition promotion/discount and a retention promotion/discount respectively.
C10	Forecasted Unregulated services LRIC costs.	This is the forecasted LRIC costs associated with any unregulated services included in the relevant bundled FTTP flagship products (e.g. mobile, TV) for each month of the ACL. This will include the cost associated with out of bundle mobile calls (which should be separately disclosed).
C11	Forecasted ATC monthly costs for each of the FTTP flagship	This is the sum of C1 plus C2 plus C3 plus C5 plus C7 plus C9 plus

	products	C10.
C12	Present value of the total forecasted ATC monthly costs for each of the FTTP flagship products.	This is the sum of the forecasted ATC monthly costs (**C11**) discounted to present day terms using the WACC rate.
C13	Forecasted LRIC monthly costs for each of the FTTP flagship products.	This is the sum **C1** plus **C2** plus **C4** plus **C6** plus **C8** plus **C9** plus **C10**.
C14	Present value of the total forecasted LRIC monthly costs for each of the FTTP flagship products.	This is the sum of the forecasted monthly LRIC costs (**C13**) discounted to present day terms using the WACC rate.
C15	Forecasted average monthly NGA Portfolio ATC costs (i.e. for the FTTP flagship products) per subscriber.	This is the weighted average of C12 (weighted by the expected number of subscribers associated with each FTTP flagship product).

9.829 For the FTTP flagship products, sold singly or as part of a bundle, the MST will be passed:

(a) **At the portfolio level** if the NPV is not negative i.e., when the average total PV of revenue (R7) is equal to or exceeds the average total PV of costs (C15), and

(b) **At the FTTP flagship product level** if the NPV is not negative i.e., when the PV of revenue (R6) is equal to or exceeds the PV of costs (C14) for each of the relevant FTTP flagship products.

MST on Bitstream prices

9.830 Eircom's obligation not to cause a margin squeeze was further specified under the 2018 Decision by reference to a Wholesale MST, whereby Eircom had to ensure that the rental charge offered or charged by it to any other SP in relation to FTTP-based VUA did not cause a margin/price squeeze between (a) Wholesale FTTP-based VUA; and (b) Wholesale FTTP-based Bitstream in WCA Markets ('**Wholesale MST**'). On the basis that the WCA Market is being deregulated and that there are other safeguards such as the FTTP[1399] MST and non-discrimination obligations, so that Eircom has no incentive to engage in a squeeze between FTTP VUA and FTTP Bitstream, a wholesale MST between FTTP-based VUA and FTTP-based Bitstream is no longer required.

9.831 A number of Respondents including BT, VMI and SFG expressed their concern with the removal of the Wholesale MST. BT explained that a margin squeeze is a real concern *"as this market is very price sensitive"* and removal of the MST could have *"the effect of closing the market for access to the more costly VUA sites"* and *"…this could be a reasonable number."*[1400] However BT also noted that following deregulation of the Urban WCA Market that WCA prices increased – which is the opposite to how prices would be expected to change in a market subject to Margin Squeeze Obligations.

[1399] In the 2023 Consultation ComReg used the term FTTH. FTTP is, however, more appropriate as refers to fibre to all premises, homes and businesses.

[1400] BT Non-confidential submission p. 10

9.832 In its Submission, SPC Network was of the view that it *"… fundamentally cannot be the case"* that the FTTP MST will *"provide sufficient room"* arguing that the retail MST does not mean that Eircom has no incentive to engage in a squeeze between FTTP VUA and FTTP Bitstream.[1401] VMI agreed with SPC Network stating that the removal of the FTTP VUA to FTTP Bitstream MST is premature, and that the remaining controls (e.g., the MST between FTTP VUA and FTTP-based retail services) will not adequately control Eircom from acting in an exclusionary manner.[1402] For SPC Network, if the WCA market is deregulated, then there will be nothing to stop Eircom reducing the price of FTTP Bitstream down to the same level as FTTP VUA and *"to target such a reduction so as to attack the ongoing viability of specific competing providers of Bitstream".*[1403] VMI reiterated the points made by SPC Network expressing concern that **[✂** [redacted] **✂]**.[1404]

9.833 ComReg notes however that the FTTP MST includes in addition to the wholesale cost of FTTP VUA, all other relevant costs incurred by the RSP in the downstream market (so it can replicate the retail offering of Eircom). Such other relevant costs include, for example, other network costs incurred by the RSP in order to provide the downstream retail service e.g., backhaul and co-location costs.

9.834 As noted by Oxera in section 6.102 of its Part 3 Report if Eircom decided to lower its FTTP Bitstream prices to engage in a squeeze relative to FTTP VUA, RSPs using Eircom's wholesale Bitstream input would then be in a position to lower their retail prices, undercutting Eircom's retail prices. Eircom would not be in a position to respond by reducing its retail prices, given that the FTTP MST prohibits this and so Eircom may lose retail customers who divert to lower priced bitstream services offered by RSPs.

[1401] SPC Network Non-confidential submission p.46, paragraph 180.

[1402] VMI Non-confidential Submission, p.33.

[1403] SPC Network Non-confidential Submission, p.46-47, paragraph 180-181.

[1404] VMI Confidential Submission, p.33.

9.835 VMI argued that this justification is flawed as the retention of the MST between FTTP VUA and FTTP-based retail services does not offer the level of protection offered by the Wholesale MST as it *"would still leave very significant scope for Eircom to reduce FTTP Bitstream prices to levels it would be difficult to compete with… e.g. offering it as same or similar price to the FTTP VUA input product"* and the cost to Eircom from reduced Bitstream prices could still be justified *"by the benefit of damaging competition that would otherwise come from Virgin Media."*[1405]

9.836 SFG in its Submission argued that Oxera has ignored the scope and potential distortion from a geographically targeted Bitstream MST by Eircom. SFG put forward two scenarios in which Eircom could target competition in the VUA market or target competition in the WCA market.[1406]

9.837 Under the **first** scenario SFG suggested that Eircom could offer backhaul at a price less than cost or for free. Given the price flexibility of FTTP VUA service, Eircom could set such prices at a level which allows any negative margins on backhaul to be cross-subsidised by above cost oriented FTTP VUA prices.

9.838 Under the **second** scenario SFG suggested that Eircom using 'windfall' profits generated from contributions from NBI to the cost of PIA could sell backhaul below cost in the rural commercial area to target WCA competition. In other words Eircom could lower FTTP Bitstream prices in a geographically targeted way in areas where it faces limited or no competition from other Network Operators (such as the Rural Commercial Area) with the objective of foreclosing other Bitstream SPs and/or increasing its market share. This risk, as discussed by Oxera (in paragraph 5.9 of the Oxera Updated Part 3 Report) could be compounded *"…if these targeted WCA discounts are not fully reflected in retail price reductions, given national retail pricing policies."* In such circumstances, Eircom would not have to adjust its retail prices or its wholesale FTTP VUA prices to ensure compliance with the FTTP MST.

9.839 SFG disagreed that Eircom would be constrained from acting this way by the FTTP MST stating that it *"…has no substance under the flagship VUA-Retail MST mechanism being proposed by ComReg".* SFG expressed concerns that under both scenarios the relevant footprints could be targeted from a retail pricing perspective and not breach the 25% threshold (which is free from *ex ante* controls).[1407]

[1405] VMI Non-confidential submission, p.33.

[1406] SFG Non-confidential submission, p.22.

[1407] Ibid p. 23-24.

9.840 ComReg agrees with Oxera and SFG's first scenario that Eircom could 'in theory' reduce FTTP Bitstream prices to foreclose Network Operators by for example offering backhaul at or below cost. This would however allow the RSPs who are reliant on the FTTP Bitstream service (which includes backhaul) to reduce their price for FTTP retail services. In order for Eircom to compete with such RSPs in the retail market while ensuring compliance with the FTTP MST, Eircom could reduce the price of FTTP VUA product (given pricing flexibility). In this way the lower priced Bitstream service could as noted by SFG be cross-subsidised by lowering FTTP VUA prices which are above cost. However, as noted by Oxera, this can only happen so long as the FTTP VUA prices are above the price floor and are not part of a commercial offer which can have a detrimental effect on network rollout. ComReg notes that for Eircom to engage in this behaviour it must view the exclusivity of the Eircom network as more desirable than preventing the loss of end users to other networks. Furthermore, lowering the FTTP VUA price as per SFG's first scenario while remaining above the price floor will mean RSPs may remain on FTTP VUA rather than move to FTTP Bitstream (and may result in lower input prices for Bitstream providers).

9.841 Oxera in paragraph 5.10-5.11 of the Oxera Updated Part 3 Report considers whether it would be possible for Eircom to circumvent the wholesale remedies and engage in such pricing behaviour as outlined in the second scenario by SFG. It concluded that *"…under ComReg's proposals (with no MST between VUA and Bitstream, and the WCA market being fully deregulated), the approach described could be a way of circumventing the commercial offers pre-authorisation process by engaging in geographically targeted discounting which is not allowed for VUA… but which is not prohibited for Bitstream as it is unregulated."* This as noted by Oxera would undermine the business case of alternative Network Operators entering this market as they may not be able to compete against such heavily discounted bitstream offers.

9.842 While the risk that Eircom would engage in this practice going forward is not clear, there must be a financial gain for Eircom to engage in this practice i.e. the increase in profits on FTTP Bitstream (generated from new and existing FTTP VUA customers switching to FTTP Bitstream) must be greater than the decrease in profits on FTTP VUA. However as noted by Oxera in paragraph 5.14 of the Oxera Updated Part 3 Report, Eircom may consider this strategy to be profitable with reduced margins as it prevents its existing access customers from switching to rival Network Operators so the *"..reduction in margins on bitstream are more than offset by the avoided losses from losing wholesale customers to rivals…".*

9.843 The success of this scenario will be dependent on the ability and willingness of new and existing wholesale access customers to switch to FTTP Bitstream. This will be impacted by:

(a) the costs associated with switching from FTTP VUA to FTTP Bitstream or the comparative costs of upgrading from FTTC VUA to FTTP VUA or FTTP Bitstream. If the costs (or differences) are low, there may be a greater incentive for wholesale Access Seekers to switch;

(b) the unrecovered investment costs of backhaul (incurred by FTTP VUA customers) if wholesale Access Seekers switch from FTTP VUA to FTTP Bitstream; and

(c) the willingness of Access Seekers to relinquish control to Eircom in the provision of specific services e.g., the backhaul service.

9.844 Having considered in detail the concerns raised by Respondents to the consultation and the potential foreclosure of Network Operators in certain geographic areas, ComReg nonetheless does not believe that it is appropriate and justified to continue in place a Wholesale MST but will monitor closely market developments following removal of the Wholesale MST. In particular, ComReg, as suggested by Oxera in paragraphs 5.20 - 5.22 of the Oxera Updated Part 3 Report, will monitor market developments closely to assess if Eircom's strategy is shifting more towards the provision of FTTP Bitstream and away from FTTP VUA by offering geographically targeted offers, in order to identify concerns early and intervene in a timely manner. As noted by Oxera, there are a variety of ways in which ComReg may intervene, depending on the circumstances, such as by relying on competition law powers; through enforcement of Eircom's non-discrimination obligation on the WLA market; through the re-imposition of the *ex ante* Wholesale MST as a further specification of the obligation not to cause a margin squeeze or by bringing FTTP Bitstream into the scope of wholesale commercial offer assessments (see paragraphs 9.498 to 9.540 above).

Safeguards

9.845 In this regard, ComReg recognises that there is merit in the Respondents' arguments and shares some of these concerns including in particular that Eircom may not maintain a sufficient margin between its VUA and Bitstream offers. ComReg notes, however, that although it no longer proposes to further specify this obligation by way of a Wholesale MST, Eircom's general obligation not to cause a margin squeeze continues to apply. In accordance with its obligations of non-discrimination and transparency on the NG Commercial WLA Market, Eircom is required to supply VUA to itself and Access Seekers under the same terms and conditions including price. A Bitstream price that does not recover in full the published VUA may be discriminatory; a Bitstream price (including targeted discounted FTTP Bitstream) by Eircom that does not allow recovery not only of the published VUA price but also of the other network costs incurred by the VUA customer to provide the equivalent downstream FTTP service e.g., backhaul and co-location costs, would involve a margin squeeze.

9.846 ComReg in particular in mindful that a targeted discounting of FTTP Bitstream may place Access Seekers at a disadvantage by purchasing VUA directly (from Eircom and adding on the backhaul and co-location elements) as opposed to purchasing VUA as part of Eircom Wholesale's Bitstream offering especially as Eircom Retail use Bitstream as an input to its retail offerings and so could benefit at the expense of RSPs using VUA inputs.

9.847 Given the deregulation of the WCA Market and the market trend away from Bitstream towards VUA, ComReg considers that the best way of mitigating this risk is by means of adjustment to pricing controls in the WLA market. This can be achieved as follows.

9.848 The price floor rules for FTTP VUA (with the proxy of the price of FTTC VUA) will act to mitigate the risk to competitor networks of excessively low FTTP Bitstream prices. FTTP VUA is an input to all FTTP Bitstream products so any reduction of FTTP Bitstream prices must respect the FTTP VUA price floor.

9.849 As part of the relaxation of the ban on wholesale promotions and discounts a pre-approval process is introduced which will include an assessment of any competition concerns of proposed pricing schemes and in particular if there any foreclosure risks in downstream markets. This assessment will also consider FTTP Bitstream pricing.

9.850 Systematic gathering of information from network providers and Access Seekers on FTTP services and the associated prices will assist ComReg in identifying if pricing issues exist. If it proved to be necessary ComReg may revisit the issue of reintroducing a further specification of the obligation not to margin squeeze by reference to a specific Wholesale MST and in that event would put any such proposals to consultation.

9.851 Finally, ComReg notes that it may rely in appropriate instances on its competition law powers to investigate and where relevant, enforce against anti-competitive behaviour by Eircom which undermines rival Network Operators (e.g. below cost selling).

Ex ante and *ex post* assessment of offers

Overview

9.852 In retaining the retail MSTs for the FTTP flagship products, there is a need to consider whether existing administrative obligations with regard to *ex ante* and *ex post* assessment continue to be required, and what form they should take.

9.853 The 2018 Bundles Decision, in order to minimise the risk of non-compliant bundles (and standalone offers) being launched (e.g. ones that may cause a margin squeeze), required Eircom to notify ComReg of all new and revised bundles at least five working days before launch and for standalone offers, to submit notifications for any changes to prices and/or promotions or discounts.

9.854 Eircom had notified 81 retail amendments to ComReg by end September 2023 under the 2018 Bundles Decision. While the number of notifications has declined in recent years, there has been an increase in their complexity due to the inclusion of several promotions/discount proposals in one notification. Eircom has not, to date, submitted any notification that failed the pre-launch assessment of compliance with its obligation not to cause a margin squeeze.

Pre-launch notification

9.855 ComReg continues to consider that the requirement for Eircom to pre-notify ComReg plays an important part in supporting the overall remedies being imposed on Eircom in the Commercial NG WLA Market.

9.856 Self-certification is an alternative approach, whereby Eircom would be obliged to demonstrate that it has undertaken a form of self-compliance to ensure that, ahead of launching a new or revised retail offering, it meets its obligation not to cause a margin squeeze. In other words, Eircom would be required to provide the details of the amendment (e.g. relevant retail offering name, promotions details, etc.) to the new or revised retail offering to ComReg. Such notifications would not require ComReg's pre-clearance for launch. However, notifications would need to include a unique reference, such that the retail offering could be monitored *ex post*.

9.857 ComReg's current requirement for Eircom to pre-notify minimises the risk that non-compliant retail offerings may be launched. Eircom in its Submission was of the view that pre-clearance and approval prior to launching a new or revised bundle *"is completely disproportionate"* particularly as the process for assessing such promotions is well known to ComReg.[1408] As noted in paragraph 9.642, Eircom's incentive to engage in a margin squeeze to foreclose Access Seekers and increase its retail market share may increase in the longer term as the FTTP network fills up and Eircom becomes less reliant on Access Seekers to achieve payback on its investment cost. The BEREC Guidance considers an *ex ante* test as a safeguard for competition, allowing efficient market entry and promoting efficient investment in NGA[1409] A pre-notification requirement is in those circumstances a safeguard in ComReg's view that assists in avoiding the complexity which would be entailed in unpicking (and remedying) the harms caused to competitors were a non-compliant offer to be launched, and furthermore avoids the impact of having to cancel contracts with consumers. Therefore, ComReg retains the existing pre-launch notification requirements described below. The burden on Eircom will, however, be reduced, as it will only be relevant to the FTTP flagship products.

9.858 Prior to launching a new FTTP retail offering that is expected to become a FTTP Flagship Product or a revision to a FTTP Flagship Product (by means of a price change, discount or promotional offer), Eircom must furnish ComReg with a detailed written submission showing compliance with the obligation not to cause a margin squeeze. This submission should include all relevant documentation including, the MST DCF/NPV Model, Mobile/TV Models (where relevant), a Compliance Statement and a copy of the published price list (after the proposed promotions/discounts).

[1408] Eircom Non-confidential Submission p.91, paragraphs 228.

[1409] BEREC Guidance, p.29, paragraph 4.1.

9.859 Upon receipt of the submission, ComReg will review the submission and within five (5) working days communicate to Eircom its decision on whether to give or withhold *prima facie* approval for launch of the proposed new or revised offer. Such approval will not be unreasonably withheld by ComReg, subject to the submission being to the standard required by ComReg. Where the submission is not to the standard required, ComReg will restart the review period once the submission has been provided to the standard required (which at the very least is that the paperwork and DCF/NPV model are in agreement, e.g. the value of the promotion in the DCF/NPV model matches that in the paperwork). Eircom will not be permitted to launch any new FTTP retail offering or revised FTTP product (which falls within the specification above) without having received such prior approval from ComReg. For the avoidance of doubt, the making available of a promotion or discount to end users which affects an existing offer, or any other change to the price or components of an existing offer (including an extension of an existing promotional/discount offer), constitutes the making available of a revised offer.

9.860 ComReg continues the approach whereby Eircom is required to ensure that all offers (relating to all FTTP products, standalone and bundled) remain compliant with its obligation not to cause a margin squeeze at all times.

9.861 In that context, the granting of approval does not amount to a definitive finding by ComReg that a particular offer is compliant, or will remain compliant in the future, with the FTTP MST, given that the actual outturn of a specific offer may ultimately be different from that initially envisaged, such that the relevant offer may not in fact pass the FTTP MST.

9.862 Accordingly, ComReg *prima facie* approval is strictly without prejudice to ComReg's right to take action (whether pursuant to a final Decision and/or pursuant to any of its relevant statutory enforcement powers) in respect of any FTTP flagship product that it believes may be non-compliant with Eircom's regulatory or competition law obligations.

9.863 ComReg also requires that any submission made by Eircom makes full and true disclosure of all material facts for the purpose of demonstrating that the proposed new or revised offer complies with the obligation not to cause a margin squeeze, in particular, with the FTTP MST. All assumptions should be clearly set out together with the rationale and supporting evidence for such assumptions and the likely effect if any such assumptions are not met. The MST DCF/NPV Model presented by Eircom in its submission should be capable of running scenarios for changed key assumptions. Any claims for retail efficiencies should be supported by robust evidence. For the avoidance of doubt, the making available of a promotion or discount to end users which affects an existing offer, or any other change to the price or components of an existing offer (including an extension of an existing promotion/discount offer), shall constitute the making available of a revised offer.

9.864 Given that Eircom is under an ongoing obligation to ensure at all times that it does not cause a margin squeeze, it must notify ComReg immediately if it believes an existing offer may be causing a margin squeeze. Also, if requested by ComReg at any time, Eircom must provide such data as may be requested by ComReg for the purpose of verifying that it is not causing a margin squeeze. In this submission, Eircom should also provide any other relevant information it believes is required so that ComReg can make an informed decision as to whether the offer is compliant with Eircom's regulatory obligations, in particular its obligation not to cause a margin squeeze.

Monitoring Statement

9.865 To understand the margin performance of offers on an ongoing basis, ComReg maintains the requirement introduced by the 2018 Bundles Decision that Eircom provide a monitoring statement of past performance of its retail offers in the form of a quarterly monitoring statement for actual performance, compared to the original projections provided. Eircom in its Submission submitted that this should be replaced with internal monitoring whereby it *"…will continue to monitor margins on a quarterly basis. Then every 12 months eir will prepare a report for ComReg using that model (the same as today) to demonstrate compliance."*[1410] It also proposes that an interim margin report can be provided (at ComReg's request) to demonstrate ongoing compliance but the MST should be *"… carried out no more than twice a year".*[1411] While the quarterly monitoring report is important to ensure that retail offers continue to pass the MST, it is also important as flagships may change as the market develops, so the focus of the *ex ante* tests may change. To restrict ComReg's visibility of this report to annually (or bi-annually) would risk some retail offers going unchecked (leading to a margin squeeze) which could have implications for competition and eventually customers.

9.866 Unlike the requirement introduced by the 2018 Bundle Decision, the monitoring statement will be restricted to the FTTP flagship products (including SA FTTP retail offerings and other plans specifically identified by ComReg for MST assessment). The purpose of this statement is to provide sufficient visibility to show that the relevant FTTP retail offerings are covering their costs over their lifetime and passing the MSTs.

9.867 In addition to the above, Eircom must submit a modified quarterly monitoring report for all standalone and bundled FTTP retail offerings, setting out the actual volume and revenue associated with each plan. This, as set out above, will form the basis for determining the FTTP flagship products that will be subject to the MST for the quarter.

9.868 ComReg considers that this update frequency strikes a balance between not placing too high a regulatory burden on Eircom and ensuring that actual offer performance (for all FTTP products) is being updated with sufficient regularity.

[1410] Eircom Non-confidential Submission, p.93, paragraph 234.

[1411] Ibid, p.93, paragraph 232.

Table 82: Summary of Requirements - Parameters of MST

Parameter	Existing Position (Per 2018 Pricing Decision and 2018 Bundles Decision)	Requirement
Profitability Approach	Period by Period (i.e. monthly basis) to calculate margin	DCF/NPV approach (i.e. over ACL) to calculate an NPV (using WACC as discount factor)
Level of Efficiency	EEO	EEO
Cost Standard	LRIC – all bundles ATC – Portfolio	LRIC - FTTP Flagships ATC - Portfolio
Relevant retail products	WLA (NGA) - FTTP / FTTC WCA (CGA) – ADSL (Copper)	FTTP Flagship products (top 75% based on volume with at least 1 Bundle and 1 SA)
Aggregation level	Bundle-by-bundle - NGA all bundles, no SA plans - CGA (excl.UA) all bundles, no SA plans Portfolio - NGA - bundles & SA (no FTTP SA) - CGA – bundles & SA - FTTP SA	Bundle-by-bundle - FTTP Flagship Products (bundle & SA) Portfolio - ‘Grand’ Portfolio for SA and bundled FTTP Flagship products
Wholesale access inputs	Relevant access products For NGA and CGA services Ban on wholesale discounts	Relevant access products for FTTP services i.e. FTTP VUA. Ban on wholesale discounts removed so FTTP VUA price should be reduced by relevant discounts
Time period	ACL - 42 months Retention – 30 months	ACL - 42 Months Acquisition period - a weighted average based on the different contract lengths that new customers are expected to subscribe to. Retention period – the residual period of the ACL i.e. 42 months less the acquisition period. This is used to allocate the month-by-

		month average retention discount cost.
***Ex ante* assessment**	Yes New or revised plans on all NGA and CGA plans (for bundle by bundle and portfolio assessment above). 5-day turnaround	Yes New or revised plans (including extensions) on FTTP Flagship products only. 5-day turnaround.
***Ex post* assessment**	Quarterly Margin Monitoring reports (detailed by aggregation level above)	Quarterly Margin Monitoring reports – Flagship FTTP products only and Modified Quarterly Monitoring reports – all FTTP retail offerings (detailing associated volumes and revenues only).
Unregulated services	Included in headline price of bundle Costs included at LRIC	Included in headline price of bundle Costs included at LRIC.

9.3.6 Cost accounting Obligations

9.869 Eircom is subject to cost accounting obligations in the WLA Market pursuant to the 2018 Decision, as specified in the 2010 Accounting Decision.[1412] In particular, Eircom must maintain detailed cost accounting systems that are sufficiently granular to allow an assessment of cost allocations. ComReg maintains these obligations on Eircom in the Commercial NG WLA Market.

9.870 To ensure the effectiveness of the specified price control obligations, ComReg considers that it is necessary to have a clear and comprehensive understanding of the costs associated with Eircom's provision of certain WLA products, services, and facilities. Obligations to maintain appropriate cost accounting systems generally support obligations of price control (and Accounting Separation) and can also assist ComReg in monitoring the non-discrimination obligation. Furthermore, the 2013 EC Recommendation also recommends that SPs provide NRAs with up to date information in respect of NGA deployments:

[1412] ComReg Document No. 10/67, ComReg Decision D08/10: Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited, dated 31 August 2010 (the '**2010 Accounting Decision**').

> *"In order to ensure transparency and to facilitate the monitoring of the evolution of the investment environment for NGA broadband as well as of competitive conditions NRAs should ask operators to provide the NRA with up-to-date information, including investment and NGA roll-out plans on a regular basis."*[1413]

9.871 Additionally, Eircom's cost accounting systems contain significant detail on the costs and revenues associated with wholesale access services. While ComReg is of the view that there is currently too much fluctuation in costs and demand each year to use the information contained in the accounts from any single year to derive prices (e.g. for wholesale services such as FTTC VUA), it is still possible to analyse the reported costs and revenues over a number of years to determine the extent to which price levels in the past have been consistent with efficient cost recovery across the economic life of the assets. It should also be possible to project this accounting information forward to gain an insight into how the prices of regulated services might need to change in the future so that overall recovery of all relevant efficient expenditure[1414] can be achieved in the long run. The prospect of copper switch-off also means that such an assessment of past and future returns may also need to consider the terminal values of legacy assets, such as the potential gains that may be realised from the sale of recovered copper cables following the ultimate retirement of the copper network.

9.872 The burden of proof rests with Eircom to show that its prices/charges for cost oriented products and services in the Commercial NG WLA Market and associated facilities or interconnection links are derived from costs, and that it is in compliance with any margin squeeze or non-discrimination obligations. Furthermore, for the purpose of calculating the costs of efficient provision of such products and services, in accordance with Regulation 56(6) of the ECC Regulations, ComReg notes that it may also use cost accounting methods independent of those used by any SP in the market. ComReg may also issue a direction requiring an SP to provide full justification for its prices, and may, where appropriate, require prices to be adjusted.

[1413] 2013 EC Recommendation, recital 51.

[1414] Relevant expenditure can include an appropriate return on all investments, both the past investments in assets that are still being used to provide NGA services and the future investments needed to upgrade the network and ensure its efficient operation.

9.873 Having regard to the need to support the effectiveness of the price control obligations above and to enable monitoring of Eircom's compliance with these obligations, ComReg considers that the continued imposition of cost accounting obligations on Eircom in the Commercial NG WLA Market is justified. ComReg requires Eircom to maintain appropriate cost accounting systems to justify its prices/costs of WLA products, services, and facilities in the Commercial NG WLA Market. Consequently, Eircom must ensure that its cost accounting systems are capable of providing the level of granularity and transparency necessary to demonstrate compliance with its obligations arising from a finding of SMP in the Commercial NG WLA market, including its price control, accounting separation, and non-discrimination obligations.

9.3.7 Accounting Separation Remedies

Overview

9.874 In paragraphs 9.318 to 9.873 above, ComReg imposes various price control and cost accounting obligations on Eircom relating to the provision of WLA products, services, and facilities in the Commercial NG WLA Market.

9.875 The purpose of accounting separation obligations is to provide a further level of detail than that which can be derived from the statutory financial statements of SPs designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the SMP SP's business, were it to operate on a standalone basis. In the case of vertically-integrated SPs, accounting separation can also support non-discrimination obligations, help prevent unfair cross-subsidies to other services, and assist ComReg in monitoring compliance with obligations (e.g. non-discrimination). Having such detailed information enables ComReg to understand information related to the costs, volumes and associated revenues of products, services and facilities.

9.876 In accordance with Regulation 53 of the ECC Regulations, ComReg can, *inter alia*, require a vertically-integrated SMP SP, to make transparent its wholesale prices and its internal transfer prices, so as, for example, to ensure compliance with any non-discrimination obligation or, where necessary, to prevent unfair cross-subsidy.

9.877 Allocating costs to the appropriate and relevant products and services of an SMP SP is an important factor to consider when regulating multiple products and services carried over the same network. This is particularly true for Eircom, where its fixed access network is a common infrastructure that is used to provide a range of retail and wholesale services, some of which are subject to regulation. Therefore, when setting price controls for WLA products, services and facilities (and in ensuring compliance with pricing and other obligations) in the Commercial NG WLA Market, information is required about the costs and revenues associated with Eircom's provision of regulated WLA products and services, with such costs and revenues distinct from the costs and revenues associated with other services provided over Eircom's network.

9.878 Eircom argues that an Accounting Separation obligation is not proportionate given the evolution of the market and the Cost Accounting and Pricing remedies proposed in the Commercial NG WLA Market. Instead, the Cost Accounting obligation should be sufficient to provide ComReg with the information it requires, particularly as Eircom considers that Accounting Separation is not relevant to the FTTC pricing continuity approach.[1415]

9.879 ComReg does not accept Eircom's arguments that Accounting Separation is not proportionate. As noted in paragraph 9.876, the Accounting Separation obligation requires Eircom to make transparent its wholesale prices and its internal transfer prices, to ensure compliance with any non-discrimination obligation or, where necessary, to prevent unfair cross-subsidy.

9.880 As Eircom has been found to have SMP in the Commercial NG WLA Market, then the imposition of an Accounting Separation obligation ensures that sufficient and robust information is provided to help ComReg monitor regulation of those markets where Eircom has been found to have SMP as well as Eircom's compliance. Publication of the HCA Separated accounts is also intended to provide stakeholders with some assurance that Eircom is complying with its SMP obligations.

9.881 The Cost Accounting obligation by itself would not provide ComReg with information on the internal transfers between Eircom's Wholesale and Retail businesses or provide the insight as to how wholesale prices inform those internal transfers. Therefore, retaining the Accounting Separation obligation is necessary to ensure that ComReg can identify the level of returns that Eircom is earning on a regulated wholesale market and also whether Eircom might be using any excess returns to subsidise products in downstream markets where they do not have SMP.

[1415] Eircom Non-confidential Submission, paragraphs 250 – 260.

9.882 Having an Accounting Separation obligation in conjunction with a Cost Accounting obligation also means that ComReg can place greater reliance on any cost accounting information it receives from Eircom in respect of NG WLA services. Eircom has a significant ability to allocate costs between services including services which are regulated and those which are not. The Accounting Separation obligation requires Eircom to publish a set of HCA Separated Accounts based on a FPIA opinion, and it is the audit opinion that provides ComReg and other stakeholders with the assurance that costs are allocated in a fair, transparent and objective way. This is why, where possible, Eircom is required to provide a reconciliation between the cost information that is provided as part of the AFIs, with audited information provided either in the published HCA Separated Accounts or as part of the AFS.

9.883 Therefore, ComReg does not agree with Eircom's assertion that "*in the context of "on-going" price regulation the importance of accounting separation also does not hold*".[1416] Eircom cites ComReg's acknowledgement that "*Eircom's cost accounting systems contain significant detail on the costs and revenues associated with wholesale access services*"[1417] to support its argument that the cost accounting obligation should be sufficient to provide ComReg with the information it requires. The fact is that, when reviewing data on costs and revenues, ComReg is aware that it has been compiled in accordance with an Accounting Separation obligation within the framework established by the 2010 Accounting Decision, and that the reliability and consistency of the data is heavily dependent on the governance and audit scrutiny that the cost and revenue allocations are subjected to during the preparation, finalisation and audit of the HCA Separated Accounts.

9.884 Furthermore, notwithstanding the evolution of pricing remedies, the Accounting Separation obligation continues to be relevant to the regulation of the Commercial NG WLA Market, such as for Eircom's FTTC VUA service which is cost oriented. While ComReg is allowing FTTP VUA to be set using pricing flexibility whose parameters are monitored using retail margin squeeze pricing remedies, there is still a need to ensure that FTTP VUA prices are not below the price floor, and as noted in paragraphs 9.480 to 9.484 on price floors, Eircom can use the cost information pertaining to its FTTP network in the HCA Separated Accounts to support a proposal to reduce the price floor for its FTTP-based services.

[1416] Eircom Non-confidential Submission, paragraph 252.

[1417] Eircom Non-confidential Submission, paragraph 253.

9.885 It is also the case that, while ComReg would not propose to use the information contained in the accounts from any single-year to derive prices, the accounts can provide stakeholders, including ComReg, with an insight into the extent that regulation is effective and appropriate to achieve its purpose. For example, in a competitive market, prices would be expected to converge to costs, including a return equal to the WACC. Indeed, Eircom's economic advisers, Copenhagen Economics, stated that: *"Cost orientation is warranted if and only if there is evidence to suggest that absent price regulation eir would charge excessive prices and generate returns that are substantially and persistently above competitive levels (namely, the weighted average cost of capital, WACC)."*[1418]

9.886 The Cost Accounting obligation would not be sufficient to provide evidence of the returns that Eircom is making as can be determined from the descriptions of Cost Accounting and Accounting Separation provided in the 2005 EC Recommendation:

> *"The purpose of imposing an obligation to implement a cost accounting system is to ensure that fair, objective and transparent criteria are followed by notified operators in allocating their costs to services in situations where they are subject to obligations for charge controls or cost-oriented prices".*[1419]

9.887 In contrast, the Accounting Separation obligation can provide evidence of the returns achieved by the notified operator for the different businesses within its vertically integrated structure:

> *"The purpose of imposing an obligation regarding accounting separation is to provide a higher level of detail of information than that derived from the statutory financial statements of the notified operator, **to reflect as closely as possible the performance of parts of the notified operator's business as if they had operated as separate businesses** and in the case of vertically integrated undertakings, to prevent discrimination in favour of their own activities and to prevent unfair cross-subsidy"*[1420] *[emphasis added].*

9.888 Consequently, it is the Accounting Separation obligation rather than the Cost Accounting obligation that makes transparent the extent that the reported returns for Eircom's WBA statement have been substantially and persistently above the regulated WACC.

[1418] Copenhagen Economics Non-confidential Submission, paragraph 4.8.

[1419] COMMISSION RECOMMENDATION of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications, recital 1.

[1420] *Ibid*, footnote 1419.

9.889 Therefore, for the reasons outlined above, ComReg does not accept Eircom's arguments that an Accounting Separation obligation is not a proportionate remedy to impose for the Commercial NG WLA Market.

9.890 The detailed nature of the accounting separation obligations currently imposed on Eircom is specified in the 2010 Accounting Decision. However, the focus of regulation has evolved, with the services subject to regulation changing, the number of relevant markets reducing, and new technologies and services emerging. As regulation has evolved, ComReg is updating some of the specific Accounting Separation obligations.

9.891 Eircom argues that the 2010 Accounting Decision *"pre-dates all of the NGA technology and market developments that are being contemplated in this review"*.[1421] Furthermore, expecting the HCA Separated Accounts to be completed on a *"fairly presents"* basis is not consistent with International Standards on Auditing (ISA 800) which Eircom consider are relevant to Regulatory Financial Statements. Instead, Eircom proposes that it "*should only be required to obtain an opinion that the regulated accounts are "Properly Prepared In Accordance" with its Accounting Methodology Documents*."[1422]

9.892 ComReg disagrees with Eircom's position, technology upgrades and market developments are not incompatible with the existing decision in the manner that Eircom appears to suggest. Since the imposition of the 2010 Accounting Decision the accounts structure has been changed to reflect changes in both technology and market regulation. The 2010 Accounting Decision established a tri-partite engagement that includes ComReg, Eircom and Eircom's auditors, that provides an opportunity to consider how the Separated Accounts should best evolve to keep pace with the introduction of new products and services, changes to network technologies and regulatory market developments. This is evidenced by the various modifications to the reporting requirements that have been introduced over the years. These include:

(a) Removal of the necessity to publish a Retail profit and loss statement;

(b) The removal of the audit opinion on a number of profit and loss statements that are now provided as part of the AFIs (rather than the audited AFSs) following deregulation of certain markets;

(c) Changes to the lists of network elements that are reported in the Network Statement of Costs to recognise evolutions in technology and changes to the regulatory environment, e.g., NGA was introduced as a separate Network Element in the 2012 HCA Separated Accounts when Eircom

[1421] Eircom Non-confidential Submission, paragraphs 246 – 247.

[1422] Eircom Non-confidential Submission, paragraphs 247 - 249.

commenced investment in NGA, while Network Elements relating to the core network have been removed or consolidated as the focus of regulation has shifted from core call conveyance to the access network services such as SB-WLR narrowband services and NGA broadband services;

(d) The restructuring of the HCA Separated Accounts in 2022 following the deregulation of the FACO Market; and

(e) Ongoing updates to the AFI data that is provided each year to better align with technological (e.g., greater granularity on NGA expenditure) and regulatory (e.g., greater focus on physical access infrastructure) developments.

9.893 ComReg also does not agree that a 'fairly presents in accordance with' ('**FPIA**') audit opinion is no longer appropriate. Eircom notes that *"According to ISA 800, a suitable opinion framework for financial statements subject to special purpose frameworks would be a "Properly Prepared In Accordance with" opinion in accordance with the identified special purpose framework"*.[1423] Eircom argues that this would mean that it should only be required "*to obtain an opinion that the regulated accounts are "Properly Prepared In Accordance" (PPIA) with its Accounting Methodology Documents*".[1424]

9.894 However, ComReg considers that adopting a lower audit opinion in the manner proposed by Eircom would give Eircom too much discretion over the choice of accounting rules. The lower audit opinion such as proposed by Eircom would require the auditor to only consider whether the accounts were prepared in accordance with a particular framework (i.e. the cost allocation methodologies contained in the Accounting Methodology Documents that have been developed by Eircom), but it does not require the auditor to consider whether the particular framework provides a fair representation of the financial performance of the regulated entity. In contrast, a FPIA opinion also requires the auditor to consider whether the methodology itself is appropriate or if more suitable alternatives exist.

[1423] Eircom Non-confidential Submission, paragraph 248.

[1424] Eircom Non-confidential Submission, paragraph 249.

9.895 Eircom stated that the audit opinion has moved from FPIA to PPIA due to a change in international accounting standards but did not provide the context for that move.[1425] ComReg is aware of the increased use of a PPIA audit opinion in respect of BT's Regulatory Financial Statements ('**RFS**') which followed Ofcom's decision to specify in more detail the preparation of the RFS to address inconsistencies between information in the published RFS and the way Ofcom used cost information in making regulatory decisions.[1426] This led to Ofcom setting more detailed Regulatory Accounting Guidelines, which BT is required to adhere to in preparing the RFS. Ofcom also required BT to prepare the RFS on a Regulatory Asset Valuation (RAV) basis, to be consistent with the methodology Ofcom adopted to value duct and copper assets in its charge controls.[1427]

9.896 At the time, BT and its auditors argued that Ofcom's proposals may not be consistent with FPIA assurance as there was a concern that Ofcom's more interventionist approach to setting the accounting framework could give rise to issues around the fairly presents opinion, in the event that, for example, BT and Ofcom disagreed on a cost allocation methodology. Consequently, Ofcom thought it necessary to reconsider the level of audit opinion that should apply to the RFS:

> *"We recognise that this may be an issue in certain circumstances and that we would need to consider this further. In light of these submissions, we have decided to revise the requirement to enable us to specify whether BT will be required to obtain either an FPIA or a PPIA opinion on the Regulatory Financial Statements as a whole."*[1428]

9.897 However, ComReg has refrained from specifying detailed methodologies in respect of the HCA Separated Accounts, with the result that it is only necessary for Eircom and its auditors to ensure that, as set out in the 2010 Accounting Decision, the key principles of cost causality, objectivity, transparency and consistency of treatment are applied in the preparation of regulatory accounting information. As a result, Eircom and its auditors have more discretion in the preparation and audit of the HCA Separated Accounts than is currently available to BT in the UK. In light of these considerations, ComReg considers that an FPIA opinion remains appropriate for Eircom's separated accounts as a whole.

[1425] Eircom Non-confidential Submission, paragraph 249.

[1426] Ofcom's pricing decisions have tended to be informed by BT's Top Down CCA costs as reported in BT's RFS, whereas ComReg has made more use of Bottom-Up cost models based on a HEO, which are less reliant on Eircom's TD HCA cost data.

[1427] BT previously valued these assets on a Current Cost Accounting basis.

[1428] Ofcom, Directions for Financial Reporting, 30 March 2015, from paragraph 7.45.

Accounting Separation Obligations

9.898 ComReg considers the Accounting Separation obligation reporting requirements under the following headings:

(a) Historic Cost Accounting (‘**HCA**’) Statements;

(b) Additional Financial Statements (‘**AFS**’); and

(c) Additional Financial Information (‘**AFI**’).

HCA Statements

9.899 Eircom continues to be required to publish in its HCA Statements a consolidated income statement and consolidated Statement of Mean Capital Employed for Wholesale Access. This retains the current process and arises in light of the need for ongoing price regulation of certain WLA products, services and facilities, and also supports transparency for stakeholders.

9.900 Up to 2021 Eircom’s Wholesale Access in the HCA Statements was sub-divided into the following:

(a) Wholesale fixed narrowband and unbundled access;

(b) Wholesale broadband access (‘**WBA**’); and

(c) Wholesale leased lines.

9.901 The 2021 HCA Statements from Eircom included further analysis of Wholesale Broadband Access including the average costs and revenues for WBA connections, CGA rental, CGA usage, NGA rental, and NGA usage.

9.902 In the 2023 Consultation ComReg noted that future HCA Statements, would require that the costs and revenues for all the products and services that are within the WLA market are reported within a WLA statement, with a clear distinction between FTTP, FTTC and other WLA services - for example an analysis of Average Costs and Revenues for each service. ComReg also noted that Eircom had previously reported costs and revenues associated with the provision of FTTC VUA services within the 'Wholesale fixed narrowband and unbundled access' statement, when that FTTC-based VUA service was ultimately sold as part of a POTS-based service. Consequently, the only time that Eircom reported costs and revenues associated with FTTC use of the copper loop in the 'Wholesale Broadband Access' statement was when that service was sold as a Standalone Broadband service.[1429] As POTS-based FTTC has tended to be the predominant FTTC-based service since 2013, this has meant a relatively small proportion of the costs and revenues associated with FTTC-based VUA sales were included in the 'Wholesale Broadband Access' statement.

9.903 However, in the 2023 Consultation ComReg proposed that future HCA Separated Accounts report all costs and revenues associated with the provision of WLA services, such as FTTC-based VUA, within the same statement. This would necessitate the costs and revenues associated with all the copper loops (LLU and SLU) that are used in the provision of an FTTC-based service to be reported as FTTC VUA related revenues and costs in the 'Wholesale Broadband Access' statement.

9.904 As products, services and associated facilities provided in the Commercial NG WLA Market continue to be regulated, ComReg retains the requirement to provide consolidated financial results for the wholesale access income statements, as produced annually by Eircom in its Separated Accounts, but in particular for the results pertaining to Eircom's provision of NGA services, e.g. FTTC and FTTP. These obligations continue to flow from the 2010 Accounting Decision.

[1429] One consequence of this is that the rates of return that Eircom has reported for FTTC-based services have tended to be understated. In the past, Eircom has continually reported excess returns for 'Wholesale Fixed Narrowband' services. However, a significant proportion of the revenues and costs were associated with POTS-based FTTC services. Reporting all the costs and revenues associated with the sale of POTS-based FTTC services in the 'Wholesale Broadband Access' would have increased the reported rate of return for FTTC-based services and reduced the reported rate of return for Wholesale Fixed Narrowband services.

9.905 Since the publication of the 2023 Consultation, Eircom has published its 2022 Separated Accounts.[1430] Prior to their publication ComReg engaged with Eircom and its auditors on the reformatting of the accounts to be more consistent with proposals outlined in the 2023 Consultation (and reflect other Consultations and Decisions). As a result, the Income Statement Wholesale Access disclosed revenues and costs relating to:

(a) Wholesale Physical Access;

(b) Wholesale Broadband Access; and

(c) Wholesale High Quality Access.

9.906 Furthermore, Wholesale Broadband Access now includes all costs and revenues associated with the provision of WLA services as set out in paragraph 9.903.

9.907 These changes were discussed and agreed with Eircom and its auditors and Eircom has also included a prior year restatement of its Separated Accounts. The obligation to maintain appropriate cost accounting systems in relation to these changes rests solely with Eircom.

Additional Financial Statements

9.908 Additional financial statements ('**AFS**') tend to be in a profit and loss format, below the market level. They may be subject to external audit.

9.909 Eircom's AFS for the year to December 2022 distinguish Wholesale Broadband Access between WBA Connections, CGA Rental, CGA Usage, NGA Rental and NGA Usage. Given the deregulation of CG and NG WCA, and CG WLA, ComReg therefore will only require data from Eircom in relation to those NGA services that continue to be regulated.

9.910 Further, in light of the increased deployment and take-up of FTTP services, ComReg's view is that the existing reporting obligation should be enhanced to separate, where possible, the NGA categories further into FTTP VUA Rental, FTTC VUA Rental, and NGA Connections as part of the AFS submissions. ComReg is also relaxing reporting obligations in relation to CGA, as this form of broadband is declining and is being deregulated. Details of the necessary enhancements can be finalised as part of the annual engagement with Eircom, as set out in the 2010 Accounting Decision.

[1430] https://www.eir.ie/opencms/export/sites/default/.content/pdf/regulatoryinformation/HCA.pdf

Additional Financial Information

9.911 Additional financial information (‘**AFIs**’) can contain both profit and loss accounts and volumes, fixed asset investments, and further breakdown of cost information. AFIs tend not to be subject to external audit.

9.912 The 2013 EC Recommendation recommends that NRAs should take into account the SMP SP’s audited downstream costs when assessing *ex ante* Economic Replicability Tests.[1431] Eircom currently provides ComReg with information in respect of retail costs in relation to relevant products through the AFI submissions. Given the MST for Eircom’s provision of both standalone and bundled retail offers as part of this Decision, ComReg considers that Eircom should continue to provide information related to the retail costs. The production of the existing AFI for FTTP connections and migrations should also continue.

9.913 On an annual basis, ComReg discusses the requirements for AFI reports with Eircom and has, in previous years, revised the list as required. ComReg is continuing with this annual review, thereby ensuring that the number and format of the AFI reports continue to be relevant, and that the production of such reports does not amount to an undue burden on Eircom.

9.914 Eircom also argues that it “*does not consider it appropriate or necessary to publish any separate and identifiable information related to its FTTH network*”.[1432] Eircom notes that a number of operators are rolling out FTTP services, yet it is the only Network Operator that is expected to produce information regarding its FTTP network. However, Eircom is also the only Network Operator that has been found to have SMP in the Commercial NG WLA Market, and ComReg remains of the view that the Accounting Separation obligation is an appropriate remedy in light of that finding.

9.915 Eircom also argues that information on its FTTP network is *“commercially sensitive and could inappropriately be used by our FTTH infrastructure-based competitors to distort the market to the detriment of end-user”*. Eircom’s concern is that investment in FTTP is largely based on external negotiated commercial contracts and that *“competitors could use industry expertise to reverse engineer key information or metrics to influence tenders, rate card negotiations, targeted roll-out plans etc. The publication of FTTH information will only serve to provide competitive advantage to eir’s competitors”*.[1433]

[1431] Ibid, recital 67.

[1432] Eircom Non-confidential Submission, paragraph 263.

[1433] Eircom Non-confidential Submission, paragraphs 263 and 264.

9.916 ComReg does not accept that there is any substance to the claims that Eircom will be obliged to publish commercially sensitive information or that it would be possible to reverse engineer the published data in the manner suggested by Eircom. Any investment in FTTP will be capitalised against a range of assets on Eircom's Fixed Asset Register, to be depreciated over the different useful lives associated with each of those assets. The annualised depreciation charge and residual NBV associated each of these assets will ultimately be allocated in the accounts to inform the costs of the various network elements and market statements, and only a limited amount of cost information is published in the HCA Separated Accounts.

9.917 For example, the WBA Statement in the most recent set of Eircom's HCA Separated Accounts contains a depreciation charge of €88,178k for the twelve months to 31 December 2022,[1434] but no further disaggregation of this depreciation is published. Therefore, the published information does not disclose to which assets this depreciation relates or when the investment in those assets took place. Similarly, the mean capital employed includes a single figure for 'Property, Plant and Equipment', but no further information on the nature of those assets, the location of the investment or when the associated investment took place.[1435]

9.918 Nor does the published information in respect of network elements and the allocation of those network elements to market statements appear to be at a level of detail that risks possible disclosure of confidential information. For example, the 'Network Cost Market Summary Wholesale Markets'[1436] in the latest HCA Separated Accounts, discloses that the most material network element allocating to the 'Wholesale Broadband Access' statement is the 'NGA' network element. The most detailed breakdown of the €109,805k operating and capital costs can be found in the 'Statement of Network Costs Wholesale Markets',[1437] but even here, no information below the level of operating costs, exceptional costs, Mean Capital Employed and capital costs is disclosed.

[1434] Eircom 2022 HCA Statements, page 11.

[1435] Eircom 2022 HCA Statements, page 13.

[1436] Eircom 2022 HCA Statements, page 18.

[1437] Eircom 2022 HCA Statements, page 16.

9.919 Eircom has not provided a sufficiently specific explanation of how it believes published information relating to FTTP costs in the HCA Separated Accounts might be reverse engineered to provide insight into the *“external negotiated commercial contracts”*. For the avoidance of doubt, it is not ComReg’s intention that any commercially sensitive information should be published in the HCA Separated Accounts. Should Eircom provide evidence that demonstrates that the concerns it has raised in relation to the disclosure of confidential information are genuine, ComReg will take all steps necessary to ensure that those concerns are addressed in an appropriate manner.

9.920 Nonetheless, ComReg remains of the view that future HCA Separated Accounts should evolve towards an Income Statement for WLA focused on NGA VUA Rental and NGA Connections, with a further breakdown of average costs and revenues for FTTP VUA rental, FTTC VUA rental and NGA connections. ComReg expects that there will be material differences between the average costs and revenues associated with FTTP VUA and FTTC VUA over the price review period as investment in FTTP continues and demand transitions from FTTC to FTTP. Therefore, distinguishing the average costs and revenues between FTTP VUA and FTTC VUA should provide stakeholders with greater transparency as to how the prices of FTTP-based services are likely to evolve.

9.921 Developing an Income Statement for Wholesale Access that is focused on NGA VUA Rental and NGA Connections will require some further amendments to the existing WBA Statement, such as the transfer of the costs and revenues relating to CGA broadband services and WCA port and usage services to the Wholesale Residual Unregulated statement.

9.922 The deregulation of CGA and WCA specific services will also result in changes to the ‘Statement of Average Cost and Revenue by Service’ for the Wholesale Broadband Access. As noted in paragraph 9.901 this currently includes WBA connections, CGA rental, CGA usage, NGA rental and NGA usage.

9.923 However, reporting costs and revenues relating to CGA broadband services and WCA port and usage within the Wholesale Residual Unregulated statement will also require the ‘Statement of Average Cost and Revenue by Service’ to be amended. For example, a revised ‘Statement of Average Cost and Revenue by Service’ could evolve to contain the following regulated services:

(a) FTTP VUA rental;

(b) FTTC VUA rental; and

(c) NGA connections.

9.924 ComReg expects that these changes can be progressed as part of the annual engagement with Eircom, as set out in the 2010 Accounting Decision.

Summary of Accounting Separation Obligations

9.925 ComReg retains the requirement on Eircom to provide consolidated financial results for the wholesale access income statements, as published annually by Eircom in its Separated Accounts, but in particular for the results pertaining to Eircom's provision of NGA VUA Rental and NGA Connections with analysis of average costs and revenues for FTTP VUA rental, FTTC VUA rental and NGA connections. These obligations continue to flow from the 2010 Accounting Decision.

9.926 The existing AFS reporting obligation should be enhanced to separate, where possible, the NGA related categories further into FTTP VUA rental, FTTC VUA rentals and NGA Connections as part of the AFS submissions.

9.927 The annual review of AFI requirements will continue to ensure that the AFI reports provided (such as on Retail costs and FTTP Connections) continue to be relevant and that the production of such reports does not represent an undue burden on Eircom.

9.928 Any necessary enhancements to the Separated Accounts, the AFSs and the AFIs can be finalised as part of the annual engagement with Eircom, as set out in the 2010 Accounting Decision.

9.3.8 Regulatory Governance Obligations

Requirement for effective regulatory governance

9.929 A key objective of ComReg in selecting appropriate remedies to prevent potential anti-competitive behaviours arising from Eircom's SMP in regulated markets to date has been to ensure that Access Seekers have the option to choose the level of access they require, depending on the scale of their operation, while encouraging efficient infrastructure-based competition (including through price control obligations). A critical aspect of the effectiveness of WLA products in facilitating effective competition is the regulatory governance arrangements that are (or need to be) in place for the purpose of ensuring that Eircom provides access to its network in accordance with its regulatory obligations. This includes, in particular, the management of matters such as order provisioning and service assurance, the development of the WLA products and services, the manner in which Eircom investment decisions are made, by whom and the criteria used, and the management of confidential regulated information.

9.930 Eircom's regulatory governance arrangements are overseen by ComReg in two principal ways.

9.931 First, in 2013 ComReg imposed an obligation on Eircom as an operator with SMP to produce a Statement of Compliance (‘**SoC**’) demonstrating how it ensures compliance with the non-discrimination obligation, more particularly by reference to the regulatory governance measures and arrangements put in place, in order to identify and manage risks of non-compliance. This was expanded in the 2018 Decision to cover all SMP obligations. Eircom uses its Regulatory Governance Model (‘**RGM**’) to develop and provide SoCs to ComReg. The RGM in turn relies on Eircom’s expertise and knowledge of its processes, systems and procedures to identify, manage and control the risks of non-compliance with its regulatory obligations.

9.932 Second, on 10 December 2018, ComReg and Eircom entered into a settlement of a number of High Court proceedings (the ‘**Settlement Agreement**’).[1438] As part of this Settlement Agreement, Eircom agreed to a set of commitments which, when fully implemented, were to result in the establishment and operation of an enhanced RGM in Eircom. These commitments include, *inter alia*, the establishment of an Independent Oversight Body (‘**IOB**’). The IOB is charged with, among other things, overseeing and assessing Eircom’s regulatory governance arrangements and publishing a report on an annual basis with an opinion regarding the implementation and effectiveness of Eircom’s RGM.

9.933 Following its review of the IOB’s first report published on 5 October 2021, ComReg noted that the IOB Report was wholly based on evidence provided by Eircom and that Eircom had not yet permitted the independence and effectiveness of these functions to be independently assured in a way that ComReg considers adequate. As such ComReg considered that the IOB was not in a position to adopt an opinion on the overall effectiveness of Eircom’s RGM and as a result, the IOB Report – while providing some information about aspects of Eircom’s RGM – did not provide ComReg with reason to place meaningful reliance on the effectiveness of Eircom’s RGM when ComReg is exercising its regulatory functions. The causes for ComReg’s views had not been addressed, or addressed in full, when the second IOB report was published 16 December 2022.[1439]

[1438] Settlement Agreement between Eircom and ComReg dated 10 December 2018.

[1439] ComReg 21/95, ComReg Statement on the IOB Opinion 2021.

9.934 Eircom suggested in its Submission that as the RGM mandated by the Settlement Agreement is still in place, having a RGM in this decision would be duplicative.[1440] Eircom further stated that *"ComReg has also failed to take into account the very detailed reporting on regulatory governance and compliance that eir is already providing to the Independent Oversight Board ('IOB')"*.[1441] ComReg has had regard to the role played by the IOB. However, as explained by ComReg in respect of the First IOB Report and recalled above, the approach followed by Eircom and the IOB in terms of the review of Eircom's governance arrangements did not provide ComReg with reason to place meaningful reliance on the effectiveness of Eircom's RGM when ComReg is exercising its regulatory functions, and this remains the case. The majority of the Respondents were of the view that the IOB was not going far enough in the role of overseeing Eircom's Regulatory Compliance; ComReg also notes that the legal footing for the IOB is of a contractual nature and in that regard it has a fixed term under the Settlement Agreement.

9.935 ComReg also notes that the legal footing for the IOB is of a contractual nature and that it has a fixed term under the Settlement Agreement. Eircom, under the terms of the Settlement Agreement is *"entitled to replace the IOB with a committee comprising some or all of the executive or non-executive directors to eir to have oversight of regulatory matters"*.[1442] The end of the IOB's term and any transition to a replacement, should Eircom choose to put one in place, is likely to occur shortly after the effective date of this Decision. Therefore, the IOB in its present form, and any criticisms raised by respondents in respect of the IOB are of negligible relevance within the overall period to which this Decision will apply.

9.936 In its Electronic Communications Strategy Statement 2023-2025,[1443] ComReg indicated that it continued to have concerns around the state of competition and the culture of compliance within Eircom in the presence of the enhanced RGM, and that it would continue to review the effectiveness of the RGM and Settlement Agreement and consider if more regulatory action is required.

[1440] Eircom Non-confidential Submission, paragraph 315.

[1441] Eircom Submission, paragraph 285.

[1442] Paragraph 16.3 of the Settlement Agreement between ComReg and Eircom, Data December 2018

[1443] Electronic Communications Strategy Statement 2023-2025, ComReg Document 23/24, April 2023 ('**Electronic Communications Strategy Statement**').

9.937 A key aspect in assessing Eircom's regulatory governance arrangements and whether additional measures are required in this respect, is to understand in respect of WLA products available to Access Seekers, whether they are effective in terms of facilitating effective competition and establishing that there is a level playing field for all users, including how Eircom supplies WLA products which consume upstream PIA products to itself and Access Seekers.

9.938 In light of the above, ComReg remains of the view that Eircom should be required to ensure that it has in place effective regulatory governance arrangements ensuring compliance with its obligations of access, non-discrimination, transparency, accounting separation, cost accounting and price control including as regards its arrangements, and the implementation of those arrangements, with FNI. ComReg further requires that this obligation be further specified for the time being by reference to a requirement to prepare and provide to ComReg, an SoC, as further described below. ComReg remains of the view that this is the least intrusive measure which it may impose on Eircom at this point in time. However, Eircom's obligations may be respecified or complemented by further requirements, including non-standard remedies where and if justified, depending on the outcome of ComReg's review of the effectiveness of Eircom's RGM as referred to in the Electronic Communications Strategy Statement. This will include consideration of the effectiveness of Eircom's WLA products in facilitating effective competition and how competition has developed to date, and the potential impact of the divestment of certain inputs used by Eircom in its supply of WLA in FNI and associated governance arrangements within the Eircom Group in this respect. In light of the fact that Regulation 15 of Framework Regulations has been triggered, ComReg has an obligation to assess the impact of decision making by FNI and the associated incentives on the provision of WLA by Eircom.

9.939 ComReg remains satisfied with the position as set out in this Final Decision and will continue to review Eircom's compliance with its regulatory obligations and the role of regulatory governance.

9.940 In its Submission, Eircom objected to an obligation to produce an SoC on a number of grounds. Eircom noted that such an obligation was not provided under ECC Regulations and that a SoC requirement was disproportionate having regard to existing disputes and investigative powers. Eircom also disagreed that the FNI transaction had triggered Regulation 15 or had any relevance to the imposition of a SoC obligation and was of the view that, *"it is not proportionate or justified to suggest as ComReg does that the FNI requires additional obligations beyond those provided for under the ECC Regulations. The FNI transaction involved the re-organisation of shareholding within Eircom Limited – no assets have left the Eircom Group"*.[1444]

9.941 However, ComReg notes that Eircom has been subject to a requirement to produce SoCs since 2013 and its suggestion that, "While ComReg today receives a statement of compliance under the 2028 Decision and 2020 WHQA decision it is important to highlight that eir conceded to those obligations in light of the Settlement Agreement", is not accepted. The requirement to produce a SoC in the 2018 Decision or the 2020 WHQA Decision are not linked in any way to the existence of the Settlement Agreement. Given that the Settlement Agreement remains in place, it is not clear the relevance of Eircom's point.

9.942 ComReg in this regard is satisfied that there is a legal basis for the requirement that Eircom has in place effective regulatory governance arrangements ensuring compliance with its SMP obligations and for that purpose, that Eircom produce a SoC, and that there is adequate and sufficient justification for same. At a fundamental level the requirement for a SoC is anchored in Eircom's obligation to provide access transparently in a non-discriminatory manner and in accordance with a price control, and the monitoring of same. It is designed, not for ComReg to *"substitute its own view of what constitutes 'adequate' risk consideration for that of eir"*[1445] as Eircom contends, but rather to understand the processes that Eircom has put in place, and see their workings in practice, to deliver transparently non-discriminatory access in accordance with the price control, including how decisions are made in that respect. It is no more than a corollary of the substantive SMP obligations imposed on Eircom.

9.943 ComReg notes further in this regard that under Regulation 105(1) of the ECC Regulations, it is obliged to monitor and supervise compliance and that under Regulation 105(2), it may require an SMP operator to provide "*all the information that [ComReg] considers necessary to verify compliance*".

[1444] Eircom Submission, paragraph 282.

[1445] Eircom Submission, paragraph 290.

9.944 ComReg maintains that the FNI transaction is relevant to the manner in which Eircom approaches the discharge of its regulatory obligations. Despite Eircom Group retaining the majority share of FNI and as such the physical infrastructure upon which the WLA products are provided remain under Eircom control, the transaction added to the complexity of interactions. ComReg is obliged to consider the implications of the transaction and therefore the requirement for Eircom to maintain a SoC is fully reasoned and proportionate, to provide transparency and assurance on the regulatory governance in place to ensure its compliance with its obligations.

9.945 Similarly, as stated in the ComReg Electronic Communications Strategy Statement 2023-2025, ComReg will continue to review and monitor the effectiveness of the RGM and Settlement Agreement and consider if more regulatory action is required, following consultation where required.

Statement of Compliance Remedies

9.946 Eircom is required to provide, and keep up to date, a SoC that details and explains its risk assessment and control and governance measures.

9.947 The function of the SoC is to require Eircom to demonstrate how it ensures compliance with the regulatory obligations imposed on it in the Commercial NG WLA Market. The SoC obligation requires Eircom to explain the regulatory governance measures and arrangements that it has put in place in order to identify and manage risks of non-compliance with its SMP obligations, thereby providing reasonable assurances to ComReg that Eircom effectively manages risks of non-compliance in the Commercial NG WLA Market. As noted by VMI in its Submission, *"transparency in relation to compliance may be a useful tool to drive improvement"*.[1446]

Information to be provided in the SoC

9.948 The implementation of effective regulatory governance structures and arrangements by Eircom requires the identification and management of risks of non-compliance with Eircom's regulatory obligations in the Commercial NG WLA Market, and in turn transparency as regards Eircom's approach to risk identification and the development of controls including an explanation of the scope and output of the risk review, the processes reviewed, the material considered and how Eircom employed subject matter experts in the risk analysis and control development processes.

[1446] VMI Submission, p.35.

9.949 This requires assessments to be carried out by Eircom of, *inter alia*, systems, processes and activities that have relevance for its compliance with all of its regulatory obligations in the Commercial NG WLA Market in order to determine where and how regulatory risk might arise. For example, the business processes and associated systems that underpin the development of WLA products or provisioning of WLA products and services or service assurance may give rise to regulatory risk. A structured and systematic approach to risk assessment is required in order to identify potential risks of non-compliance. A similar approach is necessary for the effective design and operation of controls in order to manage the identified risks of non-compliance.

9.950 It also requires that the output of the risk analysis is documented adequately, including a description of the potential regulatory issues which could give rise to regulatory risk, together with an outline of the consideration given to potential regulatory issues and the reasons why the conclusion that issues identified do or do not give rise to regulatory risk, as the case may be.

9.951 Eircom's risk analysis process, which it currently applies in the WLA, WCA and WHQA Markets is structured to produce the information outlined above and the output from each risk assessment is stored by Eircom. Therefore, ComReg considers that this requirement, with respect to the Commercial NG WLA Market, will not result in an undue additional burden on Eircom. Moreover, the provision of this information to ComReg has the potential to increase confidence in the scope and comprehensiveness of Eircom's regulatory governance and oversight in the Commercial NG WLA Market.

9.952 This information is required in order for ComReg to understand Eircom's approach to risk management and the extent to which it has fully evaluated risks and has developed, and is operating, controls. This information demonstrates the extent to which identified risks of non-compliance with obligations are managed by Eircom in a manner that provides reasonable assurances to ComReg with respect to Eircom's compliance with its regulatory obligations in the Commercial NG WLA Market. It also provides information which supports the directors' confirmation that, in their opinion, the governance arrangements provide reasonable assurance that Eircom is in compliance with its regulatory obligations in the Commercial NG WLA Market.

Activities particularly relevant to the WLA Market

9.953 ComReg has identified categories of activities which it considers are particularly relevant to the delivery and availability of regulated wholesale products and services in the Commercial NG WLA Market. ComReg considers that non-compliance by Eircom with regulatory obligations associated with these activities has the potential to have a significant impact on Access Seekers. Effective regulatory governance in general, including with respect to these activities, will assist Eircom in being compliant with its regulatory obligations resulting in benefits to competition and, ultimately, end users.

9.954 For the avoidance of doubt, these are not necessarily the only categories or areas where the SoC obligation requires Eircom to provide information on the implementation and operation of regulatory governance. It is reasonable to expect that appropriate and effective governance and oversight of the management of Confidential Regulated Information[1447] as required by Eircom's regulatory obligations in the Commercial NG WLA Market will apply throughout Eircom.

9.955 The SoC obligation is required with respect to all of Eircom's activities and processes i.e. all areas where Eircom's regulatory obligations apply in the Commercial NG WLA Market. ComReg expects that Eircom has the knowledge and expertise to make a determination as to the scope, extent and potential impact of its activities on its compliance with its regulatory obligations in the Commercial NG WLA Market and should address the requirements of the SoC obligation accordingly, in a comprehensive manner.

9.956 However, due to their significance and relevance, the consideration given to the management of regulatory risk arising from Eircom's activities, processes and systems associated with these categories should be explicitly included in the SoC obligations:

(a) Development of WLA products and services;

(b) Provisioning and service assurance;

(c) Eircom's investment decisions; and

(d) Management of Confidential Regulated Information.

[1447] Confidential Regulated Information ('**CRI**') means information relating to Regulated Access Products (RAPs) over and above that which is currently in the public domain. This includes Confidential Wholesale Customer Information. Confidential Wholesale Customer Information means confidential or commercially sensitive information provided to the Wholesale Function by a wholesale customer relating to RAPs.

9.957 The SoC must be signed by a person of appropriate authority within Eircom, such that assurances can be provided to ComReg that regulatory governance and oversight is afforded the necessary oversight and attention by Eircom.

9.958 Furthermore, the signatory must be a person within Eircom who is sufficiently independent from day-to-day operational activity and decision-making, in relation to the development, and supply of wholesale regulated products and services, in order to be able to objectively confirm Eircom's compliance with its regulatory obligations.

9.959 The SoC should be signed by a director or directors of Eircom on behalf of the Board of Directors of Eircom Limited and should include a statement acknowledging the directors' responsibility in ensuring Eircom's compliance with its regulatory obligations and confirmation that the governance arrangements in place provide reasonable assurance that Eircom has taken all necessary steps to ensure compliance with its regulatory obligations in the Commercial NG WLA Market. ComReg considers that this requirement emphasises the importance of the SoC and reinforces the need for, and increases the likelihood of the establishment, by Eircom, of appropriately robust oversight and governance measures relating to the implementation and operation of regulatory governance in Eircom.

9.960 ComReg also notes that, under the Companies Act 2014, company directors have specific obligations with which they must comply relating to securing compliance with relevant obligations, defined in the Act, as follows:

> *"The directors of a company to which this section applies shall also include in their report under section 325 a statement—*
>
> *(a) acknowledging that they are responsible for securing the company's compliance with its relevant obligations; and*
>
> *(b) with respect to each of the things specified in subsection (3), confirming that the thing has been done or, if it has not been done, specifying the reasons why it has not been done.*
>
> *(3) The things mentioned in subsection (2)(b) are—*
>
> *(a) the drawing up of a statement (to be known, and in this Act referred to as, a "compliance policy statement") setting out the company's policies (that, in the directors' opinion, are appropriate to the company) respecting compliance by the company with its relevant obligations;*
>
> *(b) the putting in place of appropriate arrangements or structures that are, in the directors' opinion, designed to secure material compliance with the company's relevant obligations; and*
>
> *(c) the conducting of a review, during the financial year to which the report referred to in subsection (2) relates, of any arrangements or structures referred to in paragraph (b) that have been put in place."*

9.961 While the obligations referred to in the Companies Act 2014 do not include regulatory obligations, ComReg considers that it is relevant and instructive that the Companies Act 2014 requires directors to prepare a statement that, *inter alia*, confirms that, in their opinion, arrangements are designed and put in place that secure material compliance with the company's relevant obligations.

9.962 ComReg is aware from SoCs previously received from Eircom that various certification processes are in place as part of the RGM which Eircom has implemented to govern compliance with its regulatory obligations generally. ComReg understands that these include self-certification processes by Eircom managers certifying, for example, the operation of the governance processes in their areas of responsibility.

9.963 The SoC must therefore describe both the processes followed and the information relied upon by the signatory to the SoC who is required to certify the correct operation of the governance process. Similarly, the SoC must include a description and explanation of the governance measures implemented in Business Areas and activities which have relevance to Eircom's compliance with its regulatory obligations. ComReg also requires that the SoC includes a description and explanation of the processes followed by Eircom's management, in particular senior managers in relevant Business Areas,[1448] to assess the operation and effectiveness of the processes used to identify and mitigate risks of non-compliance.

9.964 As some form of verification process must currently be carried out by the SoC signatory and the staff who provide certification, it is reasonable that ComReg should understand and review the verification process followed by the SoC signatory and Eircom management in order for ComReg to reasonably satisfy itself that Eircom has adequate governance and oversight arrangements to ensure compliance with its regulatory obligations. Providing this information should not be an additional undue burden and is reasonable and proportionate.

[1448] Senior Managers in Business Areas where Eircom's regulatory obligations apply, for example Business Areas responsible for the provision and service assurance of Regulated Access Products.

9.965 A key element of Eircom's RGM is the analysis, management and documentation of the risk and control framework. This includes the production of data and information, some of which can be used when preparing a SoC. A significant portion of the information required for the SoC is generated as an output from the risk assessment processes executed as part of the implementation of Eircom's RGM. In the SoC obligation, Eircom is required to produce information on the output generated from the risk analysis and control development process. ComReg considers that the requirement to provide such information, relating to the execution of its risk analysis process in the SoC, will not result in an additional burden being placed on Eircom as this information is currently being generated by Eircom as it operates its RGM.

9.966 In its Submission, Eircom stated that,

> *"ComReg has not only indicated that it intends to substitute eir's risk management approach with its own and introduce "non-standard" remedies. eir considers this implies that ComReg intends to prescribe how eir manages its regulatory risks, a clear departure from the norm where such matters are the sole responsibility of the company."*[1449]

9.967 ComReg notes that the assessment of risk, and the operation of any controls, is solely the responsibility of a company. As such, Eircom is fully responsible for the assessment of risk, development of controls, and the operation of those controls. The SoC obligation seeks to provide transparency and assurance on the processes within Eircom in the identification and management of risks.

Timeframe for provision of the SoC to ComReg

9.968 Eircom is required to provide a SoC for the Commercial NG WLA Market within three months from the effective date of this Decision, where there is no offer of a new WLA product or change to an existing WLA product.

9.969 In the case of any offer of a new WLA product, service or facility, or a change to an existing WLA product, service or facility in the Commercial NG WLA Market, an updated SoC must be notified to ComReg under the notification requirements specified as part of Eircom's transparency obligation.

9.970 In all cases, the SoC and associated updates should include version control information including a revision history in order to allow the reader of the SoC to easily identify changes and when they were made.

[1449] Eircom Submission, paragraph 289.

Publication of the Statement of Compliance

9.971 ComReg has decided that the SoC should be published and made available to Access Seekers. The SoC is primarily concerned with the degree of governance Eircom applies to meeting its regulatory obligations in the Commercial NG WLA Market.

9.972 The provision of the SoC to Access Seekers gives greater visibility of the processes Eircom has put in place to ensure it complies with its regulatory obligations in the Commercial NG WLA Market. This has the potential to improve Access Seekers' confidence that they are receiving the same wholesale product or service that Eircom is supplying to its own downstream arm, for example, and this is beneficial to providing regulatory certainty, facilitating competition and, ultimately, greater choice to end users.

9.973 However, ComReg recognises that some information to be published as part of the SoC may be considered to be confidential by Eircom. In these circumstances, where a request is made by Eircom to ComReg not to publish aspects of the SoC, then ComReg will apply its rules relating to the publication of confidential information when assessing any such request.

9.974 Eircom should make the SoC available to Access Seekers on its publicly available wholesale website one month after provision of the SoC to ComReg, unless otherwise agreed by ComReg.

9.4 Conclusions on Remedies in the Commercial NG WLA Market

9.975 Having regard to the competition problems identified in Section 8 and the discussion in Section 9 above, ComReg imposes a range of access, non-discrimination, transparency, price control, cost accounting, accounting separation and SoC remedies on Eircom, with such obligations being imposed in the Commercial NG WLA Market.

10 Withdrawal of SMP and Remedies on the CG WLA Market, the IA NG WLA Market, and the Revised Regional WCA Market

10.1 In cases where Eircom has previously been designated as holding SMP on a specific market, and has therefore been subject to regulatory obligations, and where ComReg decides to withdraw such obligations, Regulation 49(7) of the ECC Regulations requires ComReg to give reasonable notice to any parties which it considers to be affected by the withdrawal of such obligations.

10.2 As noted in Section 6, ComReg finds that neither the CG WLA Market nor the IA NG WLA Market are susceptible to *ex ante* regulation. Similarly, as noted in Section 7, ComReg finds that the WCA market is no longer susceptible to *ex ante* regulation. In the 2023 Consultation ComReg sought views (at Question 9) on the proposed sunset periods. A number of Respondents raised issues in the context of the withdrawal of SMP and remedies that are more appropriately addressed in Sections 5, 6 and 7.

10.3 In respect of deregulation, Eircom argues[1450] in its Submission that ComReg has taken a forward-looking approach to CG WLA deregulation which it has not similarly applied to the Commercial NG WLA Market, based on the treatment of forecast network rollout. As set out in detail at paragraph 5.298 above, ComReg can only take into account network rollout based on sufficiently reliable deployment forecasts. In particular, ComReg is reliant on NOs to provide reliable network rollout forecasts. Eircom, SIRO, and VMI have all proven unable to furnish such data to ComReg beyond a very short time period, while NBI, pursuant to the NBP Contract, has provide ComReg with such data. Differences in NO forecast capability and reliability are reflected in ComReg's analysis.[1451]

[1450] Eircom Non-confidential Submission, paragraph 100.

[1451] As set out in greater detail, for example, at paragraphs 5.298 and A 12.67.

10.4 BT argues[1452] in its Submission that, following WCA deregulation, unless Eircom offers *"favourable terms"* (sic) or a commercial network backhaul solution to *"all or favourable operators"* (sic), then national reach by Access Seekers using WLA will no longer be viable. ComReg's position is that a range of wholesale inputs will continue to be available to Access Seekers following WCA deregulation which will facilitate continued delivery of retail services to end users.[1453]

10.5 ComReg's assessment is predicated on a number of factors, including a forward-looking assessment of the competitive constraints arising in those markets, principally due to the presence of wholesale NG broadband networks capable of delivering WLA and WCA to Access Seekers. In respect of WCA, the presence of such competitive constraints is assured, in an MGA, through upstream regulation in the Commercial NG WLA Market, and services to be supplied by NBI pursuant to the NBP Contract, in the IA NG WLA Market.

10.1 Withdrawal of remedies – sunset period

10.6 To facilitate an orderly transition to deregulation of the three markets described above, ComReg's view is that an overall 12-month sunset period is appropriate, starting from the effective date of this Decision. During this period, access to existing CG WLA, NG WLA (in the IA NG WLA Market) and WCA services will be maintained at prices no higher than prevailing prices. At the end of this 12-month sunset period, these access and pricing obligations will be withdrawn.

10.7 Apart from the aforementioned access and prevailing prices requirements, Eircom will not be required to meet other obligations (for example, in relation to transparency, non-discrimination etc.) during this 12-month sunset period.

10.8 A number of Respondents raised issues with the 12-month sunset period and argued that longer, shorter, or variable withdrawal periods were more appropriate. ComReg is not persuaded by these arguments.

[1452] BT Non-confidential Submission, p.2.

[1453] As set out in greater detail at Section 7 above at paragraphs 7.61 to 7.82.

10.9 Eircom argued in its Submission[1454] that the sunset period was too long and unjustified. In respect of deregulation of the WCA market, Eircom argued that, bearing in mind ComReg's obligations under Article 67(4) EECC to balance the need for a transition period with the obligation not to retain regulation for longer than necessary, it was not consistent to apply a 12-month sunset period to WCA when a six-month sunset period had been applied to WCA in both the 2018 Decision and the 2021 Mid-term Assessment.

10.10 As ComReg's assessment is forward-looking, ComReg notes that NBI rollout is ongoing, and the 12-month sunset period takes this into account. In particular, NBI rollout being sufficiently progressed within the 12-month sunset period is one reason supporting the deregulation of the relevant markets.

10.11 As Eircom notes, the 2018 Decision and the 2021 MTA both applied a six-month sunset period in respect of WCA only. A 12-month sunset period is, however, appropriate on this occasion, given that three markets are being deregulated, rather than just WCA, as was the case in 2018 and 2021. Access Seekers will likely need to engage in more planning and organising to manage transitions to new inputs across these three markets.

10.12 In respect of WLA, Eircom argues in its Submission that ComReg's justification is insufficient, and that the underlying assumption that Eircom would withdraw service following deregulation is not supported by its past behaviour in other deregulated markets.

10.13 The reasoning for a 12-month sunset period is not grounded in an assumption that Eircom will discontinue service, absent regulation. This assumption forms part of the MGA assessment, but it is not material to the appropriate length of the sunset period.

10.14 VMI argued[1455] in its Submission that it may be appropriate to allow longer, flexible sunset periods on a case-by-case basis, where, for example, backhaul is unavailable, or a longer period of time is necessary to protect end user interests, or to reconfigure complex telecommunications solutions for business end users which rely partially on a deregulated input.

10.15 ComReg is (partially) withdrawing the obligation on Eircom to provide WLA and fully withdrawing the obligation to provide WCA on a regulated basis. This does not mean Eircom will withdraw merchant market access to WLA and WCA altogether. Eircom is entitled to provide WLA and WCA on a commercial basis in the WCA Market, the CG WLA Market, and the IA NG WLA Market.

[1454] Eircom Non-confidential Submission, paragraphs 101 to 105.

[1455] VMI Non-confidential Submission, p.37.

10.16 ComReg notes that, during the sunset period, the onus is on Access Seekers to actively manage their customer relationships. In many cases, alternatives will be available, including via NBI.

10.17 Flexible sunset periods or *ad hoc* requests for extensions to the sunset period are likely to generate an additional assessment burden for ComReg and will fail to provide market certainty. ComReg also envisages the risk that, if some such requests were granted, this would incentivise Access Seekers to speculatively make additional requests to ComReg for extension periods, adding to the associated assessment burden, and also to uncertainty.

10.18 Sky, BT and ALTO argue in their respective Submissions that the sunset period should only be triggered once NG rollout reaches a specific threshold. Sky argues that remedies should only be withdrawn from the IA NG WLA Market once NBI rollout is 'sufficiently advanced', and suggests the same threshold in respect of NG rollout on the CG WLA Market.[1456] ALTO[1457] suggests that the sunset period on the CG WLA Market in the footprint of the IA should not commence until 80% of premises in an IA EA are passed by NBI, while BT suggests that this approach should apply in the IA in respect of both CG WLA and WCA.[1458]

10.19 The arguments advanced by Sky, BT, and ALTO suggest rolling premises-by-premises deregulation at Modified EA level as NG rollout progresses. Across the WCA, CG WLA, and IA NG WLA Markets, ComReg has identified that Eircom does not have SMP. In withdrawing regulatory obligations ComReg seeks to provide certainty to stakeholders in accordance with the obligations placed on it by the EECC to provide regulatory predictability.[1459]

10.20 Rolling deregulation fails to provide that certainty, particularly where there are short lead times between network rollout and notice to Access Seekers of Modified EA deregulation. ComReg considers that a piecemeal and uncertain approach to deregulation is unsatisfactory relative to ComReg's preferred approach, particularly where it has identified that no undertaking has SMP.

10.21 During the 12-month sunset period, Eircom is not obliged to meet new requests for access to CG WLA, NG WLA or WCA orders in the CG WLA Market, the IA NG WLA Market, and the Revised Regional WCA Market respectively, as appropriate. It is, of course, open to Eircom to do so on a commercial basis.

[1456] Sky Non-confidential Submission, p.7.

[1457] ALTO Submission, p.9.

[1458] BT Non-confidential Submission, pp.9-10.

[1459] As set out at recitals 23 and 28 thereof.

10.22 ComReg considers that this 12-month sunset period is necessary in order to facilitate an orderly transition to deregulation, including noting that:

(a) Access Seekers may need to obtain backhaul and interconnect to new aggregation nodes on Eircom's network in order to facilitate their purchases of NG WLA at new network access points;

(b) Access Seekers may need to obtain backhaul and interconnect to new aggregation nodes on SIRO's and/or NBI's network in order to facilitate their purchases of NG WLA at new network access points; and

(c) Where LLU (CG WLA) is being used to provide retail services to business users, sufficient time is likely required to ensure continuity of service provision and/or the exploration of alternatives.

10.23 For the avoidance of doubt, and to address a concern raised by VMI in its Submission,[1460] ComReg clarifies that, during the sunset period Eircom will continue to be obliged, pursuant to its access obligations, to carry out repairs in a timely fashion in accordance with the relevant SLAs, and to pay Access Seekers SLA credits.

10.24 Similarly, and to address another concern raised by VMI in its Submission,[1461] ComReg will actively monitor markets following deregulation, as set out at paragraph 11.75 below. Where the forward-looking conditions envisaged in this Decision do not materialise, such that there is sufficient evidence that suggests deregulated markets are not effectively competitive, and are not tending towards effective competition, ComReg reserves the right, where the evidence warrants, to re-examine the need for intervention in these markets.

10.25 Finally, in their Submissions, a number of Respondents made arguments in respect of the sunset periods which are more appropriately addressed in other sections of this Decision, or which fall outside the scope of the WLA/WCA market review.

[1460] VMI Non-confidential Submission, p.37.

[1461] VMI Non-confidential Submission, p.8.

10.26 VMI queried in its Submission what would happen where deregulated inputs are used to supply critical national infrastructure.[1462] ComReg does not have the capacity to differentiate the withdrawal of remedies to individual sites, and the protection of critical national infrastructure is set out in the Strategic Emergency Management guidelines published by the Department of Defence Office of Emergency Planning.[1463] This issue therefore falls out of scope of this market review.

10.27 VMI[1464] and Vodafone[1465] both argue in their respective Submissions that, in withdrawing remedies on the CG WLA Market, ComReg should protect the interests of end users, particularly vulnerable end users, reliant on upstream CG WLA inputs. ComReg cannot, as part of the WLA/WCA Market Review, impose remedies on a market (the downstream retail broadband market) which is not the subject of that review.

10.28 A number of Respondents argue that other aspects of ComReg's analysis such as the market definition exercise, the competition assessment, or the decision to withdraw remedies were incorrect and that, as a result, the decision to impose a sunset period is based on flawed prior reasoning. These Submissions are therefore grounded in the argument that the sunset periods follow from purported errors elsewhere in ComReg's reasoning, and are more appropriately addressed in the relevant section of this Decision.

10.29 Having regard to the above, ComReg accordingly withdraws existing regulatory obligations on Eircom, given its finding that the CG WLA Market, the IA NG WLA Market, and the Revised Regional WCA Market are not susceptible to *ex ante* regulation. In this respect, existing obligations, other than as set out above, are withdrawn on the date at which this Decision takes effect, subject to the 12-month sunset period described above.

[1462] VMI Non-confidential Submission, p.36.

[1463] https://www.gov.ie/en/publication/7ff6f-strategic-emergency-management-sem-national-structures-and-framework/

[1464] VMI Non-confidential Submission, p.14.

[1465] Vodafone Non-confidential Submission, p.27.

11 Regulatory Impact Assessment

11.1 Introduction

11.1 A Regulatory Impact Assessment ('**RIA**') is a detailed consideration of the likely effect of proposed new regulations - or changes to existing regulations - on SPs, end users, Access Seekers and other stakeholders. A RIA seeks to establish if such proposals are necessary and, in doing so, identifies any possible effects which might result from their implementation. A RIA identifies alternative regulatory options and, ultimately, establishes whether a proposed regulation is likely to have the desired impact. It is a structured approach to policy development, and analyses the impact of the proposed regulation, and other regulatory options, on different stakeholders. Appropriate use of a RIA should assure identification of the most effective regulatory option.

11.2 In carrying out a RIA, ComReg adheres to its RIA Guidelines[1466] and takes account of the Better Regulation programme.[1467] ComReg is also cognisant of international best practice, such as guidance from the EC and the Organisation for Economic Co-operation and Development ('**OECD**').

11.3 Section 13(1) of the Communications Regulation Act 2002 (as amended) requires ComReg to comply with Ministerial Policy Directions. Section 6 of the Ministerial Policy Direction to ComReg of 21 February 2003 requires that, prior to imposing regulatory obligations on Undertakings, ComReg shall conduct a RIA in accordance with international best practice, and otherwise in accordance with measures that may be adopted under the Better Regulation programme.

11.4 The ultimate aim of conducting a RIA is to ensure that the regulatory measures which ComReg intends to implement are appropriate, proportionate and justified. As decisions can vary in terms of their impact, if, after initial investigation, a decision appears to have relatively low impact, ComReg may carry out a lighter RIA in that respect.

11.5 ComReg's approach to carrying out a RIA follows five steps:

Step 1: Describe the policy issue and identify the objectives;

Step 2: Identify and describe the regulatory options;

[1466] ComReg Document 07/56a, ComReg, 'Guidelines on ComReg's Approach to Regulatory Impact Assessment', 10 August 2007 (the '**RIA Guidelines**').

[1467] Department of the Taoiseach, 'Regulating Better', January 2004. See also 'Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis', June 2009, (the '**Revised RIA Guidelines**'), available from: http://publicspendingcode.per.gov.ie/wp-content/uploads/2012/07/Revised_RIA_Guidelines_June_20091.pdf

Step 3: Determine the impact on stakeholders;

Step 4: Determine the impact on competition; and

Step 5: Assess the impacts on stakeholders and competition and choose the best regulatory option.

11.6 In the analysis set out below, ComReg carries out each of these steps in respect of the Commercial NG WLA Market.

11.7 The purpose of carrying out a RIA is to aid decision-making through identifying regulatory options and analysing the impact of those options in a structured manner. The Revised RIA Guidelines state that:

> *"RIA should be conducted at an early stage and before a decision to regulate has been taken."*[1468]

11.8 The EC, in its review of impact assessments, notes that:

> *"Impact assessments need to be conducted earlier in the policy development process so that alternative courses of action can be thoroughly examined before a proposal is tabled."*[1469]

11.9 In determining the impacts of the various regulatory options, best practice recognises that a full cost benefit analysis should be carried out where it would be proportionate to do so, or, in exceptional cases, where robust, detailed and independently verifiable data are available. Such a comprehensive review may be undertaken by ComReg when necessary and relevant.

11.10 A RIA should be carried out as early as possible in the assessment of potential regulatory options, where appropriate and feasible. The consideration of regulatory impacts facilitates the discussion of options, and a RIA should therefore be integrated into the overall analysis. This is the approach which ComReg follows, and this RIA should be read in conjunction with the overall Decision. This RIA takes into account Submissions to the 2023 Consultation, and any comments from the CCPC, EC and BEREC.

11.11 ComReg now conducts a RIA, having regard to the regulatory remedies set out in Section 9 above, along with consideration of other options. The following sections, along with the full analysis and discussion set out in this Decision represent a RIA. It sets out ComReg's assessment of the potential impact of regulatory obligations for the Commercial NG WLA Market, and the removal of regulatory obligations in the IA NG WLA Market, the CG WLA Market, and the Revised Regional WCA Market, as set out in Sections 9 and 10.

[1468] See paragraph 2.1 of the Revised RIA Guidelines.

[1469] Second strategic review of Better Regulation in the European Union, COM(2008)32, p.6.

11.12 In a number of instances, Respondents' Submissions on the RIA focussed on the content of remedies,[1470] or their removal.[1471] These issues have been appropriately addressed at Section 9 and Section 10 of this Decision respectively. Similarly, a number of Respondents' Submissions argued that the RIA is incorrect on the basis that the underlying market definition[1472] or competition assessment[1473] analysis is incorrect. These issues have been appropriately addressed at Section 5 and Section 6 respectively.

11.2 Principles in Selecting Remedies

11.13 In Sections 2 and 9, ComReg sets out the legislative basis for the imposition of remedies on Eircom, which is designated with SMP in the Commercial NG WLA Market. In choosing appropriate remedies, ComReg is obliged, pursuant to Regulation 50(5) of the ECC Regulations, to ensure that they are:

(a) Based on the nature of the problem identified;

(b) Proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Regulation Act 2002 (as amended), and Regulation 4 of the ECC Regulations; and

(c) Only imposed following consultation in accordance with Regulation 17 of the ECC Regulations.

11.14 Section 4(4) of the ECC Regulations sets out the objectives of ComReg in exercising its functions in relation to the provision of electronic communications networks, services and associated facilities, namely to:

(a) Promote connectivity and access to very high capacity networks;

(b) Promote competition;

(c) Contribute to the development of the internal market; and

(d) Promote the interests of users within the European Union.

[1470] BT Non-confidential Submission, at p.9.

[1471] BT Non-confidential Submission, at p.10 and SFG Non-confidential Submission, at p.30.

[1472] SFG Non-confidential Submission, at p.30.

[1473] Eircom Non-confidential Submission, at paragraph 106.

11.3 Commercial NG WLA Market Regulatory Impact Assessment

11.3.1 Step 1: Describe the Policy Issue and Identify the Objectives

11.15 The EC acknowledges the need for the imposition of *ex ante* regulatory obligations to mitigate the potentially anti-competitive exercise of market power by SMP SPs, and to ensure the development of effective competition within, and across, telecommunications markets. ComReg notes that the EC has established that the WLA market is susceptible to *ex ante* regulation and ComReg has carried out the preceding analysis in this Decision on that basis. However, since the WCA market is no longer included in the 2020 Recommendation, NRAs must decide on an individual basis if, based on national circumstances, WCA markets should continue to be regulated, by carrying out a 3CT. In the case of WCA, and pursuant to the MGA, ComReg carries out a 3CT in the first instance on the Modified Retail Broadband Market, assuming no WCA regulation. This ultimately forms the basis for the assessment set out in this Decision.

11.16 In this Decision, ComReg has set out its analysis and views on the Relevant WLA Markets and Relevant WCA Markets. In doing so, its policy objectives are to identify whether or not any SP operating on each of those Relevant Markets has SMP, whether competition concerns arise and, if so, how best to address these. This includes the following:

(a) In Section 5, ComReg sets out its views on the definitions of the Relevant WLA Markets, which provide the parameters within which competition is to be assessed;

(b) In Sections 6 and 7, ComReg carries out competition assessments and sets out its view that, in the absence of evidence of SMP, the IA NG WLA Market, the CG WLA Market, and the Revised Regional WCA Market are deemed to be effectively competitive. However, on the basis of a competition assessment which suggested the presence of SMP, the Commercial NG WLA Market is deemed not to be effectively competitive, thereby being susceptible to *ex ante* regulation. ComReg accordingly designates Eircom with SMP on the Commercial NG WLA Market;

(c) In Section 8, ComReg assesses the ability and incentives of Eircom to engage in various anti-competitive conducts to the ultimate detriment of competition and end users on the Commercial NG WLA Market; and

(d) In Section 9, ComReg address these identified competition problems and justifies proportionate remedies which it imposes on Eircom.

11.17 As noted in Section 9, in order to address identified competition problems, ComReg is required to impose on SMP SPs such of those obligations set out below, as it deems appropriate:

(a) Transparency;

(b) Non-Discrimination;

(c) Access;

(d) Price Control and Cost Accounting;

(e) Accounting Separation; and

(f) Statement of Compliance.

11.18 ComReg is required to impose at least one of the above obligations on those SPs which it designates with SMP.

11.19 Having regard to the competition problems identified in Section 8, ComReg's objectives are to mitigate the effects of SMP in the Commercial NG WLA Market, and any impacts on related markets. In so doing, ComReg aims to prevent the emergence of restrictions or distortions in competition among SPs, to the ultimate benefit of consumers. ComReg also seeks to provide regulatory certainty to SPs through the development of an effective and efficient forward-looking regulatory regime that serves to promote competition between SPs.

11.20 In pursuing these objectives, ComReg aims to influence the behaviour of Eircom, to mitigate the harmful effects that can potentially arise from the exercise of SMP in the Commercial NG WLA Market. In this regard, ComReg considers that the regulatory measures set out in Section 9 should address, in a proportionate way, the relevant competition problems and the consequent impacts on competition and consumers.

11.21 In Section 9, ComReg considered the impact of the specific nature of the regulatory obligations deemed necessary in the Commercial NG WLA Market and formed the view that the range of remedies specified is both appropriate and justified in light of the analysis set out in Section 8. The various regulatory options for the Commercial NG WLA Market are, in the context of the RIA, further considered below.

11.3.2 Step 2: Identify and Describe the Potential Regulatory Options

11.22 ComReg recognises that regulatory measures should be restricted to the minimum necessary to address the identified market failure in an effective, efficient and proportionate manner. A range of potential regulatory options is available to ComReg to address the potential competition problems that may arise in the Commercial NG WLA Market.

11.23 In this regard, regulation should be incremental, such that only those obligations which are necessary and proportionate to address the identified competition problems are imposed, as set out in Regulations 51 to 56, 58 and 62 of the ECC Regulations. For example, the lightest measure that can be imposed is the transparency obligation. Should this be insufficient to address competition problems on its own, ComReg may apply a non-discrimination obligation. If this is still not sufficient, ComReg may next consider the imposition of an access obligation, regulatory governance obligations, or price controls, with accounting separation obligations potentially required if price control obligations are imposed.

11.24 The questions of regulatory forbearance and the incremental imposition of one or more of the above obligations in the Commercial NG WLA Market are considered at paragraphs 11.25 to 11.49 below.

Forbearance from regulating the Commercial NG WLA Market

11.25 Forbearance is not, in ComReg's view, applicable in the case of the Commercial NG WLA Market. As set out in Section 6, the Commercial NG WLA Market is not effectively competitive, nor is it likely to become effectively competitive within the timeframe covered by this market review. Therefore, pursuant to Regulations 49(8) and 50(1) of the ECC Regulations ComReg is required to impose at least some level of regulation on Eircom arising from its SMP designation on the Commercial NG WLA Market.

11.26 In Section 8, ComReg sets out its view that, absent regulation, Eircom would likely have the ability and incentive to engage in a range of exploitative, exclusionary and leveraging behaviours. Absent the imposition of any remedies, it is ComReg's view that the Commercial NG WLA Market (and impacted adjacent markets) would not function effectively, ultimately to the detriment of downstream competition and end users.

11.27 By not imposing any regulatory obligations on an SP designated with SMP, ComReg would fail to discharge its statutory obligations. Where SMP has been identified, ComReg is obliged to impose at least some level of regulation on the SP designated with SMP. The question is, therefore, which regulatory obligations are appropriate. ComReg examines the regulatory options below.

NG WLA Transparency Obligations

11.28 ComReg's view, set out in Section 9, is that, due to the ability and incentives of Eircom to engage in the identified anti-competitive behaviours, transparency obligations[1474] are necessary to facilitate the development of effective downstream competition. ComReg has specified transparency remedies, including requirements to publish an ARO (see paragraphs 9.209 to 9.247 above) setting out contractual terms and conditions, and the technical basis upon which SPs can obtain access to WLA and associated facilities, along with requirements to publish WLA prices and provide advance notification of changes to them.

11.29 Eircom faces a minor level of incremental burden from the enhancements to the existing transparency obligations, which include:

(a) Minor amendments to the ARO,

(b) Minor amendments with respect to advance notification to ComReg and Access Seekers for changes to the ARO; and

(c) Minor updates to the content of Eircom's NGA rollout plan.

11.30 The requirements to publish information on product development and to publish Key Performance Indicators and performance with respect to Service Level Agreements are largely a continuation of extant obligations.

11.31 ComReg considers that Eircom should be required to comply with these transparency obligations in order to minimise information asymmetries and, therefore, facilitate timely and efficient access to WLA and associated facilities. It is envisaged that these obligations will promote effective competition in downstream markets.

11.32 As set out in Section 9, ComReg does not consider that transparency obligations in isolation will sufficiently address competition problems in the Commercial NG WLA Market. For example, transparency obligations do not directly address concerns regarding denial of access, discrimination (on price or non-price grounds), or excessive pricing.

[1474] The transparency remedies in the Commercial NG WLA Market are set out in paragraphs 9.200 to 9.287 above.

NG WLA Non-Discrimination Obligations

11.33 Having reviewed competition problems in the Commercial NG WLA Market in Section 8, ComReg sets out its view in Section 9 that non-discrimination obligations are necessary to ensure that Access Seekers being provided with NG WLA are treated in an equivalent manner.[1475] Eircom supplies WLA services, such as VUA and NG migrations to undertakings, and self-supply, such as NG broadband and migrations, to itself. ComReg maintains Eircom's non-discrimination obligation in respect of all undertakings including itself, its subsidiaries, affiliates or partners, on the same timescales, terms and conditions, including those related to prices and service levels, using the same systems and processes.

11.34 Such non-discrimination obligations are designed to promote pro-competitive behaviours in the Commercial NG WLA Market, by requiring the same treatment of Access Seekers (with the transparency obligation providing a means of observing that discrimination is not occurring). In view of potential issues of discriminatory treatment (on price or non-price terms), transparency obligations alone would not address such issues. Furthermore, a non-discrimination obligation itself (or coupled with transparency) does not specifically address what type of product or service should be offered, or how it should be priced.

11.35 Thus, the non-discrimination and transparency obligations alone are not considered by ComReg to be sufficiently adequate in providing a means of ensuring *ex ante* that Eircom provides access to WLA and associated facilities, and does so in a fair, reasonable and timely manner.

NG WLA Access Obligations

11.36 Having reviewed the competition problems identified in Section 8, ComReg sets out its view in Section 9 that access obligations are necessary to prevent the actual denial of, or effective refusal to provide, access to WLA and associated facilities.[1476] Transparency and non-discrimination obligations are necessary supporting obligations, but ComReg holds the view that such obligations alone are incapable of effectively addressing access issues.

11.37 Eircom faces a moderate level of incremental burden from the enhancements to the existing access obligations. These enhancements include:

[1475] Paragraphs 9.194 to 9.199 set out non-discrimination remedies in the Commercial NG WLA Market.

[1476] The access remedies in the Commercial NG WLA Market are outlined in paragraphs 9.17 to 9.193.

(a) Eircom to provide access to an Interconnection Sharing Service[1477] where the Guest Access Seeker can request Eircom to terminate its VUA traffic on a WEIL which is owned by the Host Access Seeker in circumstances where the Host Access Seeker agrees commercially to allow the Guest Access Seeker to use its WEIL(s) (as described at paragraphs 9.97 to 9.102 above);

(b) Eircom to provide access to 1:1 VLAN tagging on FTTP-based VUA service[1478] (as described at paragraphs 9.110 to 9.121 above);

(c) Eircom to provide access to an emulated FTTC-like service on the FTTP network from the time that FTTC is no longer available for connection or migration in an Exchange Area (as described at paragraphs 9.75 to 9.76 above);

(d) When assessing Access requests, Eircom must provide an engagement plan outlining when Access Seekers can input into discussions on requirements and when SLA negotiations will take place. Eircom must also provide a timeline for notification, publication and launch when providing the status update. This will give Access Seekers certainty with regard to the timeline for input to, and delivery of, Access requests, to the benefit of competition in downstream markets and ultimately, end users (see paragraphs 9.140 to 9.153 above);

(e) Eircom must provide information to Access Seekers when it plans to conduct a trial as part of a product development to allow Access Seekers the opportunity to participate in the trial (see paragraphs 9.154 to 9.155 above);

(f) If a new SLA or an amendment to an existing SLA is required due to an Access request for a new or amended product, service or associated facility, the SLA Negotiation Period will be scheduled to ensure that the SLA documentation is notified at the same time as the new or amended product documentation. This will result in the new or amended product, service or associated facility being launched with the necessary SLA in place (see paragraphs 9.156 to 9.178 above); and,

[1477] Currently Eircom provides access to the Interconnection Sharing Service in the MI WHQA Markets.

[1478] Currently Eircom provides access to the 1:1 VLAN tagging feature on the FTTC-based VUA service.

(g) Eircom must demonstrate how SLA service credits incentivise it in meeting the service levels committed to in the SLA, including itemising the relevant elements and value contributing to the service credit. Eircom must include this information in its published SLA documentation. This will give Access Seekers certainty regarding levels of service they may provide to end users with respect to downstream products relying on WLA inputs (see paragraphs 9.179 to 9.185 above).

11.38 ComReg's view is that obligations to provide WLA and access to associated facilities (including Interconnection Services necessary for effecting such access) are both proportionate and justified. Access obligations on Eircom will promote regulatory predictability and ensure that Access Seekers are treated in a consistent fashion.

11.39 The specified access obligations are fundamental requirements in the Commercial NG WLA Market and, taking account of the provisions of Regulation 55(1) of the ECC Regulations, the absence of such obligations would hinder the development of effectively competitive retail markets by restricting or distorting competition among SPs, to the detriment of end users.

11.40 These access obligations are therefore considered necessary and appropriate in achieving the objectives of Section 12 of the Communications Regulation Act 2002 (as amended) and Regulation 4 of the ECC Regulations, namely the promotion of competition, contributing to the development of the internal market, and protecting the interests of end users.[1479]

NG WLA Price Control and Cost Accounting Obligations

11.41 Having identified competition problems with respect to the Commercial NG WLA Market in Section 8, ComReg sets out its view in Section 9 that wholesale charges for access to WLA and associated facilities should be subject to both price control and cost accounting obligations, as set out in detail below.

11.42 Eircom is subject to price control obligations which vary to reflect ComReg's competition concerns and cost accounting with respect to access to WLA and associated facilities. ComReg's analysis in Section 8 and Section 9 indicates that Eircom has both the ability and incentive to engage in excessive pricing and exclusionary behaviours, absent regulation. For example, imposing a cost orientation obligation on associated facilities will provide regulatory certainty to all stakeholders, including both Access Seekers and end users. ComReg is maintaining a MST for Eircom's retail FTTP broadband offers to ensure replicability is possible for Eircom's retail competitors dependent on Eircom's FTTP VUA service.

[1479] These overarching objectives are mirrored at Recital 23 of the EECC.

11.43 Eircom faces a lighter regulatory burden from the price control and cost accounting obligations compared to the existing obligations. Of particular note are the following:

(a) The FTTP MST focusses on a reduced number of Eircom's FTTP broadband retail offers (bundles and standalone offers), focusing on 'flagship offers' rather than all offers, as is the case currently. ComReg ceases the current approach of also testing FTTC and CGA-based broadband retail offers;

(b) ComReg removes the MST between FTTP Bitstream and FTTP VUA, given the deregulation of WCA and the reduced incentive for Eircom to margin squeeze in the presence of the FTTP MST;

(c) ComReg maintains pricing flexibility for FTTP VUA rental;

(d) ComReg's view is that a cost orientation obligation for FTTC VUA can be discharged using a price continuity approach that involves, taking as a starting point the existing price from the BU LRAIC+ models (€19.12, from 1 July 2023), with the FTTC VUA price allowed to increase in future by no more than inflation (CPI-0%);

(e) An emulated FTTC-like service on the FTTP network is necessary in the event of FTTC withdrawal, with the same price to be charged for both FTTC VUA and the emulated FTTC-like service on the FTTP network. As with FTTC VUA, the price acts as an anchor to constrain the risk of excessive prices for FTTP VUA rental. Introducing the emulated FTTC-like service in the event of FTTC withdrawal maintains the anchor price constraint on Eircom pricing of FTTP VUA rental;

(f) ComReg is also relaxing the ban on wholesale promotions and discounts for FTTP VUA. To protect competition ComReg will follow a principles-based case-by-case assessment of any wholesale promotions and discounts so as to limit Eircom as the SMP SP in frustrating market entry or expansion by competing networks;

(g) ComReg is capping FTTP connections and migrations charges at €100. Eircom is obliged to recover any connection costs not recovered through once-off connection/migration charges from ongoing line rental charge; and

(h) ComReg is continuing to impose rules related to the price for FTTC VUA and the price floor for FTTP VUA rental, with mechanisms for any exceptional circumstances where Eircom seeks to lower the FTTC VUA price / FTTP VUA price floor, subject to ComReg approval.

11.44 If specific price control obligations are to be meaningful, it is necessary to have a clear and comprehensive understanding of the costs associated with the provision of WLA by Eircom. ComReg continues to impose a cost accounting obligation on Eircom, having regard to its integrated position across several upstream and downstream markets and, in particular, noting its SMP designation in the Commercial NG WLA Market.

NG WLA Accounting Separation Obligations

11.45 ComReg sets out its view in Section 9 that the imposition of an accounting separation obligation on Eircom would be proportionate and justified to mitigate the potential competition problems discussed in sub-section 8.46.

11.46 As noted in Section 9, in general, the purpose of an accounting separation obligation is to provide more detailed information than that which can be derived from the statutory financial statements of SPs designated with SMP, with the objective of reflecting, as closely as possible, the performance of those parts of the SP's business, were it to operate on a standalone basis. In the case of vertically-integrated SPs, accounting separation obligations can support non-discrimination obligations and prevent unfair cross-subsidies to other services.

11.47 In Section 8, ComReg identifies potential competition problems associated with possible price-related leveraging to be particularly pertinent in the case of Eircom, which highlights the importance of continuing to ensure a transparent and effective mechanism of accounting separation, which was previously imposed under the 2018 Decision. In respect of the Commercial NG WLA Market, the main objective of accounting separation is to provide sufficient visibility over the allocation of costs across WLA products, services and associated facilities, and other horizontally and vertically-related input services. ComReg therefore considers it proportionate and justified to continue to impose an obligation on Eircom to maintain separated accounts.

NG WLA Regulatory Governance Obligations

11.48 Section 8 sets out a series of competition problems and impacts which are likely to arise, absent regulation in the Commercial NG WLA Market, due to Eircom's SMP position. It is ComReg's view that, due to the ability and incentives of Eircom to engage in identified anti-competitive behaviours, which would ultimately have a negative impact on competition in downstream and/or adjacent markets, a regulatory governance obligation is both proportionate and justified, having regard to the need to ensure effective monitoring and enforcement of all regulatory obligations placed on Eircom.

11.49 It is ComReg's view that this obligation will ensure Eircom's adherence with each of the other remedies set out in Section 9, thereby facilitating the achievement of the overall objectives described in paragraph 11.14, namely promoting competition, contributing to the development of the market, and protecting the interests of end users.

11.3.3 Step 3: Determine the Impacts on NG WLA Stakeholders

11.50 Given that ComReg is designating Eircom with SMP in the Commercial NG WLA Market, it is ComReg's view, as outlined in paragraphs 11.25 to 11.27 above, that there is no option of regulatory forbearance in this case. Regulatory forbearance is therefore discounted when considering the impact on stakeholders.

11.51 Having regard to the SMP designation in Section 6 (which requires ComReg to impose at least some level of regulation),[1480] as well as the review of competition problems and remedies in Sections 8 and 9, ComReg has, on an incremental basis, identified why a range of remedies are necessary, proportionate and justified, while discounting other remedies, as appropriate.

11.52 Having regard to the analysis and assessment of the Commercial NG WLA Market, ComReg sets out the four options it considers in terms of the bundles of regulatory obligations which could, in principle, be imposed on Eircom:

Option 1: Impose Transparency, Non-Discrimination, and Regulatory Governance obligations only;

Option 2: Impose Transparency, Non-Discrimination, Regulatory Governance and Access obligations;

Option 3: Impose Transparency, Non-Discrimination, Regulatory Governance, Access and Price Control & Cost Accounting obligations; or

Option 4: Impose Transparency, Non-Discrimination, Regulatory Governance, Access, Price Control & Cost Accounting, and Accounting Separation obligations.

11.53 Having set out the four potential options for regulation in the Commercial NG WLA Market, ComReg summarises in Table 83 to Table 86 below the likely impacts of each of the four options on stakeholders.

[1480] Pursuant to Regulations 49(8) and 50(1) of the ECC Regulations.

Table 83: Option 1 – Impose Transparency, Non-Discrimination, and Regulatory Governance Obligations

Impact on Eircom, as the SMP SP	Impact on Access Seekers	Impact on end users
Eircom would benefit from a reduced regulatory burden, compared to the 2018 Decision. With the introduction of a regulatory governance obligation, there would be a greater onus on Eircom to demonstrate compliance with the obligations imposed under the Decision. Eircom could, absent access obligation, refuse to provide NG WLA to Access Seekers, thereby restricting and/or distorting competition in downstream markets. Relatively low burden of compliance as VUA charges are published online as part of Open Eir's RIO obligation, enabling transparency for all relevant stakeholders. Eircom would, absent other obligations, have flexibility to price VUA above efficient cost and/or obstruct access by existing rivals and/or new entrants in downstream markets. Could facilitate extraction of excessive rents. Risk of disputes and legal challenges if price of VUA set above efficient cost. Eircom incentives to innovate and increase efficiency may be reduced where prices set above efficient cost are paid for by competitors and, in turn, by their end users.	Risk that, even though non-discrimination mandated in principle, there would be scope for exploitative and exclusionary practices such as excessive pricing which may, in practice, amount to discrimination. Effective denial of access and/or delaying tactics could *inter alia* also be invoked to extract excessive prices and/or raise rivals' costs. This could also contribute to raising entry barriers for newer or smaller retail broadband SPs. Negative impact on competition increases Eircom's retail broadband market share, further increasing the disparity in bargaining power between SPs. WLA prices, if set above efficient costs, could limit scope for broadband pricing innovation by downstream competitors. Regulatory certainty is reduced, given Eircom's freedom related to its wholesale pricing and access. Disputes over WLA prices or access could raise legal and regulatory costs for Access Seekers. Ineffective access to WLA (through exploitative or exclusionary pricing) could also raise barriers to entry and expansion for new entrants or existing participants.	Absent effective access and price control obligations, scope for VUA access to be undermined through *inter alia* excessive pricing, refusals to supply, delaying tactics, etc. contributing to reduced scope of retail broadband (limited interoperability or higher cost service) for end users. If downstream competition is distorted or investments discouraged through WLA prices which are above efficient cost, end users would potentially have reduced service choice, quality and innovation. Above-cost WLA could put upward pressure (or slow the rate of any decline) on downstream wholesale and/or retail prices. Above-cost WLA would also limit scope for wholesale and retail pricing innovations, ultimately potentially depriving consumers of new and innovative bundles/packages involving fixed data (and other) services. Where WLA prices are set above efficient cost, this could put upward pressure on retail broadband prices. Higher wholesale prices would also limit scope for retail pricing innovations, potentially depriving end users of new and innovative retail bundles/ packages.

Eircom could engage in exclusionary behaviour by setting its retail prices too low which would then frustrate market entry/expansion of competitors. Increased risk of disputes and legal challenges involving Eircom WLA arising from ineffective transparency and other preventative measures to protect against non-discrimination.	Risk that there would be significant scope for access to be effectively undermined through practices such as excessive pricing or margin squeeze. A margin squeeze could be imposed between WLA and downstream services which would reinforce entry/expansion barriers in the Commercial NG WLA Market and related markets and potentially foreclose entry or investment by other SPs, including having regard to the fact that, ultimately, retail SPs look to compete on a national basis.	

Table 84: Option 2 – Impose Transparency, Non-Discrimination, Regulatory Governance, and Access Obligations

Impact on Eircom, as the SMP SP	Impact on Access Seekers	Impact on end users
Eircom would benefit from a reduced regulatory burden relative to 2018 Decision. The amendments to Eircom's existing regulatory governance obligations would place a greater onus on it to demonstrate compliance with the obligations imposed under this Decision. There would be increased flexibility for Eircom to use its SMP to engage in pricing conduct amounting to exploitative or leveraging behaviour and negatively influence developments at the retail broadband level, or in adjacent wholesale markets. Could also facilitate extraction of excessive rents from WLA, related markets, and end users.	While risk of impeding access to WLA may be eliminated, effective WLA may still be undermined through high or inefficient WLA pricing. High risk that, even though access mandated in principle, there would be significant scope for such access to be effectively undermined through excessive pricing. Where access is provided to downstream competitors on exploitative or exclusionary terms, this could significantly disadvantage existing rivals and distort, restrict or eliminate existing competition in downstream or adjacent markets. Pricing above efficient cost would raise financial barriers to	If downstream competition is distorted or investments discouraged due to ineffective WLA, end users could have reduced retail broadband choice, quality and innovation. Above-cost WLA prices could put upward pressure (or slow the rate of any decline) on retail broadband prices. Above-cost prices would, in the short run, also limit scope for retail broadband pricing innovations, thereby potentially depriving consumers of new and innovative bundles/packages. Risk that, even though WLA access is mandated in principle, there would be significant scope for it to be effectively

Eircom incentives to innovate and increase efficiency may be reduced if prices set above efficient cost are paid for by competitors and, in turn, by end users. Disputes could increase legal and regulatory costs faced by Eircom.	entry and expansion for smaller or newer entrants and existing participants in downstream or adjacent retail markets. A margin squeeze could be imposed between WLA and downstream services which would reinforce entry/ expansion barriers in the Commercial NG WLA Market and related markets and potentially foreclose entry or investment by other SPs, having regard to the fact that, ultimately, retail SPs look to compete on a national basis	undermined through such practices as excessive pricing or margin squeeze.

Table 85: Option 3 – Impose Access, Transparency, Non-Discrimination, Regulatory Governance, and Price Control & Cost Accounting Obligations

Impact on Eircom, as the SMP SP	Impact on Access Seekers	Impact on end users
As Eircom is currently subject to price control and cost accounting obligations, the incremental burden of such obligations is not likely to be significant. Eircom's regulatory burden under Option 3 would not be significantly less than under Option 4, as Eircom is already subject to accounting separation obligations in other SMP markets. Under Option 3, there would be increased flexibility for Eircom to obscure internal transfer prices and the real costs of WLA if no accounting separation obligation was imposed. There would thus be an increased opportunity for Eircom's non-discrimination and/or price control obligations to be undermined. Risk of disputes and legal challenges involving Eircom's WLA prices may be eased relative to Options 1 and 2 due to price control obligation. However, lack of accounting separation may generate uncertainty regarding Eircom compliance with non-discrimination and price control obligations, contributing to risk of disputes.	Regulating WLA prices at efficient cost would reinforce the effectiveness of the access, transparency and non-discrimination obligations, thus reducing risk of competitive distortions or restrictions (including foreclosure) in downstream retail broadband or adjacent markets, and potentially lowering barriers to entry / expansion for smaller SPs and existing participants. This would also contribute to reducing the impact of any inefficient financial transfers or cross subsidies from Access Seekers to Eircom and thereby contribute to level playing field between SPs. Regulating WLA prices at efficient cost could potentially provide greater scope for retail broadband pricing options (such as flat rate pricing or large inclusive bundles of minutes to fixed phone numbers) by Eircom's downstream rivals. Minimises risks that a margin squeeze could be imposed between WLA and downstream services reducing entry/expansion barriers in the Commercial NG WLA Market and related markets and encourages entry or investment by other SPs. Greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors, although lack of accounting separation obligations may render monitoring of potential exclusionary behaviour less transparent, further impacting on investment incentives for new entrants.	Reduced risk of competitive distortions or restrictions, a more level playing field in downstream and adjacent markets, and greater wholesale pricing certainty help facilitate retail price and service innovations (e.g. in terms of packages/bundles offered). Reduced risk of high WLA prices being passed through to end users in the form of higher prices, relative to Options 1 and 2 above. Potential for undetectable discriminatory behaviour due to lack of accounting separation may impact on downstream competition and investment with consequent negative implications in terms of price and service choice over time.

Table 86: Option 4 – Impose Access, Transparency, Non-Discrimination, Regulatory Governance, Price Control & Cost Accounting, and Accounting Separation Obligations

Impact on Eircom, as the SP with SMP	Impact on Access Seekers	Impact on end users
Existing regulatory burden on Eircom (per 2018 Decision) would remain. Risk of disputes and legal challenges involving Eircom's WLA prices would be eased relative to Options 1, 2 and 3.	General impacts associated with price control are as set out for Option 3 above. As set out for Option 3 above, greater consistency with EU guidance and other regulatory decisions would promote legal certainty and a more predictable environment for potential investors. Greater certainty that WLA prices would be set at efficient cost, complemented by greater visibility of internal transfers to support non-discrimination obligation, moderates risk of disputes relative to Options 1, 2 and 3.	Reduced risk of competitive distortions and restrictions, facilitating a more level playing field in downstream markets. Greater wholesale pricing certainty helps facilitate retail broadband price and service innovations (e.g. in terms of packages/bundles offered). Reduced risk of above-cost inefficient WLA prices being passed through to end users in form of higher prices relative to Options 1 and 2 above. Dynamic competition from SPs (facilitated by effective price control and appropriate preventative measures for discriminatory behaviour in respect of Eircom WLA) should facilitate ongoing delivery of price and service innovations, and choice to end users over time.

11.54 Eircom argued in its Submission that ComReg had failed to properly justify the need for the remedies on the Commercial NG WLA Market, and that the remedies are not proportionate, justified or the least intrusive way of addressing potential harm.[1481] Accordingly, Eircom considered that ComReg had failed to meet its legal obligations, and had also overstated the potential impact of Eircom distorting competition.[1482]

[1481] Eircom Non-confidential Submission, at paragraph 113.

[1482] Eircom Non-confidential Submission, at paragraphs 109 and 110.

11.55 ComReg is satisfied that it has met its legal obligations and has set out in detail at Section 9 above the justification for the imposition of the relevant remedies, and why those remedies are proportionate and appropriate. Throughout this Decision, ComReg has adhered to its RIA Guidelines, taken account of the Better Regulation programme, and is cognisant international best practice, such as guidance from the EC and the OECD. Furthermore, to ensure that the regulatory obligations imposed are appropriate, proportionate, and justified, ComReg has carried out a step-by step analysis of various sets of regulatory options in this RIA, analysing the impact of those options on stakeholders and competition, and identifying the most appropriate suite of remedies which it deemed least intrusive, whilst also being effective in addressing the competition problems set out in Section 8. ComReg clearly outlines in Table 83 to Table 86 why any lighter suite of remedies would fail to mitigate the risk of potential competitive harm which Eircom, as the SMP SP, may engage in on the Commercial NG WLA Market.

11.56 Eircom also argued that ComReg proposes to adopt a highly intrusive and wide-ranging set of remedies and that ComReg must demonstrate why the specific formulation of each proposed remedy is necessary, justified and proportionate, based in the market circumstances in a particular case. Eircom argued that ComReg has incorrectly relied on general or theoretical arguments made in the abstract, or ‘cut and paste’ justifications from other market reviews.[1483]

11.57 Additionally, Eircom argued that ComReg’s proposals included a number of ‘regulatory buffers’ which single it out for the imposition of extensive obligations and therefore prevent it from competing on the merits.[1484]

11.58 As set out at paragraph 11.20 above, ComReg aims to mitigate the potential harmful effects that can potentially arise from the exercise of SMP in the Commercial NG WLA Market. In light of this *ex ante* regulatory approach, ComReg has set out those potential competition problems in Section 8, which might arise as a result of SMP, and the proposed remedies to address these specific issues in Section 9 above.

11.59 As set out at Regulation 50(5) of the ECC Regulations, the obligation or obligations imposed must:

(a) be based on the nature of the problem identified by the Regulator in its market analysis, where appropriate taking into account the identification of transnational demand pursuant to Regulation 48,

[1483] Eircom Non-confidential Submission, at paragraphs 108 and 109.

[1484] Eircom Non-confidential Submission, at paragraph 112.

(b) be proportionate, having regard where possible, to the costs and benefits, and justified in the light of the objectives laid down in section 12 of the Act of 2002 and Regulation 4, and

(c) only be imposed following consultation in accordance with Regulations 17 and 101.

11.60 In respect of access remedies in particular, ComReg has justified the need for such remedies to the level of detail required of it in Section 9 above, having regard to the potential competition problems outlined in Section 8, these are sufficiently proportionate and justified, and in line with the objectives laid out in Section 12 of the Communications Regulations Act 2002 and Section 4 of the ECC Regulations.

11.61 ComReg has met its objectives in this respect at Sections 8 and 9 above. Having conducted this RIA, ComReg notes that while the suite of remedies imposed on Eircom has, in some cases, been recalibrated since the 2018 Decision, the overall regulatory burden on Eircom has not materially increased, having regard to the need to address identified competition problems. ComReg also notes the specific pricing remedies set out in Section 9 are lighter that those imposed under the 2018 Decision.

11.62 The competition problems outlined in Section 8 are those behaviours which ComReg has identified that Eircom has the ability to engage in, having regard to its position of having SMP on the Commercial NG WLA Market.

11.3.4 Step 4: Determine the Impacts on Competition in the provision of NG WLA

11.63 ComReg's view is, absent regulation, Eircom would have the ability and incentive to engage in exploitative and exclusionary behaviours which would impact on competition and consumers in the Commercial NG WLA Market. In Section 8, ComReg provided examples of potential competition problems and their impact on competition and consumers. ComReg has also highlighted its objectives in regulating the Commercial NG WLA Market, in particular, preventing the restriction or distortion of competition in downstream markets.

11.64 The imposition of appropriate *ex ante* remedies to address such competition problems was discussed and justified in Section 9, with each of the specific remedies designed to promote the development of effective competition. This approach will ultimately benefit SPs by allowing them to compete fairly at the retail broadband level.

11.3.5 Step 5: Assess Likely Impacts and Choose Best Option in respect of NG WLA

11.65 In its approach to remedies in this Decision, ComReg has taken full account of its obligations under Regulation 50(5) of the ECC Regulations, as well as its relevant objectives as set out under Section 12 of the Communications Regulation Act 2002 (as amended).

11.66 ComReg considers that, absent regulation, Eircom, as the SMP SP on the Commercial NG WLA Market, has the ability and incentive to engage in exploitative and exclusionary behaviours which would impact on competition and consumers. Section 8 provides examples of potential competition problems and their impact on competition and, ultimately, end users.

11.67 Based on its assessment above and throughout this Decision, and having considered the impacts on stakeholders and competition, including the impact on the development of competition within the internal market, it is ComReg's view that Option 4 represents the most justified, reasonable and proportionate approach to regulation of the Commercial NG WLA Market.

11.68 The imposition of appropriate *ex ante* remedies to address competition problems was discussed and justified in Section 9, and each of the specific remedies is designed to promote the development of effective competition, and to protect end users. ComReg applies a suite of remedies to Eircom. Accordingly, ComReg is of the view that the risk of competition problems and associated impacts resulting from Eircom's SMP position in the Commercial NG WLA Market should be minimised. This will ultimately be to the benefit of SPs and downstream retail broadband end users.

11.69 The regulatory obligations do not unduly discriminate against Eircom, in that the obligations address specific competition problems, and are proportionate, in that they are the least burdensome means of achieving this objective.

11.70 ComReg has met its transparency obligations by setting out the remedies which it imposes on Eircom, outlining the justification for the obligations, and issuing a detailed and reasoned public consultation on these matters.

11.4 IA NG WLA Market, CG WLA Market, and Revised Regional WCA Market Regulatory Impact Assessment

11.71 As noted in Sections 6 and 7, ComReg's view is that no undertaking is likely to have SMP on the IA NG WLA Market or the CG WLA Market, and that the Revised Regional WCA Market is likely to be sufficiently effectively competitive, even absent regulation. ComReg therefore considers that the IA NG WLA Market, the CG WLA Market, and the Revised Regional WCA Market are no longer susceptible to *ex ante* regulation, and regulation is no longer warranted on those markets.

11.72 On that basis, ComReg removes regulation from the CG WLA Market, the IA NG WLA Market and the Revised Regional WCA Market. Therefore, ComReg's regulatory options in each of these markets are limited to the timing of the withdrawal of existing obligations.

11.73 BT argued in its Submission that slower than expected network rollout in the footprint of the IA where WLA and WCA are deregulated could disadvantage competition, and that alternative approaches to the period for the consequential withdrawal of obligations should be considered.[1485] Similarly, SFG queried the proposal to withdraw remedies in the footprint of the IA and argued that, until such time as NBI is offering service, premises in the IA should not be deemed to be part of the IA NG WLA market.[1486] ComReg's assessment of the parameters of the relevant geographic market is set out in detail at Section 5 and Annex 12, while likely future network rollout is discussed at Section 6 above. Given that ComReg has concluded that there is no evidence of SMP on the WCA market, the CG WLA Market, or the IA NG WLA Market, ComReg is required to withdraw any remedies on those markets. ComReg's withdrawal period approach is set out at Section 10 above.

11.74 As set out in Section 10, in order to facilitate an orderly transition to deregulation of the three markets described above, ComReg's view is that an overall 12-month sunset period is appropriate, starting from the effective date of this Decision. During this period, access to existing CG WLA, NG WLA (in the IA NG WLA Market) and WCA services will be maintained at prices no higher than prevailing prices. At the end of this 12-month sunset period, these obligations will be withdrawn.

[1485] BT Non-confidential Submission, at p.10.

[1486] SFG Non-confidential Submission, at p.30.

11.75 This will allow Access Seekers sufficient time to make any necessary preparations for the new market environment arising from the deregulation process, thus preserving continuity in the supply of both wholesale and retail services (were Eircom to withdraw, or significantly alter, its VUA or Bitstream terms and conditions following deregulation).[1487] To ensure the protection of end user interests, ComReg will continue to monitor the effectiveness of competition on the CG WLA Market, the IA NG WLA Market, and the Revised Regional WCA Market, notwithstanding the removal of regulation. In this respect, ComReg reserves its right to re-examine competitive conditions on these markets and, if appropriate, to intervene accordingly.

11.76 From the effective date of this Decision, Eircom will no longer be obliged by means of regulation to meet new requests for access in the CG WLA Market, the IA NG WLA Market, or the Revised Regional WCA Market (although it is free to do so commercially). ComReg believes that this is appropriate, given that it would be illogical to maintain this requirement for a short period which, having expired, would then be subject to commercial negotiation. ComReg considers that regulatory certainty would be better preserved for all parties by not requiring access pursuant to regulation during the sunset period.

[1487] ComReg would not expect Eircom to significantly alter its terms and conditions in the presence of competition.

Annex 1 Decision Instrument

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Decision Instrument ("Decision Instrument") is made by the Commission for Communications Regulation ("ComReg"):

(i) Pursuant to and having had regard to Sections 10 and 12 of the Communications Regulation Act 2002 (as amended); Regulation 4 and Regulation 42 of the ECC Regulations;

(ii) Having taken the utmost account of the 2020 Recommendation, the Explanatory Note, the SMP Guidelines and the 2013 Recommendation;

(iii) Having regard to relevant BEREC guidance (including the BEREC Report on the impact of fixed-mobile substitution in market definition and the BEREC Guidance on the regulatory accounting approach to the economic replicability test);

(iv) Having, where applicable, pursuant to Section 13 of the Communications Regulation Act 2002 (as amended) complied with Ministerial Policy Directions;

(v) Having taken account of the submissions received from interested parties in response to ComReg Document No. 23/03 as part of the public consultation held pursuant to Regulation 12 of the Framework Regulations/Regulation 101 of the ECC Regulations;

(vi) Having consulted with the Competition and Consumer Protection Commission, further to Regulation 49 of the ECC Regulations;

(vii) Having notified the draft measure and the reasoning on which the measure is based to the European Commission, BEREC and the national regulatory authorities in other EU Member States pursuant to Article 32 of the Code/Regulation 17 of the ECC Regulations and having taken utmost account of any comments made by them;

(viii) Having had regard to the provisions contained in the European Electronic Communications Code;

(ix) Pursuant to Regulations 45, 46, 49, 50, 51, 52, 53, 55, 56 and 104 of the ECC Regulations;

(x) Pursuant to Regulation 99 of the ECC Regulations; and

(xi) Having regard to the analysis and reasoning set out in ComReg XX/XX [*the draft Decision document number*].

1.2. This Decision Instrument shall where appropriate be construed consistently with ComReg XX/XX [*the draft Decision document number*]. For the avoidance of doubt, to the extent that there is any conflict between a decision instrument dated prior to the Effective Date (as defined in Section 2.1 of this Decision Instrument) and this Decision Instrument, this Decision Instrument shall prevail.

PART I - GENERAL PROVISIONS

2. DEFINITIONS

2.1. In this Decision Instrument, unless the context otherwise suggests:

"Access" has the same meaning as under Regulation 2 of the ECC Regulations;

"Access Path" means the connection from the NTU/ONT in the End User's premises to the Point of Handover;

"Access Seeker" means an Undertaking other than Eircom;

"Additional Financial Information" or "AFI" means the information defined in section 2.1 of the Decision Instrument annexed to ComReg Decision D08/10;

"Aggregation Node" means a network concentration point for Access Paths;

"Associated Facilities" has the same meaning as under Regulation 2 of the ECC Regulations;

"Average Customer Life" or ***"ACL"*** means for the purpose of the Margin Squeeze Test provided for in Section 14.12 the length of time a customer remains on average on a specific FTTP Retail Offering within the meaning of that section;

"Average Total Cost" or ***"ATC"*** means all costs incurred in the provision of a product or service including variable, fixed, common, and joint costs;

"BEREC" means the Body of European Regulators for Electronic Communications, as established pursuant to Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No. 1211/2009;

"Bottom Up Long Run Average Incremental Cost plus" or ***"BU-LRAIC+"*** means the methodology used to estimate average efficiently incurred directly attributable variable and fixed costs, including an appropriate apportionment of joint and common costs;

"Bundle" means a package of more than one retail product or retail service;

"*Co-Location*" means a service allowing an Access Seeker access to an Eircom premises including in particular an Eircom Exchange building for the purpose of hosting and allowing connection to an Access Seeker's ECN/ECS equipment, either directly or indirectly via a third party ;

"*Communications Regulation Act 2002*" means the Communications Regulation Act 2002 (No. 20 of 2002), as amended;

"*Competition and Consumer Protection Commission*" means the body established under section 9 of the Competition and Consumer Protection Act 2014;

"*ComReg*" means the Commission for Communications Regulation, established under Section 6 of the Communications Regulation Act 2002;

"*ComReg Decision D08/10*" means ComReg Document No. 10/67, entitled *"*Response to Consultation Document and Final Direction and Decision, Response to Consultation Document No. 09/75 and Final Direction and Decision: Accounting Separation and Cost Accounting Review of Eircom Limited*"*, dated 31 August 2010;

"*ComReg Decision D10/18*" means ComReg Document No. 18/94, entitled *"*Market Review - Wholesale Local Access (WLA) provided at a Fixed Location & Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products: Response to Consultation and Decision*"*, dated 19 November 2018;

"*ComReg Decision D11/18*" means ComReg Document No. 18/95 entitled *"*Pricing of wholesale broadband services – Wholesale Local Access (WLA) market and the Wholesale Central Access (WCA) markets: Response to Consultation Document 17/26 and Final Decision*"*, dated 19 November 2018;

"*ComReg Decision D12/18*" means ComReg Document No. 18/96 entitled *"*Response to Consultation and Decision on price control obligations relating to retail bundles – Further specification of the wholesale price control obligation not to cause a margin squeeze in the WLA, and WCA Markets*"*, dated 19 November 2018;

"*ComReg Decision D10/21*" means ComReg Document No. 21/120 entitled *"*Mid-term Assessment Regional Wholesale Central Access (WCA) Market) – Re-application of geographic assessment criteria set out in ComReg Decision D10/18 dated 25 November 2021;

"*ComReg Decision D11/21*" means ComReg Document No. 21/130 entitled *"*Regulated Wholesale Fixed Access Charges – Review of the Access Network Model*"*, dated 17 December 2021;

"*ComReg Decision D04/22*" means ComReg Document No. 22/49 entitled *"*Access Products and Services – Key Performance indicator (KPI) Metrics*"* dated 29 June 2022;

"ComReg Decision D09/23" means ComReg Document No. 23/102 entitled "Framework for the Migration from the Legacy Infrastructure to Modern Infrastructure";

"CPI" means the Consumer Price Index at the end of the last calendar year;

"Current Generation Wholesale Local Access" or **"CG WLA"** means Wholesale Local Access offered or provided exclusively over Eircom's copper access network infrastructure and its Associated Facilities;

"Decision Instrument" means this decision instrument;

"Director" has the same meaning as under Section 2 of the Companies Act 2014;

"Discount" means an offer or sale of a product, service or facility at less than its standard price, for example, a price reduction, including a volume related price reduction, a rebate, a reimbursement, a refund, a set-off and any other similar words or expressions;

"Distribution Point" or **"DP"** means the network element that provides for drop cables to premises to be joined with cables from an Exchange or intermediate network element;

"Effective Date" means the date set out in Section 21 of this Decision Instrument;

"Eircom" means Eircom Limited, a company incorporated in Jersey (Number 116389), registered as a Branch in Ireland (Number 907674), with an Irish registered Branch Office at 2022 Bianconi Avenue, Citywest Business Campus, Dublin 24, D24 HX03;

"Electronic Communications Network" or **"ECN"** has the same meaning as under Regulation 2 of the ECC Regulations;

"Electronic Communications Service" or **"ECS"** has the same meaning as under Regulation 2 of the ECC Regulations;

"End User" has the same meaning as under Regulation 2 of the ECC Regulations;

"European Electronic Communications Code" or the **"Code"** means Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code;

"European Union (Electronic Communications Code) Regulations 2022" or **"ECC Regulations"** means Statutory Instrument No. 444 of 2022;

"Ethernet" means a technology that supports data transfer between network Nodes at Layer 2 of the OSI reference model;

"*Exchange*" means an Eircom network premises or equivalent facility used to house network and associated equipment;

"*Exchange Area*" or ***"*EA*"*** means the geographic area served by a specific Exchange;

"*Exchange launched VUA*" means that the active equipment that is required to provide VUA is housed in an Eircom Exchange building or equivalent;

"*Explanatory Note*" means the European Commission 2020 Recommendation – Staff Working Document/Explanatory Note (dated 18 December 2020 SWD(2020) 337 final);

"*Fibre to the Cabinet*" or ***"*FTTC*"*** means an access network architecture where active equipment is housed in the street cabinet and for the purpose of this Decision Instrument also includes Exchange launched VUA;

"*Fibre to the Premises*" or ***"*FTTP*"*** means an access network architecture where fibre optic cable is used to connect the End User premises to the ODF in an Exchange or for the avoidance of doubt includes Fibre To The Home (*"***FTTH***"*);

"*FNI*" means Fibre Networks Ireland Limited, a company incorporated in Jersey (number 140179), registered as a Branch in Ireland (Number 909747), with a registered Branch Office at 2022 Bianconi Avenue, Citywest Business Campus, Dublin 24, D24 HX03;

"*Framework Regulations*" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011);

"*FTTC-based VUA*" means VUA that is based on FTTC and for the purpose of this Decision Instrument also includes Exchange Launched VUA

"*FTTP-based VUA*" means VUA that is based on FTTP;

"*Geographic Number Portability*" or ***"*GNP*"*** means the facility that allows an End User to retain his/her telephone number when changing or switching service provider and describes the process used for this when the number concerned is a geographic number;

"*Historical Cost Accounts*" or ***"*HCA*"*** means the historical cost accounts which Eircom is required to publish in accordance with ComReg Decision D08/10;

"*Intervention Area*" or ***"*IA*"*** means the geographic areas for State intervention for the National Broadband Plan comprising the premises and delivery points in respect of which NBI has contracted with the Minister to deliver high-speed broadband services under the NBI State Contract as more particularly set out in Schedule 1;

"Interconnection" has the same meaning as under Regulation 2 of the ECC Regulations;

"Key Performance Indicator(s)" or **"KPI(s)"** means a measure(s) of the standard(s) of product, service or facility provided by Eircom to an Undertaking and by Eircom to itself;

"Line Share" means the facility offered by Eircom to an Access Seeker for shared Access to the Local Loop where the Access Seeker has exclusive Access to the high frequency capacity only of the Local Loop;

"Local Access" means the physical infrastructure between the End User's premises and the relevant MPoP;

"Local Loop" means the twisted copper pair between an Exchange and an End User's premises;

"Local Loop Unbundling" or **"LLU"** means the facility offered by Eircom to an Access Seeker for exclusive Access to the Local Loop;

"MDF" stands for Main Distribution Frame;

"Metropolitan Point of Presence" or **"MPoP"** means the point of inter-connection between the access and core networks of an Undertaking;

"Migration" means the facility allowing an Access Seeker to change the upstream wholesale input it uses to supply a retail service for another upstream wholesale input whilst maintaining services to the End User, irrespective of whether or not the supplier at the retail level changes.

"Ministerial Policy Directions" means the policy directions made by Dermot Ahern TD, then Minister for Communications, Marine and Natural Resources, dated 21 February 2003 and 26 March 2004;

"NBP" stands for National Broadband Plan;

"NBP IA" means the geographic area comprising the premises set out in Schedule 1;

"NBI" means the Authorised Undertaking NBI Infrastructure Designated Activity Company, a company registered in Ireland with number 631656 whose registered office at the date of this Decision instrument is at 3009, Lake Drive, Citywest Business Campus, Citywest, Dublin 24, D24H6RR, Ireland;

"NBI State Contract" means the contract concluded between the Minister and NBI which was signed on 19 November 2019;

"Network Termination Unit" or **"NTU"** means the physical interface which provides the service demarcation or Point of Handover of the wholesale service within the customer premises;

"NGA" stands for Next Generation Access and refers to Access provided over wired access network technologies comprised of wholly or in part of optical elements and include without limitation Fibre to the Cabinet (*"***FTTC***"*) and Fibre to the Premises (*"***FTTP***"*);

"Next Generation Wholesale Local Access" or ***"Next Generation WLA"*** means Wholesale Local Access provided over NGA and its Associated Facilities;

"Node" means any location or concentration point in the access network (excluding termination points at End Users' premises) which houses equipment for the purpose of providing services to End Users;

"Non-Disclosure Agreement" means an agreement for protecting the disclosure of commercially sensitive, competition sensitive or confidential information and governing its use or reliance;

"ODF" stands for optical distribution frame;

"Optical Line Termination" or ***"OLT"*** means a network element in an optical distribution network that terminates the root of at least one such network and allows for network elements in that network to be interconnected by optical communications channels;

"ONT" or ***"Optical Network Terminal"*** means the device that terminates the fibre Access Path at the End User's premises;

"OSI" stands for open systems interconnection;

"OSS" stands for operational support systems;

"PIA Decision" means ComReg Decision DXX/YY, ComReg Document No. xx/xx, entitled "Physical Infrastructure Access Market Review";

"Point of Handover" means the physical point at which two networks are interconnected to allow traffic to pass between these networks and includes the MDF (in for copper networks), the ODF (for fibre) in the Exchange, and the WEIL at the MPoP;

"Pre-Qual Value" means the maximum data-rate attainable for an Access Path based on its electrical characteristics;

"Promotion" means an offer in respect of a product, service or facility which is available for a finite period of time and which entails a price reduction;

"Quarter" means a three month period (July to September, October to December, January to March or April to June) in a calendar year;

"RAB" means Regulated Asset Base;

"Ready for Order Date" means the earliest date from which orders for products or services may be placed on Eircom's OSS;

"*Regional WCA Market*" means the market as defined in Section 4 of the Decision Instrument contained in Appendix 21 of ComReg Decision D10/18;

"*Re-usable Assets*" means Civil Engineering Infrastructure that is used for the copper network which can be reused to accommodate an NGA network without further investment;

"*Revised Regional WCA Market*" means the Regional WCA Market as revised in section 4.2 of Annex 1 of ComReg Decision D10/21;

"*Revised Urban WCA Market*" means the Urban WCA Market as revised in Section 4.2 of Annex 1 of ComReg Decision D10/21;

"*Service Credit(s)*" means the amount of money owed by Eircom to an Access Seeker in circumstances where Eircom has failed to meet the service levels which Eircom commits to in its SLA, or on the occurrence of specified events or the application of criteria specified in the SLA;

"*Service Level Agreement(s)*" or ***"*SLA(s)*"*** means a legally binding contract between Eircom and an Access Seeker in relation to the service levels which Eircom commits to from time-to-time;

"*SLA Negotiation Period*" means the duration of time required by Eircom to close negotiations with Access Seekers and make a BAFO in respect of an amended or new SLA;

"*SMP Guidelines*" means the European Commission guidelines of 7 May 2018 on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (OJ C 159, 7.5.2018, p.1);

"*Sub-Loop Unbundling*" or ***"*SLU*"*** means the facility offered by Eircom to an Access Seeker for exclusive Access to the portion of the Local Loop between a street cabinet and the End User's premise;

"*Top-Down HCA*" means the methodology in which the HCA and network information of the regulated Undertaking are used as the starting point for calculating the costs of relevant services;

"*Undertaking*" has the same meaning as under Regulation 2 of the ECC Regulations;

"*Urban WCA Market*" means the market as defined in Section 4.2(i) of the Decision Instrument contained in Appendix 21 of ComReg Decision D10/18;

"*Virtual Unbundled Access*" or ***"*VUA*"*** means a Layer 2 product allowing Access Seekers to handover or interconnect aggregate End Users' telecommunications traffic at the MPoP and includes both FTTC-based VUA and FTTP-based VUA;

"WCA Markets" means the Revised Urban WCA Market and the Revised Regional WCA Market as described in ComReg Decision D10/21 and as updated from the Urban WCA Market and the Regional WCA Market as described in ComReg Decision D10/18;

"Wholesale Central Access" or **"WCA"** means wholesale central access provided at a fixed location for mass market products;

"Wholesale Local Access" or **"WLA"** means wholesale local access provided at a fixed location;

"WEIL" or **"Wholesale Ethernet Interconnection Link"** is the interconnection service for the handover of VUA-based End User traffic;

"2013 Recommendation" means the Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU).

"2020 Recommendation" means the European Commission Recommendation of 18 December 2020 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (C (2020) 8750).

3. SCOPE AND APPLICATION

3.1. This Decision Instrument is binding upon Eircom and Eircom shall comply with it in all respects.

3.2. This Decision Instrument applies to Eircom and its subsidiaries and any related companies, and any Undertaking which owns or controls Eircom, and its successors, affiliates and assigns and all shall comply with it in all respects.

PART II – RELEVANT MARKET AND SMP OBLIGATIONS

4. MARKET DEFINITION

4.1. Upon its analysis of the provision of Wholesale Local Access provided at a fixed location in the State identified in the 2020 Recommendation and having regard to the relevant markets defined in, and regulated under, ComReg Decision D10/18, ComReg hereby defines the following markets:

(i) The retail Current Generation broadband market, consisting of Retail broadband provided over Eircom's copper-only network ("**Retail CG Broadband Market**");

(ii) The retail Next Generation broadband market consisting of the provision of broadband access over FTTC, FTTP and DOCSIS 3.1 CATV networks ("**Retail NG Broadband Market**");

(iii) the wholesale market for the provision of current generation WLA over copper-only networks in the State, including LLU, Line Share and SLU ("**National CG WLA Market**");

(iv) the wholesale market for the provision of next generation WLA over fibre optic cable networks, including FTTC-based VUA and FTTP-based VUA, in the NBP IA ("**IA NG WLA Market**"); and

(v) the wholesale market for the provision of next generation WLA over fibre optic cable networks, including FTTC-based and FTTP-based VUA outside the NBP IA ("**Commercial NG WLA Market**").

5. COMPETITION ASSESSMENT AND SMP DESIGNATION

5.1. ComReg hereby determines that, on a forward-looking basis, the Commercial NG WLA Market is not effectively competitive and designates Eircom as having SMP in the Commercial NG WLA Market.

5.2. ComReg hereby finds that on a forward-looking basis:

(i) the National CG WLA Market is effectively competitive absent its regulation and that no Undertaking has SMP in the National CG WLA Market;

(ii) the IA NG WLA Market is effectively competitive absent its regulation and no Undertaking has SMP in the IA NG WLA Market.

5.3. Having regard to the findings set out in Section 5.2(ii) and the designation of Eircom with SMP in the Commercial NG WLA Market, ComReg hereby finds that the Retail CG Broadband Market and the Retail NG Broadband are effectively competitive on a forward-looking basis in the absence of regulation save as regards the Commercial NG WLA Market and subject to Section 7.

5.4. Having regard to ComReg's finding in Section 5.2 and 5.3, Eircom's designation with SMP in the Revised Regional WCA Market pursuant to ComReg Decision D10/21 is hereby withdrawn.

6. REQUIREMENT FOR SMP OBLIGATIONS

6.1. In light of the competition issues arising in connection with Eircom's SMP in the Commercial NG WLA Market, ComReg finds that it is necessary to impose on Eircom in respect of the Commercial NG WLA Market, obligations of Access, non-discrimination, transparency, price control and accounting separation as set out in, and further specified as the case may be, in Sections 7 to 15.

7. ACCESS

Reasonable requests for Access

7.1. Eircom shall meet all reasonable requests for Wholesale Local Access including Associated Facilities.

7.2. For the purpose of Section 7.1, and in accordance with Section 7.4, all requests for Wholesale Local Access including Associated Facilities in the Commercial NG WLA Market shall be deemed reasonable, subject always to reasonable terms and conditions, and a request for Access may only be rejected, refused or otherwise denied for objective reasons such as where Access, as per the request, is not technically feasible or threatens network integrity and concerns in this respect may not be objectively mitigated satisfactorily by way of suitable terms and conditions.

7.3. Within one calendar month following the Effective Date, and monthly thereafter, Eircom shall provide ComReg with a list of all requests for Access to products, services and Associated Facilities in the Commercial NG WLA Market, whether by way of requests for the development of new products, services or Associated Facilities or amendments to existing products, services or Associated Facilities (including for the avoidance of doubt SLAs) which have been accepted or refused/declined within the month, together with the objective reasons for refusing/declining to meet any Access request.

Conditions for Access

7.4. Eircom shall at all times grant Access in a fair, reasonable, timely, transparent and non-discriminatory manner, as may be further specified by ComReg from time to time.

7.5. Without prejudice to the generality of Section 7.4, Eircom shall ensure that requirements imposed in respect of accreditation, audits and supervision are reasonable, proportionate and non-discriminatory by reference to the task concerned and the circumstances pertaining to the Access such that they do not result in unjustifiable impediments to the work of, or unwarranted costs for, Access Seekers. In particular, save where a material risk to national security, public safety or public health presents, or taking into account the nature of the work involved, there is a serious risk to the integrity of Eircom's network, Eircom shall ensure that any supervision requirements are applied in such a way that they do not have the effect of delaying or preventing Access Seekers from commencing or continuing work in the absence of an Eircom supervisor.

7.6. Eircom shall not amend the rules or technical standards governing the deployment of equipment in the Access Network or the topology of the Access network including without limitation changes to the Copper Loop Frequency Management Plan (*"***CLFMP***"*) without the prior written approval of ComReg which may be subject to terms and conditions.

Specified forms of Access

7.7. Without prejudice to the generality of Section 7.1, Eircom shall provide and grant Wholesale Local Access in the Commercial NG WLA Market by way of Virtual Unbundled Access (VUA) subject only to fair and reasonable terms and conditions and as may be directed by ComReg from time to time, and offer the following options:

(i) the facility to combine VUA with GNP;

(ii) a multicast facility allowing for the distribution within the Eircom network of a single copy of a designated data stream to multiple End Users (“**Multicast**”);

(iii) a traffic-based and circuit-based Class of Service (“**CoS**”) facility allowing for the autonomous treatment of traffic at a single router, switch or equivalent equipment using classes to group and manage traffic with common forwarding characteristics;

(iv) within seven (7) months of the Effective Date, having notified ComReg one month in advance, 1:1 Virtual Local Area Network (“**VLAN**”) tagging allowing an End User to tag specific traffic for the purpose of identifying specific traffic transported across an ECN; and

(v) technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services.

7.8. Without prejudice to the generality of Section 7.1, for the purpose of facilitating Wholesale Local Access, Eircom shall provide the following Associated Facilities:

7.8.1. Interconnection, including:-

(i) In-Building Handover (“**IBH**”) whereby connection from the Eircom network to the Access Seeker’s equipment takes place within the Exchange, or equivalent facility;

(ii) In-Span Handover (“**ISH**”) whereby connection from the Eircom network to the Access Seeker’s equipment takes place at the Access Seeker’s nominated Point of Handover, within the vicinity of the Exchange, or equivalent facility;

(iii) Customer-Sited Handover (“**CSH**”) whereby connection from the Eircom network to the Access Seeker’s equipment takes place at the Access Seeker’s premises and includes the installation of an Eircom NTU at the Access Seeker’s premises; and

(iv) Edge Node Handover (“**ENH**”) whereby connection from the Eircom network to the Access Seeker’s equipment takes place through a dedicated aggregation node interface;

and in each case, Eircom shall allow an Access Seeker to share the Interconnection facility it avails from Eircom with another Access Seeker (“**Interconnection Sharing**”).

7.8.2. Co-location including (without limitation):-

(i) Access to the Main Distribution Frame (“**MDF**”) and/or to the

Optical Distribution Frame (“**ODF**”), floor space, Alternating Current (“**AC**”) power, Direct Current (“**DC**”) power, roof access, cable trays and cable management systems as applicable at Exchanges;

(ii) Co-location Rack Interconnection allowing interconnection between two or more Access Seekers’ co-location equipment racks in the same Exchange;

(iii) Co-location Resource Sharing whereby an Access Seeker may accommodate its network access and/or transmission equipment in the co-located rack of another Access Seeker and share resources such as power supplies (AC or DC) and/or backhaul;

7.8.3. Migration including (without limitation) those between any forms of NGA VUA with and without GNP.

7.9. Without prejudice to the obligations set out in Sections 7.1 to 7.8, Eircom shall:-

(i) negotiate in good faith with Undertakings requesting Access;

(ii) not withdraw Access to facilities already granted without the prior approval of ComReg and in accordance with terms and conditions as may be determined by ComReg;

(iii) provide Access to OSS or similar software systems necessary to ensure fair competition in the provision of services (including those products, services and facilities described in this Section 7).

7.10. Without prejudice to the conditions that may be imposed by ComReg pursuant to Regulation 63 of the ECC Regulations, and without prejudice to the generality of the requirement set out in Section 7.9 (ii), Eircom may not in any Exchange Area in the Commercial NG WLA Market withdraw Access to FTTC-based VUA without the prior approval of ComReg and a condition to such approval shall be that Eircom makes available on its FTTP network in that Exchange Area, an FTTP-based VUA product designed to deliver at least an equivalent level of service typical of a FTTC-based VUA (“**Emulated FTTC-like FTTP VUA**”) from the time Eircom ceases to offer FTTC connections or migrations in any part of that Exchange Area.

7.11 For the avoidance of doubt, an Alternative Comparable Product within the meaning of ComReg Decision D09/23 [the CSO Decision] that replaces FTTC-based VUA is deemed by definition to fall within the Commercial NG WLA Market and is subject to all relevant obligations and requirements set out in this Decision Instrument.

8. NON-DISCRIMINATION

8.1. Eircom shall, as regards the provision of Access required in Section 7 of this Decision Instrument, ensure that it does not discriminate between Access Seekers, and between Access Seekers and itself, its subsidiaries, affiliates or partners, and to that effect shall more particularly:

(i) apply equivalent conditions in equivalent circumstances to other Undertakings requesting, or being provided with Access (or requesting or being provided with information in relation to such Access); and

(ii) provide Access and information in relation to such Access to all other Undertakings under the same conditions and of the same quality as Eircom provides to itself or to its subsidiaries, affiliates or partners, as further specified in Section 8.2.

8.2. For the purpose of Section 8.1(ii), Eircom shall provide Access and information to all Undertakings including itself, its subsidiaries, affiliates or partners, on the same timescales, terms and conditions, including those related to prices and service levels, using the same systems and processes.

9. TRANSPARENCY

9.1. Eircom shall ensure transparency in its provision of Access to Wholesale Local Access in the Commercial NG WLA Market.

Publication

9.2. Subject to Section 9.3, and save where otherwise specified by ComReg, a requirement to publish in this Decision Instrument shall be met where Eircom has made the information that it is required to publish, publicly available on its publicly available wholesale website.

9.3. Where the information which Eircom is required to publish under this Decision Instrument is of a confidential and/or commercially/competition sensitive nature, Eircom shall restrict access to such information using appropriate means, such as publication on a password-protected or restricted section of its website and subject to such reasonable terms and conditions as may be required in light of the nature of the information concerned, including a requirement to enter into a Non-Disclosure Agreement, and in accordance with any directions which ComReg may make.

ARO and other information to be published

9.4. Without prejudice to the generality of Section 9.1 Eircom shall publish, and keep available on its publicly available wholesale website, an Access Reference Offer (*"**ARO**"*) for Access in respect of the Commercial NG WLA Market. The ARO shall include at least the following:

(i) a description of the offer of contract for Access broken down into components according to market needs including without limitation relevant charges, terms of payment and billing procedures;

(ii) a description of any associated contractual or other terms and conditions for supply of Access and use including a description of each product offered ("**Product Description**") and an "**ARO Price List**" setting out applicable prices, for each of the products, services and Associated Facilities provided further to Section 7;

(iii) subject to Section 9.3 as the case may be, a description of technical characteristics and engineering or technical standards for network Access, including any technical usage restrictions and other security issues, to include accreditation and audit requirements, that are relevant to Access to products, services or Associated Facilities in the Commercial NG WLA Market;

(iv) SLAs;

(v) detailed description of operational processes, including in particular;

(a) pre-ordering, ordering, provisioning and service assurances processes;

(b) reason codes and their descriptions for declined orders;

(c) rules for the allocation of space when co-location space is limited;

(d) repair and maintenance processes;

(e) IT systems in such detail that Access Seekers may independently perform any development that they require to avail of Access; and

(f) interoperability tests.

For the avoidance of doubt, Eircom shall remove any schedules referring to Eircom's physical infrastructure at such time as the PIARO (as described in the PIA Decision) is published.

9.5. Eircom shall ensure that invoices for products, services and Associated Facilities within the Relevant Market are sufficiently disaggregated, detailed and clearly presented such that an Access Seeker availing of WLA can reconcile invoices to the ARO and ARO Price Lists.

9.6. Without prejudice to the generality of Section 9.1 and by way of further specification, Eircom shall publish and thereafter keep up to date, subject to Section 9.3 as the case may be, the following information:

(i) A full, true and accurate description of the product development process (the "**Product Development Process**") relied upon by Eircom to meet

Access requests including a description of all process steps and activities to include the points where Eircom decides to advance, delay or terminate the development of a product, service or Associated Facility (the "**Product Development Decision Points**") and any key stages in the analysis, design, development and launch, and the date on which the product, service or Associated Facility will be made available (together, "**Milestones**") from receipt of a written request for Access to launch;

(ii) The list of all proposed, planned and in progress developments, along with associated Milestone timelines and the priority level granted in respect of each Access request identified by their unique reference, a summary and a link to relevant documentation (hereafter, the "**Product Development Roadmap**"), which Eircom shall keep up to date on an ongoing basis;

(iii) The prioritisation process and the criteria used by Eircom in reaching decisions with respect to the prioritisation of product developments relative to each other ("**Prioritisation information**").

Amendments, Notification and publication timelines/Change control

9.7. Subject to Section 9.3 and Section 9.9, or where applicable, Section 9.10, Eircom shall keep the ARO, ARO Price List, Product Development Process, Product Development Roadmap and Prioritisation information up to date on its publicly available website.

9.8. Eircom shall ensure that the following, in searchable format, is available on its publicly available website;

(i) A current, unmarked, version of the ARO and ARO Price List;

(ii) A marked version of the ARO and ARO Price List tracking changes as against the previous version such that all changes are readily identifiable;

(iii) An ARO Change Matrix listing all of the amendments made to the ARO over time, including dates at which amendments were made;

(iv) An ARO Price List Change Matrix listing all of the amendments made to the ARO Price List including dates at which amendments were made; and

(v) A copy of historic versions of its ARO, ARO Price List, ARO Change Matrix and ARO Price List Change Matrix.

9.9. Subject also to Section 9.10, or save as otherwise agreed in writing with or directed by ComReg, Eircom shall not introduce new products, services or Associated Facilities or make amendments to existing products, services or Associated Facilities without first amending accordingly the documents that it is required to publish under this Decision Instrument including without limitation, the ARO, ARO Price List, Product Development Process, Product Development Roadmap and the Prioritisation information, as relevant, without first publishing at least two (2) months in advance of coming into effect, any proposed amendments or changes, having notified ComReg in writing with the information to be published at least one (1) month in advance of any such publication taking place.

9.10. By way of exception to the requirements set out in Section 9.9, the minimum two (2) month advance publication requirement shall be extended to at least six (6) months, save as otherwise agreed in writing with or directed by ComReg, where:-

(i) Availing of the new or amended product, service or Associated Facility to deliver broadband services in markets downstream from the Commercial NG WLA Market necessitates an Access Seeker to deploy or update equipment including End User equipment not previously required in respect of any form of Access offered by Eircom in the Commercial NG WLA Market; or

(ii) Availing of the new or amended product, service or Associated Facility or continuing to avail of Wholesale Local Access from Eircom on a like for like basis requires Access Seeker to carry out development work to their own IT systems as a result of changes to Eircom's IT systems;

Eircom having provided ComReg in writing, one month in advance of publication, together with the information to be published, a justification for the changes necessitating Access Seekers to carry out development work to their own IT systems where applicable or to deploy or update their equipment.

NGA Rollout Plan

9.11. Without prejudice to the generality of Section 9.1, and subject to Section 9.3, Eircom shall within three (3) months of the Effective Date, publish an updated NGA Rollout Plan which shall consist of the following:-

(i) A **Deployment Plan** setting out at least six (6) months in advance of the expected Ready for Order Date and updated on a monthly basis:

(a) A list of cabinets with their associated geographic coordinates;

(b) The location and name of the Exchange which houses the MPoP for each cabinet and for each OLT from which it is proposed that premises will be served from; and

(c) For each EA, the number of premises that Eircom forecasts will be passed by FTTP and the expected Ready for Order date.

As soon as such information is available to Eircom and at least three (3) months before the expected Ready for Order Date, Eircom shall include in the Deployment Plan, the identity, geographic coordinates, capacity, installation status, expected Ready for Order Date and whether that date has been passed for each fibre DP.

(ii) An **Order of Magnitude File** setting out, at least three (3) months in advance of the expected Ready For Order Date, sufficient information to enable operators to identify the address to be passed by FTTP, including:

(a) the Exchange Area;

(b) the expected Ready for Order Date for the premises to be passed;

(c) the Eircode of each expected premises;

(d) identities of the fibre Distribution Points from which the premises are expected to be served; and

(e) for each entry, the date of entry and the date it was last amended.

(iii) An **Advanced PreQual File** setting out premises passed by NGA, 28 calendar days in advance of the actual Ready for Order Date, the following information:

(a) The Ready for Order Date for each premises;

(b) The Exchange Area for each premises;

(c) A list of the premises, as uniquely identified, that are capable of receiving FTTC and the associated Pre-Qual Value for each such line/premises;

(d) A list of all premises passed by FTTP categorised by EA and including the MPoP for each address and the identity of the fibre Distribution Point to which each premises is indexed or connected; and

(e) Where available, and in all cases for FTTP, the Eircode of each premises that is passed and whether or not the premises is connected;

and "**premises passed**" means those premises for which the fibre DP installation has been completed and the DP is ready for the drop cable to the premises to be installed and testing has been carried out by Eircom to verify light is being transmitted between the port on the installed DP and serving OLT. Eircom shall only add premises to the Advanced

PreQual File in accordance with 9.11 (iii) and where they fall within this meaning of premises passed.

9.12. Eircom shall ensure the accuracy and completeness of the information included in the NGA Rollout Plan and to that effect shall in particular:

(i) Where a change to the RFO Date is identified, revise the RFO Date in the Order of Magnitude File at the earliest opportunity;

(ii) Publish the Order of Magnitude File on a Quarterly basis, updated and with the following entries removed:

(a) any entries included in the Advanced PreQual File; and

(b) any entries related to premises which Eircom no longer intends to pass;

(iii) Publish the Advanced PreQual File on a weekly basis, updated to remove any premises passed but which Eircom no longer considers viable for Eircom to serve;

(iv) Within 7 (seven) months of the Effective Date, have implemented an SLA in respect of the accuracy of the FTTP information in the Advanced PreQual File, or in default of agreement, published a BAFO as referred to in Section 11.4, having complied with the requirements set out in Sections 11.1, 11.2 and 11.3. Nothing in this section shall prevent an Access Seeker from making a request for another SLA in respect of the accuracy of the Advanced PreQual File or request under Section 10 changes to the SLA required under this section.

9.13. For the avoidance of doubt, during the period from the Effective Date until three (3) months after the Effective Date, Eircom shall continue to publish and update the NGA Rollout Plan in accordance with its obligations under Section 10.25 of Appendix 20 of ComReg Decision D10/18.

10. PRODUCT DEVELOPMENT PROCESS REQUIREMENTS

10.1. Eircom shall make available a clear, non-discriminatory and transparent process for requesting the development of new forms of Access in the Commercial NG WLA Market, including new products, services or Associated Facilities including SLAs and amendments to existing products, services and Associated Facilities including SLAs and such process shall apply, for the avoidance of doubt, to requests for SLAs or amendments to SLAs made independently of a request for a new or amended product, service or Associated Facility.

10.2. For the purposes of Section 10.1 and in respect of any developments requested by an Access Seeker, or by Eircom, its subsidiaries or partners, Eircom shall make available a product development process which meets the following requirements:

10.2.1. Access requests are made in writing;

10.2.2. Information is exchanged as soon as practicable and at appropriate times, with the Undertaking that has made the written request ("the requestor") and other Undertakings including at the minimum in all cases:

(a) An acknowledgement to the requester of receipt of the request providing a unique reference number identifying the request;

(b) Provision of a copy of the request to Access Seekers with the allocated reference number of the request and a description of the key features and functionality requested;

(c) A description of the matter or matters in respect of SLAs that require negotiations and the timelines governing the negotiations (the "**SLA Negotiation Period**");

(d) A status update including:

I. An outline of the product, service or Associated Facility proposed in response to the Access request including, as the case may be, any aspects which do not fully meet the requestor's requirements and the objective reasons therefor;

II. The product development timelines including expected notification, publication and launch dates, and where Eircom anticipates at that stage that IT developments or equipment deployment or updates on the part of Access Seekers may be required, the objective reasons therefor;

III. The priority level granted to the request with detail of the input values and calculations used by Eircom for the prioritisation of the request, any impact on the development timelines for other Access requests and where other Access requests are reprioritised as a result, the objective reasons therefor;

(e) A timetable for engagement and negotiations ("**the engagement timetable**") as regards the Access request noting as follows:

I. Where the Access request is for a new or amended product, service or Associated Facility, the engagement timetable shall indicate the manner and times in which Eircom will consult and seek inputs from the requestor and other Undertakings on the product requirements;

II. Where the Access request is for a new or amended SLA, the engagement timetable shall define the SLA Negotiation Period and indicate times at which the requestor and other Undertakings are required to provide requirements, information, clarifications or comments regarding the Access request, subject always that the SLA Negotiation Period is deemed to commence on the day the Access request is received.

10.2.3. In respect of the matters described in Section 10.2.2 (a) to (e), save where otherwise agreed with, or directed by ComReg, Eircom shall ensure the information is provided as soon as practicable and in any event within the timelines below:

(a) An Access request is acknowledged, and a unique reference provided, within no more than three (3) working days from receipt of the Access request;

(b) The information set out in Section 10.2.2 (b), 10.2.2 (c) (where the Access request is for a new or amended SLA), and 10.22 (e) are provided within no more than fifteen (15) working days of receipt of the Access request;

(c) The information set out in Section 10.2.2 (c) (where the Access request is for a new or amended product, service or Associated Facility) and the status update referred to in Section 10.2.2 (d) is provided within no more than eighty five (85) working days of receipt of the Access request;

(d) In the absence of agreement between the negotiating parties, the SLA Negotiation Period shall last for no more than six months from the start of the SLA Negotiation Period (which is the receipt of the Access request where the request is for a new or amended SLA or as per Eircom's SLA Negotiation Period in the case of a request for a new or amended product, service or Associated Facility) and ends with Eircom making a Best and Final Offer ("BAFO"); and,

(e) The agreed SLA or BAFO shall enter into force on the date the new or amended product, service or Associated Facility is launched.

Trials

10.3. Where Eircom intends on conducting a trial, whether such trial is for the purposes of testing operational and/or technical issues or an End User trial, Eircom shall:-

10.3.1. Set the duration of the trial for a reasonable period sufficient only to achieve the objectives of the trial;

10.3.2. Notify all Undertakings at least three (3) months in advance unless otherwise agreed with ComReg, of the commencement of the trial with an invitation to participate by means of:

(a) direct written invitation to each Undertaking that has signed a contract with Eircom on the basis of the ARO; and

(b) the publication of a general invitation on Eircom's publicly available wholesale website;

accompanied by a statement of the objectives of the trial, the requirements for participation to all Undertakings in sufficient time to allow participation, having notified ComReg in writing at least one month in advance of the invitation to Undertakings to participate.

10.3.3. Save as otherwise agreed with or directed by ComReg, Eircom shall terminate any trial at least one (1) month prior to the launch of the new or amended product, service or facility being trialled and for the avoidance of doubt, may not proceed until such time that the requirements set out in Section 9.9 or Section 9.10 as the case may be.

11. SERVICE LEVEL AGREEMENTS

11.1. Without prejudice to the generality of, and for the purpose of further specifying the requirements of the obligation at, Section 7.4, Eircom shall ensure that a legally binding, fit-for-purpose, SLA which encourages an efficient level of performance on the part of Eircom is attached to each product, service and Associated Facility made available in accordance with this Decision Instrument from the time that the product, service and Associated Facility is available and subsequently kept up to date and fit for purpose.

11.2. In meeting its obligation under Section 11.1, Eircom shall:

11.2.1. Negotiate proactively, in good faith, with Undertakings, on their requirements be it in respect of a new SLA or an amendment to an existing SLA and to that purpose meet the further requirements set out in Section 11.3 as may be amended or further specified by ComReg from time to time;

11.2.2. Ensure that SLAs are sufficiently detailed and include, without limitation, the following provisions:

(a) An obligation on Eircom to compensate failure to meet agreed service levels by way of payment of Service Credits such that the Service Credits cover, at a minimum, the direct costs and any other reasonable loss of value incurred by the Access Seeker concerned and provide Eircom with sufficient and adequate incentives to meet agreed service levels;

(b) Details of the specific circumstances upon which Service Credits must be paid by Eircom and the methodology used to calculate the amount of Service Credits owed, including an itemised list of the direct costs and other losses contributing to the Service Credit calculation, supported by clear examples demonstrating the practical application of Service Credits;

(c) An obligation on Eircom to apply Service Credits, where payable, automatically and in a timely manner;

11.2.3. Ensure, where provision is made in an SLA for its suspension, that suspension may only be triggered on the basis of objectively defined and measurable parameters, that full details are set out as to the specific circumstances which may trigger such suspension, all the terms and conditions governing the suspension, and the procedural requirements to be followed for suspension including that Eircom shall be required where suspension occurs, to report to the Access Seekers on the basis for each such suspension and the parameters relied upon.

11.3. Eircom shall ensure that negotiations for the conclusion or amendment of an SLA as the case may be, are conducted in a fair, reasonable and timely manner and that the matters of Service Credits and SLA suspension are the subject of negotiations during the SLA Negotiation Period.

11.4. Where no agreement is reached, the SLA Negotiation Period shall conclude with Eircom making available to the requestor or Undertakings involved in the negotiation its best and final offer (“**BAFO**”) within the timelines set out in Section 10.2.3(b) or Section 10.2.3(c) as the case may be, and the BAFO or the agreed SLA shall enter into force and replace as the case may be any SLA it amends, within three (3) months of its notification to ComReg in accordance with Section 9.9, save where Eircom has applied, setting out reasons therefor, for an extension and ComReg, at its sole discretion, has granted same, or in the case of an SLA or an amendment to an SLA for a new product or an amendment to a product, on the date the new or amended product, service or Associated Facility is launched.

11.5. Further to its obligation of transparency set in Section 9, Eircom shall:

11.5.1. Publish concluded SLAs or when no SLA is formally agreed, the SLA reflecting the BAFO required under Section 11.4;

11.5.2. Within two (2) months of the end of each Quarter, publish a report setting out the actual performance achieved in each of the three (3) previous months in respect of all Access Seekers compared to the committed service levels contained in the relevant SLA for the products, services and Associated Facilities referred to in Section 7 (the “performance metric report”);

11.5.3. Having regard to Section 11.5.2, publish and maintain on its publicly available website a performance metric report detailing the methodology applied, the source data used and explanations on how the source data was processed by Eircom including worked examples as to how the processed source data relates to the actual performance achieved.

11.6. Save as otherwise agreed with ComReg, within seven (7) months of the Effective Date, Eircom shall ensure that any and all existing Service Level Agreements SLAs in respect of products, services and Associated Facilities in the Relevant Market meet the requirements of this Section 11.

12. KEY PERFORMANCE INDICATORS

12.1. Further to Eircom's obligations under Sections 7, 8, 9 and 10, Eircom shall publish Key Performance Indicators (KPI) on its publicly available wholesale website in respect of its provision of WLA in the Commercial NG WLA Market, as may be further specified by ComReg.

12.2. For the purpose of complying with Section 12.1, and by way of further specification, Eircom shall meet the requirements set out in ComReg Decision D04/22. References to ComReg Decision D10/18 or the WLA Decision Instrument within ComReg Decision D04/22 shall be construed as references to this Decision and this Decision Instrument.

13. ACCOUNTING SEPARATION

13.1. Eircom shall maintain separated accounts in respect of the products, services and Associated Facilities in the Commercial NG WLA Market.

13.2. Without prejudice to the generality of Section 13.1, Eircom shall comply with the requirements set out in the Decision Instrument annexed to ComReg Decision D08/10 (as may be amended from time to time).

14. PRICE CONTROL AND COST ACCOUNTING

Cost Accounting

14.1. Eircom shall maintain appropriate cost accounting systems in respect of products, services and Associated Facilities in the Commercial NG WLA Market.

Cost orientation

14.2. Save as regards FTTP-based VUA rental, prices charged by Eircom to any other Undertaking for Access to or use of the products, services or Associated Facilities in the Commercial NG WLA Market shall be subject to an obligation of cost orientation, as may be further specified by ComReg.

FTTC-based VUA

14.3. The obligation of cost orientation set out in Section 14.2 is hereby further specified as follows in respect of FTTC-based VUA:

14.3.1. Eircom shall recover the costs of FTTC-based VUA by way of a connection charge, migration charge and a monthly rental charge.

14.3.2. For the purpose of Section 14.3.1 and subject to Section 14.3.3, from the Effective Date, the monthly rental charge applicable to FTTC-based VUA shall be a price equal to the costs set out in Section 6.1 of the ANM Decision Instrument for the relevant year namely €19.12 for the year ending 30 June 2024, which price Eircom may thereafter increase from 1 July 2024 once annually on 1 July by no more than the level of inflation calculated each year at 31 December as CPI-0. For the avoidance of doubt, Eircom may not carry over from one year to the next any permitted increases in the rental charge for FTTC-based VUA that it refrained from applying in full or otherwise in respect of any 12 month period.

14.3.3. By way of exception to Section 14.3.2, where Eircom demonstrates to ComReg's satisfaction, including providing evidence of loss of market share, that the applicable monthly rental charge for FTTC-based VUA materially impedes Eircom's ability to compete with an alternative network or networks in a defined, substantial, geographic area within the Commercial NG WLA Market, Eircom may charge a price by way of monthly rental charge that is lower than the price set in accordance with Section 14.3.2 (and which shall be the price floor for FTTC-based VUA in that particular geographic area), but not less than the higher of either an alternative Undertaking's wholesale VUA price or equivalent or Eircom's full deployment costs for NGA VUA in the specific geographic area concerned, calculated on the basis of a BU-LRAIC+ costing methodology and with Eircom's RAB applied to Reusable Assets, subject always to the express prior written approval of ComReg, which approval ComReg may grant at its discretion where the following conditions are met:

(a) the proposed reduction in the price will not dissuade new investment by alternative Undertakings;

(b) any move from national to geographic differentiated prices shall require Eircom to demonstrate to ComReg's satisfaction that there are material and sustained differences in NGA VUA unit costs between significant geographic areas

(c) the proposed reduction in the price will apply to a substantial geographic area and not simply a select number of Exchanges;

(d) Eircom undertakes that the reduced charge will be used as the wholesale input used by all FTTC services that are provided in the specific geographic area concerned;

(e) the proposed reduction in the price for FTTC VUA is not to be a short-term measure.

Associated Facilities

14.4. The obligation of cost orientation set out in Section 14.2 is hereby further specified as follows in respect of the provision of Access to Associated Facilities under Section 7:-

14.4.1. Eircom shall ensure that it recovers no more than its actual incurred costs adjusted for efficiencies plus a reasonable rate of return in respect of the provision of connections and migrations.

14.4.2. The price charged by Eircom in respect of the Interconnection services set out in Section 7.8, shall be no more than the costs of an efficient operator calculated on a BU-LRAIC+ costing methodology.

14.4.3. The price charged by Eircom in respect of Co-Location shall be no more than the actual costs (adjusted for efficiencies) incurred for the provision of Co-location plus a reasonable rate of return.

14.4.4. The price charged by Eircom in respect of each of the Multicast, CoS and 1:1 VLAN Tagging Facilities provided for in Section 7.7 shall be no more than the actual costs (adjusted for efficiencies) incurred by Eircom for their provision plus a reasonable rate of return.

FTTP VUA

14.5. Eircom shall recover the costs of FTTP-based VUA by way of connection and migration charges and a monthly rental charge to be set in accordance with the requirements set out in Section 14.6 to Section 14.8.

Pricing Flexibility

14.6. Eircom shall be free to determine the price applicable to its FTTP-based VUA services subject to the following:

14.6.1. Save as provided for in Section 14.6.2, the monthly rental charges for FTTP-based VUA shall be set at or above the applicable price for FTTC-based VUA set in accordance with Section 14.3.2 or, as the case may be in respect of the geographic area concerned, in accordance with Section 14.3.3 (the "**Price Floor**");

14.6.2. Where, on Eircom's application, providing evidence of loss of market share, ComReg finds that in a geographic area the Price Floor materially impedes Eircom's ability to compete with an alternative network or networks in a defined, substantial, geographic area and that a reduction of the applicable Price Floor for FTTP-based VUA monthly charge is necessary to allow Eircom to compete, ComReg may lower the Price Floor in the geographic area subject always to the following:

(a) the reduced charge (including any Connection/Migration Charges (as provided for in Section 14.6.3)) is not less than the higher of either an alternative Undertaking's wholesale VUA price or equivalent or Eircom's full deployment costs for NGA VUA in the specific geographic area concerned (including for the avoidance of doubt customer specific connection costs), calculated on the basis of a BU-LRAIC+ costing methodology and with Eircom's RAB applied to Reusable Assets;

(b) the reduction to the Price Floor is not to be a short term measure;

(c) the reduction of the Price Floor will not dissuade new investment by alternative Undertakings;

(d) any move from a national to a geographic differentiated Price Floor will require Eircom to demonstrate to ComReg's satisfaction that there are material and sustained differences in NGA VUA unit costs between significant geographic areas;

(e) the proposed reduction of the Price Floor will apply to a substantial geographic area and not simply to a select number of Exchanges;

(f) Eircom undertakes that the reduced charge will be used as the wholesale input used by all FTTP services that are provided in the geographic area concerned; and

(g) The FTTC VUA price shall continue to serve as the Price Floor for FTTP VUA, such that an FTTP VUA service cannot be offered at a price that is lower than the FTTC VUA price in the specific geographic area.

14.6.3. Where Eircom charges a separate fee in respect of connection to its FTTP network ('**Connection Charge**'), it shall also charge a fee where there is a change of RSP in respect of the FTTP line concerned ('**Migration Charge**') in which case:

(i) The Connection Charge and the Migration Charge shall be the same;

(ii) The combination of the Connection and Migration Charges referred to in Section 14.6.3(i) shall not exceed Eircom's customer specific connection related investment costs over the lifetime of the underlying assets;

(iii) The Connection Charge and the Migration Charge shall not exceed €100; and

(iv) Any Connection Charge and Migration Charge shall remain in place for a minimum of six (6) months.

14.6.4. Eircom shall not cause a margin squeeze between FTTP-based VUA services and FTTP-based services in markets downstream from the Commercial NG WLA Market, as may be further specified from time to time by ComReg.

Emulated FTTC-like FTTP service

14.7. Where Eircom offers, further to Section 7.10, an Emulated FTTC-like FTTP service, the latter's price shall be the applicable price for FTTC-based VUA calculated in accordance with Section 14.3.2 or as the case may be and in respect of the geographic area concerned only, the reduced price for FTTC-based VUA approved by ComReg under Section 14.3.3.

Wholesale Discounts and Promotions

14.8. Eircom shall not apply any Discounts or Promotions in respect of FTTC-based VUA.

14.9. Eircom shall not apply any Discounts or Promotions in respect of FTTP-based VUA without the express prior approval of ComReg which approval ComReg may grant on Eircom's application made in accordance with Section 14.11 where the conditions set out in Section 14.10 are met.

14.10. For the purpose of Section 14.9, ComReg shall not approve a Discount or Promotion unless:-

14.10.1. The proposed price taking account of any Promotion or Discount remains above the Price Floor calculated in accordance with Section 14.6.1.

14.10.2. ComReg is satisfied that the Promotion or Discount does not, in form or in effect, favour Eircom's retail arm and is in practice available to a range of Access Seekers;

14.10.3. ComReg is satisfied that the Promotion or Discount is not targeted at a specific geographic area and for the avoidance of doubt, no Promotion or Discount will be approved that gives rise to a geographic differentiation of prices; and

14.10.4. ComReg is satisfied that the Promotion or Discount will not adversely affect investments by Undertakings or undermine competition.

Notifications for Regulatory approval

14.11. Any notification for the purpose of Section 14.3.3, Section 14.6.2 and Section 14.9 shall be made at least three (3) months in advance of the proposed publication date setting out the detail of the proposed offer and Eircom's submission as regards the assessment to be carried out by ComReg under Section 14.3.3, Section 14.6.2 and Section 14.10 respectively. Upon receipt of a notification and in any event within one month of notification, ComReg may require any such additional information as it considers necessary to its assessment and shall indicate to Eircom the date by which its assessment will complete following receipt of the relevant information.

Further specification of the obligation not to cause a Margin Squeeze

14.12. For the purpose of Section 14.6.4, Eircom shall be considered not to cause a margin squeeze where its FTTP Flagship Offering and FTTP Flagship Portfolio pass a Margin Squeeze Test whereby:-

(a) The average total Present Value revenue of the FTTP Flagship Portfolio is equal to or exceed the FTTP Flagship Portfolio's average total Present Value of costs; <u>and</u>

(b) For each FTTP Flagship Offering, the Offering's Present Value revenue is equal to or exceed the Offering's Present Value of costs;

where:-

(i) FTTP Offering means an FTTP-based product sold by Eircom at the retail level on a standalone basis or included in a bundle with one or more unregulated products;

(ii) FTTP Flagship Offering means each of the FTTP Offerings, including at least one retail FTTP bundle offering and one retail standalone FTTP offering, which together account for at least 75% of Eircom's total FTTP retail product subscribers in the Quarter being reported on, and any additional FTTP Offering that ComReg requires Eircom to include in the FTTP Flagship Offering from time to time;

(iii) FTTP Flagship Portfolio means Eircom's FTTP Flagship Offerings in aggregate;

and:-

(iv) The average total Present Value revenue and costs of the FTTP Flagship Portfolio are calculated by reference to lines R7 and C15 in Table 1 in Schedule 2;

(v) An FTTP Flagship Offering's Present Value revenue and costs are calculated by reference to lines R6 and C14 in Table 2 in Schedule 2;

in each case calculated using a Discounted Cash Flow (“**DCF**”) approach over the Average Customer Life (“**ACL**”) to generate the Net Present Value (“**NPV**”);

and where the ATC used for the purpose of the MST is reconciled to the extent possible to Eircom’s Separated Accounts.

14.13. Eircom shall ensure that the Margin Squeeze Test is met at all times in respect of the FTTP Flagship Portfolio and each of the FTTP Flagship Offerings and having followed the requirements set out in Section 14.14 take appropriate measures where the Margin Squeeze Test is not met.

14.14. Eircom shall demonstrate to ComReg that the Margin Squeeze Test set out in Section 14.12 is met:

14.14.1. In respect of an FTTP Offering which Eircom forecast will become an FTTP Flagship Offering in future or an amendment to an FTTP Flagship Offering’s price, including by way of promotion or other discount, at least five (5) days in advance of the FTTP Offering or amended price being made available to End Users (and for the avoidance of doubt Eircom may not offer for sale an FTTP Offering which Eircom forecast will become an FTTP Flagship Offering in future or an amended FTTP Flagship Offering without first having obtained ComReg’s confirmation under Section 14.15 that the Margin Squeeze Test is met); and

14.14.2. Further to Section 14.13, on amending an FTTP Flagship Offering which fails to meet the Margin Squeeze Test,

and for that purpose, Eircom shall furnish ComReg with a detailed written submission, making full and true disclosure of all material facts including all assumptions relied upon, the rationale and supporting evidence for such assumptions including as regards retail efficiencies or increased Average Customer Life and the likely effect if any such assumptions are not met, together with a copy of the DCF Model underpinning Eircom’s submission in a format allowing changes to key assumptions and ComReg shall assess Eircom’s submissions in accordance with Section 14.15.

14.15. Subject to Section 14.17, within five (5) working days of receipt of a submission pursuant to Section 14.14, ComReg shall inform Eircom whether or not ComReg finds on a *prima facie* basis that the FTTP Offering meets the Margin Squeeze Test under Section 14.12 or Section 14.18 as the case may be and does not cause a margin squeeze.

14.16. Where ComReg informs Eircom, under Section 14.15, that an FTTP Offering does not meet the Margin Squeeze Test (or otherwise causes a margin squeeze) Eircom shall:

14.16.1. Where the FTTP Offering has been notified on the basis that Eircom forecast it will become an FTTP Flagship Offering in future, withhold from making the FTTP Offering available to End Users;

14.16.2. Where the FTTP Offering has been notified as an amendment to an existing FTTP Flagship Offering, withhold from implementing the proposed amendment;

14.16.3. Further to Section 14.13, where the FTTP Offering is available to End Users, adjust the price for all existing customers of the Offering and immediately stop new sales of the FTTP Offering or transfer subscribers to an alternative FTTP Offering until such time that the price of the Offering has been adjusted and confirmation obtained from ComReg that *prima facie* the Margin Squeeze Test is met in accordance with Section 14.15.

14.17. Prior to the expiry of the five (5) working day period referred to in Section 14.15, ComReg may seek further information from Eircom to inform its assessment of whether *prima facie* the Margin Squeeze test is met in which case, the five working day period under Section 14.13 shall be deemed to commence from the day that ComReg receives the information sought.

14.18. Where either part or both parts of the Margin Squeeze Test set in Section 14.12 are not met, ComReg may nevertheless determine that Eircom has not caused a margin squeeze for the purpose of Section 14.6.4 on the basis of a general reasonableness assessment taking into account any objective evidence of retail efficiencies or increased customer lifetimes resulting from the Offering concerned and potential impact in the Commercial NG WLA Market and downstream markets.

14.19. Within six (6) weeks of the end of each Quarter, Eircom shall submit to ComReg the following statements:

14.19.1. A Monitoring Statement demonstrating that the Margin Squeeze Test is met in respect of the FTTP Flagship Portfolio and each of the FTTP Flagship Offerings;

14.19.2. A Modified Monitoring Statement stating the actual volume and revenue associated with each FTTP Offering.

15. REGULATORY GOVERNANCE

15.1. Eircom shall have in place transparent regulatory governance arrangements, which facilitate effective and non-discriminatory provision of Access by Eircom to the products, services or associated facilities in the Commercial NG WLA Market in accordance with the requirements of this Decision Instrument.

15.2. Without prejudice to the generality of Section 15.1, within three (3) months of the Effective Date, Eircom shall submit to ComReg a written statement of compliance ("Statement of Compliance") signed by a Director or Directors of Eircom authorised to provide such statements on behalf of the Board of Directors of Eircom, which includes the following:

15.2.1. A statement:

(a) That the Directors acknowledge that they are responsible for Eircom securing compliance with its regulatory obligations;

(b) Confirming that, in their opinion, arrangements, structures and internal controls are in place that provide reasonable assurance that Eircom is compliant with its obligations as set out in this Decision Instrument;

(c) Explaining the basis upon which the confirmation in sub-paragraph (b) above is made, including a description of the information relied upon, and the process followed, by the Directors for that purpose;

15.2.2. A description and explanation of the governance measures implemented by Eircom to ensure that it is, and remains, in compliance with the obligations set out in this Decision Instrument;

15.2.3. A description of the methodology followed to identify risks of noncompliance with the obligations imposed in Sections 7 to 14 (the "regulatory risks") and to develop the controls required to manage the regulatory risks including in particular by reference to identifying, employing and relying on adequate expertise, material and information.

15.2.4. A detailed description of the regulatory risks identified utilising the methodology described in Section 15.2.3 above for all WLA products, services and facilities in the Commercial NG WLA Market, including without limitation, in respect of the following activities:

(a) Pre-provisioning, provisioning and service assurance;

(b) Product development including product enhancements, and pre-product development screening of Access requests;

(c) Product prioritisation and investment decisions;

(d) Access to shared resources including IT and product development resources, and

(e) The management of confidential information, in conformance with regulatory requirements.

15.2.5. A detailed description of the controls developed to manage the regulatory risks, including:

(a) A description of the relationship of each control to the underlying regulatory risk;

(b) A description of the process used to assess the adequacy and effectiveness of the controls;

(c) A description of the operation of controls including the method employed by Eircom to record and store the data produced when controls are operated;

(d) The identification and description of the repository in which the data from the operation of each control is recorded and stored.

15.2.6. For each of the products, services and Associated Facilities reviewed for the purpose of Section 15.2.1 and 15.2.5, a description of the risk analysis and control development process carried out (the "Process"), to include the following:

(a) The scope of the Process, including in particular:

I. A description of the expertise relied upon to identify the regulatory risk and develop the controls required to manage the regulatory risks, by reference to the description of the expertise of the Eircom personnel engaged in the Process, and

II. A list of all the material used to identify the regulatory risks and develop the controls required to manage the regulatory risks including without limitation, relevant product documentation, internal process information, risk analysis documentation.

(b) The outcome of the Process in respect of the identification of regulatory risks, and the justification for the outcome;

(c) The outcome of the Process in respect of the development of the controls required to address the regulatory risks identified, and the justification for the outcome, to include:

I. A description of the operation of the control, including the frequency of its operation, and

II. A description of the directory / path details for repository for control evidence.

15.3. The documentation referred to in this Section 15 shall be of sufficient clarity and detail to enable ComReg to assess whether Eircom's risk assessment and control and governance measures provide reasonable assurance as to Eircom's compliance with the obligations set out in this Decision Instrument.

15.4. Eircom shall keep the Statement of Compliance up to date. In particular, and without prejudice to the generality of this obligation, Eircom shall update, and submit to ComReg, an updated Statement of Compliance, duly dated and signed and meeting the requirements of Section 15.2.1 above, in the following circumstances:

15.4.1. Where a material change or material changes are made to any of the documentation and information detailed in this Section 15, within three (3) months of such change or changes being made;

15.4.2. Where a new WLA product, service or Associated Facility, or an amendment to an existing WLA product, service or Associated Facility which falls within the scope of the Commercial NG WLA Market is introduced, having regard in particular to the requirements in Sections 15.2.4, 15.2.5 and 15.2.6, and in accordance with the timeline set out in, and as part of the documentation required for the purpose of Section 9.9, or as otherwise may be required or agreed by ComReg.

15.5. Eircom shall ensure that updates or changes to the Statement of Compliance are easily identifiable. For that purpose, Eircom shall operate a standardised regime for the management of changes to the documents contained in, and including, the Statement of Compliance whereby:

15.5.1. Different versions of the Statement of Compliance are identified by a number, letter or code, associated with a date and timestamp; and

15.5.2. A record of all changes made to versions of the Statement of Compliance is maintained and incorporated in a dedicated and indexed section in each Statement of Compliance.

15.6. Eircom shall publish the Statement of Compliance, and updates to the Statement of Compliance, within one (1) month of providing it to ComReg, unless otherwise agreed with ComReg.

PART III - OPERATION AND EFFECTIVE DATE

16. STATUTORY POWERS NOT AFFECTED

16.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument).

17. WITHDRAWAL OF SMP OBLIGATIONS

17.1. The following Decision Instruments, and/or ComReg Documents and/or Decisions shall be withdrawn when this Decision Instrument comes into effect, subject to Section 9.13:

(i) The Decision Instrument contained in Appendix 20 and Appendix 21 of ComReg Decision D10/18 save as it applies to the provision of CEI and in particular, sections 7.2(xiii), 7.2(xiv), 10.26, 12.6, 12.7 and 12.8 of Appendix 20.

(ii) The Decision Instrument contained in Annex 1 and Annex 2 of ComReg Decision D11/18.

(iii) The Decision Instrument contained in Annex 4 and Annex 5 of ComReg Decision D12/18.

(iv) The Decision Instrument contained in Annex 1 of ComReg Decision D10/21.

(v) The Decision Instrument contained in Annex 7 and Annex 8 of ComReg Decision D11/21.

(vi) The following references to the WCA Decision Instrument in ComReg Decision D04/22, namely in section 1.1(vii), section 2.1 (the definitions of Relevant Decision Instrument and WCA Decision Instrument), section 3.2.1 and section 3.2.2.

(vii) The Direction to Eircom Limited with respect to Access to CEI under ComReg Decision D10/18, ComReg Document 21/60R.

18. SUNSET PROVISIONS

18.1. There shall be one Sunset Period of twelve (12) months in relation to the deregulation of the following three markets: (i) the National CG WLA Market; (ii) the IA NG WLA Market; and (iii) the WCA Market.

18.2. During the Sunset Period Eircom shall not withdraw Access to any products, services or Associated Facilities in the three markets referred to in Section 18.1 to which Access was previously granted on or before the Effective Date, pursuant to or consistent with an obligation imposed by the Decision Instrument contained in Appendix 20 and Appendix 21 of ComReg Decision D10/18, or in respect of which Access has been sought on or prior to the Effective Date of this Decision.

18.3. Access to any products, services or Associated Facilities in any of the three markets referred to in Section 18.1 above provided by Eircom to any Undertaking pursuant to the obligations in Section 18.2, shall be provided at prices no higher than those prevailing for such products, services or Associated Facilities on the Effective Date for the Sunset Period of twelve (12) months.

19. MAINTENANCE OF OBLIGATIONS

19.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg, applying to Eircom, and in force immediately prior to the Effective Date of this Decision Instrument, continue in force and Eircom shall comply with the same.

19.2. For the avoidance of doubt, to the extent that there is any conflict between a Decision Instrument dated prior to the Effective Date and Eircom's obligations set out herein, it is the latter which shall prevail.

19.3. If any Section(s), clause(s), or provision(s), or portion(s) thereof, contained in this Decision Instrument is(are) found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that(those) Section(s), clause(s), or provision(s), or portion(s) thereof shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining Section(s), clause(s), or provision(s), or portion(s) thereof, of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument or other Decision Instruments.

20. PUBLICATION AND NOTIFICATIONS

20.1. This Decision Instrument shall be published on ComReg's website, www.comreg.ie and notified to Eircom on the same day.

21. EFFECTIVE DATE

21.1. The Effective Date of this Decision Instrument shall be the date of its notification to Eircom and it shall remain in force until further notice by ComReg.

COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE [X] DAY OF [X]

Schedule 1 – NBP IA Premises

Schedule 2

TABLE 1 – REVENUES

Reference	Title	Description
R1	Forecasted monthly headline price of the FTTP flagship products. This should reflect expected future price changes, e.g., annual price increases linked to CPI.	This is the full monthly contract price of the FTTP flagship products during the ACL. In circumstances where the FTTP BB service is bundled with other unregulated services (i.e. fixed voice, mobile and/or TV), the contract price should be the price inclusive of all services. The price should be reported net of VAT.
R2	Forecasted average monthly out of bundle (‘**OOB**’) calls revenue of the FTTP flagship products (with fixed voice).	This is the forecasted additional monthly revenue for fixed voice traffic/calls consumed outside the plan (i.e. where the customer exceeds the fixed voice traffic/call allowance included in the relevant plan). This should be traceable to data available in the most recently reported actual OOB call revenues (which is received every three months).
R3	Forecasted average monthly out of bundle (‘**OOB**’) other revenue of the FTTP flagship products	This is forecasted additional monthly revenue for other out of bundle revenue, e.g. excess data usage on fixed data allowance contracts and, out of plan revenues on unregulated mobile contracts. The out of bundle data usage revenue should be traceable to data available in the most recently reported actual out of bundle data usage revenue (which is received

		every three months). The out of bundle mobile revenue should be traceable to the data available in the last two reports of actual out of bundle mobile revenue (which are received every six months).
R4	Forecasted non-recurring revenues of the FTTP flagship products.	This is the forecasted non-recurring revenues, e.g. FTTP connection charges~~,~~ broadband activation fees etc. This should be recognised in full in the month in which it is expected to arise (i.e. it should not be allocated over the ACL).
R5	Total forecasted revenue for each FTTP flagship products (per month over the ACL).	This is the sum of **R1** plus **R2** plus **R3** plus **R4** (as relevant).
R6	Present value of the forecasted monthly revenue for each of the FTTP flagship products.	This is the sum of the discounted **R5** to present day terms using the WACC rate.
R7	Forecasted average monthly NGA Portfolio revenue (i.e. for the FTTP flagship products) per subscriber.	This is the weighted average of **R6** (weighted by the expected number of subscribers associated with each FTTP flagship product).

TABLE 2 – COSTS

Reference	Title	Description
C1	Forecasted Wholesale Network Input (‘**WNI**’) for FTTP VUA.	This is the forecasted monthly price (based on Eircom’s published reference offers) less the forecasted wholesale discounts provided to the retail arm of Eircom for FTTP VUA (for each month of the ACL).
C2	Forecasted Other Network costs (incurred by Access Seekers) to provide the FTTP flagship products.	This is all other relevant forecasted wholesale costs necessary to provide FTTP flagship products (for each month of the ACL). All other relevant forecasted wholesale costs’ include co-location, backhaul and in-home costs (i.e., cost of broadband installation at customer premises) that would be incurred when using the FTTP VUA wholesale input to provide a FTTP Retail Offering. Costs associated with connections migrations and call out charges should also be included here. This would also include a Voice MEA charge for VOBB bundles.
C3	Forecasted ATC retail costs associated with retail line rental for the relevant FTTP flagship products (with fixed voice)	This is the forecasted ATC retail costs associated with line rental for fixed voice for the relevant flagship product (for each month of the ACL). Prior year costs can be derived from Eircom’s most recent Regulatory Accounts and may be used as a basis (with adjustments) for the

		forecasts.
C4	Forecasted LRIC retail costs associated with retail line rental for the relevant FTTP flagship products (with fixed voice)	This is the forecasted LRIC retail costs associated with line rental for fixed voice for the relevant flagship product (for each month of the ACL).
C5	Forecasted ATC costs of calls for the relevant FTTP flagship products (with fixed voice).	This is the forecasted ATC call costs (wholesale and retail) per call type (for each month of the ACL) e.g. domestic national landline; domestic mobile on/off net.
C6	Forecasted LRIC cost of calls for each of the FTTP flagship products (with fixed voice)	This is the forecasted LRIC cost of calls (for each month of the ACL). This will include the forecasted cost associated with out of bundle calls (which should be separately disclosed).
C7	Forecasted ATC retail costs associated with FTTP retail broadband for each of the FTTP flagship products.	This is the forecasted ATC retail costs associated with FTTP retail broadband (for each month of the ACL). Eircom's Regulated Accounts, which includes retail cost for all BB types, can be used as a starting point for the forecast.
C8	Forecasted LRIC retail costs associated with FTTP retail broadband for each of the FTTP flagship products.	This is the forecasted LRIC retail cost associated with FTTP retail broadband for the FTTP flagship products (for each month of the ACL). This will include the forecasted cost associated with out of bundle broadband (data) usage (which should be separately disclosed).

C9	Forecast average promotion/discount costs associated with the relevant FTTP flagship products.	This is the forecasted average acquisition and average retention costs (promotions and discounts for the relevant FTTP flagship products provided to retail customers. The average acquisition cost can be calculated with reference to the range of promotion/discount offers that are available to new customers and the expected uptake of those acquisition offers by all new customers. The average retention cost can be calculated with reference to the range of promotion/discount offers that are available to existing customers that are no longer availing of an acquisition discount/promotion and the expected uptake of those promotional offers by all non-acquisition customers (i.e. those not on an acquisition promotion). The average acquisition and average retention costs will be allocated to the number of months in the ACL that correspond to the average period a customer is in receipt of an acquisition promotion/discount and a retention promotion/discount respectively.
C10	Forecasted Unregulated services LRIC costs.	This is the forecasted LRIC costs associated with any unregulated services included in the relevant bundled FTTP flagship products (e.g. mobile, TV) for each month of the ACL. This will include the cost associated with out of bundle mobile calls (which should be separately

		disclosed).
C11	Forecasted ATC monthly costs for each of the FTTP flagship products	This is the sum of C1 plus C2 plus C3 plus C5 plus C7 plus C9 plus C10.
C12	Present value of the total forecasted ATC monthly costs for each of the FTTP flagship products.	This is the sum of the forecasted ATC monthly costs (**C11**) discounted to present day terms using the WACC rate.
C13	Forecasted LRIC monthly costs for each of the FTTP flagship products.	This is the sum **C1** plus **C2** plus **C4** plus **C6** plus **C8** plus **C9** plus **C10**.
C14	Present value of the total forecasted LRIC monthly costs for each of the FTTP flagship products.	This is the sum of the forecasted monthly LRIC costs (**C13**) discounted to present day terms using the WACC rate.
C15	Forecasted average monthly NGA Portfolio ATC costs (i.e. for the FTTP flagship products) per subscriber.	This is the weighted average of C12 (weighted by the expected number of subscribers associated with each FTTP flagship product).

Annex 2 Consultation with the Competition and Consumer Protection Commission

A 2.1 Copy of letter from CCPC to ComReg, dated 26 October 2023:

Coimisiún um Iomaíocht agus Cosaint Tomhaltóirí | Competition and Consumer Protection Commission

Robert Mourik
Chairperson
Commission for Communications Regulation
1 Dockland Central
Guild Street
Dublin 1, D01 E4X0

26 October 2023

Re: Market Review of the Wholesale Local Access (WLA) provided at a fixed location and Wholesale Central Access (WCA) provided at a fixed location for mass-market products

Dear Mr Mourik,

Pursuant to Regulation 27(1) of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), the Commission for Communications Regulation ("ComReg") has consulted the Competition and Consumer Protection Commission (the "Commission") with respect to ComReg's proposed draft measures arising from its Response to Consultation and Decision which analyses the market for wholesale local access provided at a fixed location (WLA) and wholesale central access for mass-market products provided at a fixed location (WCA) (together, the "Relevant WLA Markets" and the "Relevant WCA Markets") in the State.

On the basis of the facts and analysis presented by ComReg, the Commission does not object to ComReg's conclusion that the:

(i) Relevant WCA Markets;
(ii) the wholesale market for the provision of current generation WLA over copper-only networks in the State ("National CG WLA Market"); and
(iii) the wholesale market for the provision of next generation WLA over fibre optic cable networks ("IA NG WLA Market");

are no longer susceptible to ex-ante regulation. The Commission understands that all existing significant market power ("SMP") designations and obligations will be withdrawn in those markets, subject to a sunset period.

On the basis of the facts and analysis presented by ComReg, the Commission does not object to ComReg's conclusion that Eircom Limited has been designated with SMP in the wholesale market for the provision of next generation WLA over fibre optic cable networks in the commercial area, and a full suite of remedies will apply.

Yours sincerely

Ibrahim Bah
Director – Competition Enforcement & Mergers Division
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Annex 3 European Commission Response to ComReg's Notified Draft Measures

A 3.1 Copy of letter from the European Commission to ComReg [To Be Completed].

Annex 4 ComReg's Consideration of the European Commission Response to the Notified Draft Measures

A 4.1 [To Be Completed].

Annex 5 Non-confidential versions of Respondent Submissions to the 2023 Consultation

A 5.1 A non-confidential version of Respondent Submissions to the 2023 Consultation is published as ComReg Document 23/106a at www.comreg.ie.

Annex 6 2022 Residential Market Research

A 6.1 The 2022 Residential Market Research conducted for ComReg by Red C Research & Marketing is published as ComReg Document 23/03a at www.comreg.ie/publication/wla-wca-residential-market-research.

Annex 7 2022 SME Market Research

A 7.1 The 2022 SME Market Research conducted for ComReg by Red C Research & Marketing is published as ComReg Document 23/03b at www.comreg.ie/publication/wla-wca-sme-market-research.

Annex 8 Broadband Packages

Introduction

A 8.1 This Annex outlines the retail broadband packages (both fixed and mobile) which are offered by a selection of larger SPs (Digiweb, Eircom, Imagine, Magnet, Pure Telecom, Sky, Three, VMI, and Vodafone). The service offerings are separately assessed with the primary distinction made between bundles for business and residential end users.

Fixed Broadband Packages Offered by Main SPs

Digiweb

A 8.2 Digiweb provides retail broadband packages to both residential and business end users over copper, VDSL (FTTC), FTTP (using SIRO, Eircom and NBI inputs), satellite and FWA technology. It offers a total of 13 residential packages and five business packages.

Residential Packages

A 8.3 Digiweb offers one DSL-based broadband product:

Table A8.1: Digiweb Residential DSL tariffs

	DSL Unlimited Broadband[1488]
Contract Length	12 months
Price (inc. VAT) p/m	€59.95 per month
Download Speed	Up to 24 Mbps
Download Allowance	Unlimited
Other Services included	Talk Unlimited to landlines and mobiles in Ireland and the UK

A 8.4 Digiweb offers one FTTC plan, advertised as ‘Superfast’:

Table A8.2: Digiweb Residential FTTC tariffs[1489]

	Superfast Value Broadband
Contract Length	12 months
Price (inc. VAT) p/m	€34.95 per month
Download Speed	Up to 100 Mbps
Download Allowance	Unlimited
Other Services included	Free unlimited calls to Ireland/UK landlines/mobiles anytime (VoIP)

[1488] https://digiweb.ie/dsl-broadband/ accessed August 2023.

[1489] https://digiweb.ie/hot-deals/ accessed August 2023.

A 8.5 Digiweb offers five different FTTP packages, delivered over different networks (Eircom, SIRO or NBI), depending on the location of the premises. The table below outlines the components of each FTTP bundle:

Table A8.3: Digiweb Residential FTTP tariffs

	Lightning FTTP Broadband[1490]		**SIRO Broadband**[1491]	**NBI Broadband**[1492]	
	Lightning 500 Saver	**Lightning 1000 Saver**	**SIRO Gigabit 1000 Broadband**	**NBI Fibre 500**	**NBI Fibre 1000**
Contract	12 months			12 months	
Price (inc. VAT) p/m	€34.95 per month (for 6 months) €59.95 per month for remaining 6 months)	€34.95 per month (for 6 months) €49.95 per month for remaining 6 months)	€39.95 per month	€34.95 per month (for 6 months) €59.95 per month for remaining 6 months)	€24.95 per month (for 3 months) €64.95 per month for remaining 9 months)
Download Speed	Up to 500 Mbps	Up to 1000 Mbps	Up to 1000 Mbps	Up to 500 Mbps	Up to 1000 Mbps
Upload Speed	Up to 50 Mbps	Up to 100 Mbps	Up to 100 Mbps	Up to 50 Mbps	Up to 100 Mbps
Download Allowance	Unlimited				
One-off charges	€24.95 activation fee				
Other services included	Talk Unlimited (6,000 anytime minutes to any Irish/ UK landline numbers and 1,500 anytime minutes to Irish/ UK mobile numbers per month)		Talk unlimited local and mobile calls to Ireland/UK	Talk unlimited calls to mobiles and landlines in Ireland/UK	Talk off-peak to mobiles and landlines in Ireland/UK

A 8.6 Satellite broadband is delivered following installation of a 75cm satellite dish at the premises. Digiweb offers five satellite-based broadband packages, varying by download allowance and price outlined in Table A8.14 below:

1490 https://digiweb.ie/lightning-ftth-saver-broadband/ accessed August 2023.

1491 https://digiweb.ie/siro-broadband-1000-limited-offer/ access August 2023.

1492 https://digiweb.ie/nbi-ftth-broadband/ accessed August 2023.

Table A8.4: Digiweb Residential Satellite tariffs[1493]

	Surfer 20[1494]	Surfer 25[1495]	Surfer 35[1496]	Surfer 45[1497]	Surfer 60[1498]
Contract Length	12 months				
Price (inc. VAT) p/m	€44.95	€54.95	€64.95	€74.95	€84.95
Average Download Speed	20 Mbps (Unlimited night-time traffic)				
Download Allowance	20GB	25GB	35GB	45GB	60GB
One-off Charges	€99 Connection charge				

A 8.7 Digiweb offers two FWA broadband products, outlined in Table A8.5 below, delivered over a wireless network which is owned and managed by Digiweb.

Table A8.5: Digiweb Residential FWA tariffs[1499]

	Metro Freedom Broadband	Metro Starter Broadband
Contract Length	12 months	
Price (inc. VAT) p/m	€54.95	€34.95
Download Speed	Up to 30 Mbps	Up to 5 Mbps
Download Allowance	Unlimited	30GB
One-off Charges		€29.95 activation fee
Other services included	Talk Unlimited to mobiles and landlines in Ireland/UK	
*** Talk World International Call package for an extra €5 per month**		

[1493] https://digiweb.ie/tooway-surfer-satellite-broadband/ accessed August 2023/.

[1494] https://digiweb.ie/product/tooway-surfer-20-satellite-broadband/#tab-additional_information accessed August 2023.

[1495] https://digiweb.ie/product/tooway-surfer-25-satellite-broadband/#tab-additional_information accessed August 2023.

[1496] https://digiweb.ie/product/tooway-surfer-35-satellite-broadband/#tab-additional_information accessed August 2023.

[1497] https://digiweb.ie/product/tooway-surfer-45-satellite-broadband/#tab-additional_information accessed August 2023.

[1498] https://digiweb.ie/product/tooway-surfer-60-satellite-broadband/#tab-additional_information accessed August 2023.

[1499] https://digiweb.ie/metro-broadband/ accessed August 2023.

Eircom

A 8.8 Eircom offers a range of broadband packages, catering for both residential and business broadband users. Eircom does not offer standalone broadband products, but offers broadband bundled with RFTS, TV or mobile services.

Residential Packages

A 8.9 Eircom offers two residential FTTC broadband packages, outlined below:

	Up to 100 Mb	Up to 100 Mb
Contract Length	12 months	24 months
Price (inc. VAT) p/m	€34.99	€39.99
Download Speed	Up to 100 Mbps	
Upload Speed	10 Mbps	
Download Allowance	Unlimited	
Other Services included	Unlimited off-peak local and national calls	

A 8.10 On the residential side, Eircom offers broadband fibre packages at two speed profiles, as outlined below.

Table A8.6: Eircom Residential Fibre Broadband tariffs[1500]

	500 Mb	1 Gb
Contract Length	24 months	
Price (inc. VAT) p/m	€39.99	€44.99
Download Speed	Up to 500 Mbps	Up to 1000 Mbps
Upload Speed	50 Mbps	100 Mbps
Download Allowance	Unlimited	
Other Services included	Unlimited off-peak local and national calls	

A 8.11 Eir TV with Apple TV can be added to any package for €9.99 per month for the first 12 months of the contract, and €19.99 thereafter. Similarly, Sim Only Connect can be added for €9.99 per month for the first 12 months, and €19.99 thereafter. Amazon Prime Video is also available to all eir TV customers.

Business Packages

A 8.12 On the business side, Eircom offers packages for small to medium (1-9 employees, eir Business) and large (10+ employees, eir evo) sized businesses. The bundles listed below are available to small to medium businesses, through eir Business, while larger firms can access tailored broadband services through eir evo, in addition to a range of other IT and telecommunication solutions.

[1500] https://www.eir.ie/broadband/ accessed August 2023.

Table A8.7: Eircom Business Fibre Broadband tariffs

	eir Business[1501]		eir evo[1502]		
	Up to 100 Mb	**1 Gb**	**1GB Fibre Broadband**	**1GB Fibre & Landline Bundle**	**Collaborate Starter Bundle[1503]**
Contract Length	12 months	24 months	24 months		36 months
Price (ex VAT) p/m	€34.99	€49.99	€30 for 4 months €55 thereafter	€50 for 6 months €65 thereafter	€99
Download Speed	Up to 100 Mbps	Up to 1000 Mbps			
Download Allowance	Unlimited				
Other Services Included	Unlimited local, national, mobile, and international calls	Unlimited local, national, and mobile calls.	Dedicated Business Support Centre in Ireland	Dedicated Business Support Centre in Ireland Add-ons available for UK and international calling	4 eir Collaborate seats with DDI numbers. 4 desktop and 4 mobile soft-clients. 1 IVR and 1 hunt group. Unlimited landline and mobile calls in Ireland. Self-care portal. Bundles for larger teams available.

A 8.13 Eircom also offers business broadband plans bundled with mobile.[1504] The components of each bundle are described in Table A8.8 below:

Table A8.8: Eircom Business Broadband and Mobile tariffs

	100 Mb Broadband and SIM Only	**Gigabit Fibre and SIM Only**	**Gigabit Fibre and Mobile**
Contract Length	12 months	24 months	
Price (exc. VAT) p/m	€49.99	€64	€89.99
Download Speed	Up to 100 Mbps	Up to 1000 Mbps	
Download Allowance	Unlimited		
Other services Included	No limits 5G mobile data Unlimited calls to Irish landlines and mobiles International calls included 1GB USA Data roaming		
			Free Smartphone

[1501] https://www.eir.ie/business/smb/ accessed August 2023.

[1502] https://eirevo.ie/ accessed August 2023.

[1503] If Eircom Gigabit Fibre Broadband (1GB FTTP) is available at the location, the RRP is €168 per month, meaning customers save €69 per month. With Eircom Business Advantage Boost Fibre Broadband, the RRP is €129 per month, meaning customers save €30 per month. There are options for no fixed contract term but installation will be chargeable.

[1504] https://www.eir.ie/business/smb/broadband-mobile/ accessed August 2023.

Imagine

A 8.14 Imagine offers three residential broadband package and one business broadband package.[1505] It offers broadband delivered over its ‘Wireless to the x’, or WTTx, network and makes use of LTE technology and 5G Fixed Broadband, as an alternative to FTTx.

Residential Package

Table A8.9: Imagine Residential Broadband tariffs

	Everyday	Hero	Super
Contract Length	18 months		
Price (inc. VAT) p/m	€39.99	€49.99	
Download Speed	Up to 150 Mbps		
Download Allowance	250GB	1TB	500GB
Other Services Included	Free local, national and UK landline calls Free 60 minutes to Irish mobiles		

Business Package

Table A8.10: Imagine Business Broadband tariffs

	For business
Contract Length	18 months
Price (exc. VAT) p/m	€48.77
Download Speed	Up to 150 Mbps
Download Allowance	1TB
One-off Charges	€150 installation and connection fee
Other Services included	Free 60 minutes to Irish Mobiles Free Static IP address on request

Magnet

A 8.15 Magnet offers a range of broadband packages for residential and business customers. These packages are split between FTTP and FTTC.

Residential Packages

A 8.16 The residential packages, which are split between FTTC and FTTP, and are outlined in Table A8.11 and Table A8.12 below:[1506]

[1505] https://www.imagine.ie/broadband/ accessed August 2023.

[1506] https://www.magnetplus.ie/residential/ accessed August 2023.

Table A8.11: Magnet+[1507] Residential Broadband tariffs

	60 Mb	100 Mb	1 Gb
Price (inc. VAT) p/m	€15 for first 6 months €29.99 thereafter	€20 for first 6 months €39.99 thereafter	Free for first 3 months €45 thereafter

Table A8.12: Magnet (Other)[1508] Residential Broadband tariffs

	100 Mb	1 Gb
Price (inc. VAT) p/m	€49.99	€59.99

Business Packages

A 8.17 Magnet offers four business packages, including two standalone broadband solutions and two broadband packages bundled with phone services.[1509] Table A8.13 and Table A8.14 below outline the components of each product:

Table A8.13: Magnet Business Standalone Broadband tariffs

	Business Broadband 100 Mb	Business Broadband 1 GB
Price (exc. VAT) p/m	€49.95	€64.95
Download Speed	Up to 100 Mbps	Up to 1000 Mbps
One-off Charges	€99 installation fee	

A 8.18 Magnet More allows a business to add RFTS to a broadband service with unlimited monthly call allowance to Irish numbers:

Table A8.14: Magnet More Business tariffs

	Magnet More 100 Mb	Magnet More 1 GB
Price (exc. VAT) p/m	€49.95	€64.95
Download Speed	Up to 100 Mbps	Up to 1000 Mbps
One-off Charges	€99 installation fee	
Other Services included	Unlimited calls to Irish landlines and mobiles Available as an app Voicemail with the option to have voicemails emailed	

[1507] Magnet+ refers to homes directly connected to the Magnet+ fibre broadband area.

[1508] 'Other' in this instance encompasses all other services, outside Magnet+'s fibre broadband area, allowing Magnet+ to provide connectivity anywhere in Ireland

[1509] https://www.magnetplus.ie/business/business-broadband/ accessed August 2023.

Pure Telecom

Residential Packages

A 8.19 Pure Telecom offer one standalone broadband package, two broadband packages bundled with RFTS[1510] and two fibre broadband packages with RFTS.[1511] The components of each package are outlined below:

Table A8.15: Pure Telecom Residential Bundle tariffs

	Unlimited Broadband Only[1512]	Online Special Bundle	Broadband and Phone	Instant Speed	Premium Speed
Contract Length	12 months		12 months		
Price inc. VAT p/m	€35	€24 for 6 months, €50 thereafter	€35	€35 for 12 months €55 thereafter	€35 €55 thereafter
Download Speed	Up to 100 Mbps			Up to 500 Mbps	
Download Allowance	Unlimited				
Other Services included		Discounted mobile calls	Unlimited local and national calls Discounted mobile calls	Unlimited Local and National calls Line rental included	
	Pure TV can be added to selected broadband products for €10 per month or for €20 as a standalone service.				

Business Packages

A 8.20 Pure Telecom offers broadband services for businesses through fibre technology, ethernet, licensed wireless, and leased lines.[1513]

Sky

A 8.21 Sky offers a number of broadband packages for residential consumers, both on a standalone and bundled basis. Sky has widened its portfolio from initially only offering satellite TV services, to now offering a range of broadband and dual play services. In addition to the broadband and bundles outlined below, Sky also offers a number of TV-only packages.

Residential Packages

A 8.22 Table A8.16 describes the standalone broadband services offered by Sky:

[1510] https://www.puretelecom.ie/ accessed August 2023.

[1511] https://www.puretelecom.ie/fibre-broadband accessed August 2023.

[1512] https://www.puretelecom.ie/broadband-only accessed August 2023.

[1513] https://www.puretelecom.ie/business accessed August 2023.

Table A8.16: Sky Residential Standalone Broadband tariffs[1514]

	Online Exclusive	Online Exclusive	Ultrafast Plus	Ultrafast Plus	Ultrafast Max
Contract Length	12 months	24 months	12 months	24 months	12 months
Price (inc. VAT) p/m	€30	€35	€30	€35	€40
Download Speed	Up to 500 Mbps				Up to 1000 Mbps
Average Upload Speed			30 – 50 Mbps		30 – 100 Mbps
Download Allowance	Unlimited				

A 8.23 Table A8.17 describes three of Sky's broadband and TV bundled packages:[1515]

Table A8.17: Sky Residential Broadband and TV bundled tariffs

	Sky Stream, Netflix and Ultrafast Broadband	Sky TV, Ultrafast Broadband and Netflix	Sky TV, Sky Sports and Ultrafast Broadband with Netflix	Sky Q and Sky Broadband	Sky TV, Sky Sports, Sports Extra and Ultrafast Broadband with Netflix	Sky TV, Sky Sports, Sky Cinema and Ultrafast Broadband with Netflix
Contract Length	12 months					
Price (inc. VAT) p/m	€50	€50	€70 for 6 months €149 thereafter	€45	€75 for first 6 months €175 thereafter	€74.50 for first 6 months €158 thereafter
Download Speed	Up to 500 Mbps					
Download Allowance	Unlimited					
One off charges				€30 set-up fee		

A 8.24 Sky offers a range of add-ons to any broadband package. Talk Freetime can be added on for €5 a month and includes calls to Irish landlines in the evenings and weekends while Talk Anytime for €12.50 a month included unlimited calls to Irish landlines and 20 worldwide destinations.

A 8.25 Sky Sports can be added on a 31-day rolling contract for an introductory price of €20 a month, €40 thereafter. Similarly, Sky Cinema is offered for an introductory price of €4.50 a month, €9 thereafter on a minimum 12-month contract. Sports Extra is currently offered for €5 per month for 6 months, €34 thereafter, on a 31-day rolling contract and requires a HD compatible box.

1514 https://www.sky.com/ie/broadband accessed August 2023.

1515 https://www.sky.com/ie/deals/tvandbroadband accessed August 2023.

A 8.26 Multiscreen, Ultra HD + HD and HD upgrades are all currently being offered with the first two months free, after which they are priced at €19, €14 and €10 respectively. They all require 31 days' notice to cancel.

A 8.27 Sky Kids can be added to any package for €10 a month and Disney+ can be added for €8.99 a month, each of which are on a 31-day rolling contract.

Three

Business Packages

A 8.28 Three offers two broadband packages which are aimed towards business users. Table A8.18 outlines both fibre broadband package offers by Three:

Table A8.18: Three Business Broadband and Phone Service bundle tariffs[1516]

	Business Fibre Broadband	Business Broadband Only (Fibre)
Contract Length	24 months	18 months
Price (ex. VAT) p/m	€50	€38
Download Speed	Up to 1 Gbps	Up to 100 Mbps
Download Allowance	Unlimited	
Other services included	Free site visit (if required)	

VMI

A 8.29 VMI offers a range of broadband services both as part of a bundle and as a standalone product. It is the only SP in the Irish market which delivers broadband services over a CATV network, and offers single, dual, triple and quad play bundles. These service offerings encompass four residential packages and two business packages for small businesses.

Residential Packages

A 8.30 VMI offers two standalone broadband products on its CATV network, the components of which are outlined in Table A8.30 below:

Table A8.19: VMI Standalone CATV Broadband tariffs[1517]

	500 Mb Broadband	1 Gb Broadband
Contract	12 months	
Price (inc. VAT) p/m	€44	€54
Download Speed	Up to 500 Mbps	Up to 1000 Mbps
Upload Speed	Up to 50 Mbps	
Download Allowance	Unlimited	
Other Services	Free Spirit Unlimited can be added to either plan for €20 per month.	

[1516] https://www.three.ie/business/shop-and-plans/broadband-plans.html#fibre-broadband accessed August 2023.

[1517] https://www.virginmedia.ie/broadband/buy-a-broadband-package/ accessed August 2023.

	World Talk can be added for €3 per month, including free local and national calls to Irish mobiles and landlines and 400 minutes to 22 International countries.

A 8.31 VMI also offer three standalone broadband products over fibre, outlined in Table A8.31 below:

Table A8.20: VMI Standalone Fibre Broadband tariffs

	Full Fibre 500 Mb Broadband	Full Fibre 1 Gb Broadband	Full Fibre 2 GB Broadband
Contract	12 months		
Price (inc. VAT) p/m	€44	€54	€64
Download Speed	Up to 500 Mbps	Up to 1000 Mbps	Up to 2000 Mbps
Upload Speed	Up to 50 Mbps		
Download Allowance	Unlimited		
Other Services	Free Spirit Unlimited can be added to either plan for €20 per month. World Talk can be added for €3 per month, including free local and national calls to Irish mobiles and landlines and 400 minutes to 22 International countries.		

A 8.32 Table A8.21 outlines the CATV broadband and TV bundles offered by VMI:

Table A8.21: VMI Residential Broadband, and TV Services[1518]

	500 Mb Broadband + Loaded TV	1 Gb Broadband + Loaded TV	2 GB Broadband + Loaded TV
Contract Length	12 months		
Price inc. VAT p/m	€59	€69	€79
Download Speed	Up to 500 Mbps	Up to 1000 Mbps	Up to 2000 Mbps
Upload Speed	Up to 50 Mbps		
Other Services included	Free Spirit Unlimited can be added to either plan for €20 per month. World Talk can be added for €3 per month, including free local and national calls to Irish mobiles and landlines and 400 minutes to 22 International countries.		

1518 https://www.virginmedia.ie/bundles/broadband-tv-phone/?intcmp=nav-feb23&cache=0 accessed August 2023.

A 8.33 VMI offers a number of different TV packages that can be bundled with any broadband product. TV can be added for €15 a month. Sky Sports can be added for €20 (standard definition) or €22.50 (high definition) for 6 months. Sky Sports and Sky Sports Extra can be added for €30 (standard definition) or €35 (high definition) for 12 months. VMI also offers Sky Cinema for €10 a month (standard definition) or €12.50 (high definition) for 6 months. A Sky Cinema and Sky Sports package can be added for €24.50 a month (standard definition) or €27 a month (high definition) for 6 months. Lastly, VMI offer Sky Sports Extra for €17 (standard definition) or €19.50 a month (high definition) for 12 months.

A 8.34 VMI also offer a range of smart home device packs, including Entertainment for €12.50 a month, Home Automation for €30 a month or Complete Smart Home for €47.50 a month.

Business Packages

A 8.35 VMI also provides broadband packages to business customers, from small businesses (1-20 employees) to medium businesses (20-250 employees),[1519] large enterprises (250+ employees)[1520] and the public sector.[1521] The various packages available for small businesses are outlined below in Table A8.22:

Table A8.22: VMI Business Broadband tariffs (for SMEs)[1522]

	Business 500	Business 1Gb
Contract Length	24 months	
Download Speed	Up to 500 Mbps	Up to 1000 Mbps
Upload Speed	Up to 50 Mbps	
Download Allowance	Unlimited	
Other Services Included	Business Service Level Agreement Dedicated Expert Support Team	

Vodafone

A 8.36 Vodafone offers a range of broadband packages, including single, dual, and triple play combinations of broadband, TV and voice.

Residential Packages

A 8.37 Table A8.23 describes three of the standalone broadband packages offered by Vodafone to residential customers:

[1519] https://www.virginmedia.ie/business/medium-business/ accessed August 2023.

[1520] https://www.virginmedia.ie/business/enterprise-business/ accessed August 2023.

[1521] https://www.virginmedia.ie/business/ accessed August 2023.

[1522] https://www.virginmedia.ie/business/fibre-business-broadband/ accessed August 2023.

Table A8.23: Vodafone Residential Standalone Broadband tariffs[1523]

	500 Mbps	1000 Mbps	2000 Mbps
Contract Length	12 months		
Price (incl. VAT) p/m	€40	€50	€70
Download Speed	Up to 500 Mbps	Up to 1000 Mbps	Up to 2000 Mbps
Download Allowance	Unlimited		
* Vodafone TV can be added for €25 p/m, including 80+ channels * GigaHome is available for €10 p/m, which includes Super Wi-Fi, Always Connected and Secure Net at Home * Super Wi-Fi for €5 p/m, which includes End Wi-Fi black spots in the home, supports Vodafone Wi-Fi calling and home Wi-Fi audit by technician * Always Connected for €5 p/m, which includes network back-up for broadband * Home Phone for €5 p/m, including unlimited Irish landline calls, call forwarding and twining to mobile and voicemail.			

Business Packages

A 8.38 Vodafone also provides broadband packages to business customers, ranging from businesses sized 1-24 employees, 25-49 employees and 50+ employees.[1524]

A 8.39 Table A8.24 describes three of the standalone broadband packages offered by Vodafone to business customers:

Table A8.24: Vodafone Business Standalone Broadband tariffs[1525]

	Up to 500 Mbps	Up to 1000 Mbps	Up to 2000 Mbps
Contract Length	12 months		
Price (ex VAT) p/m	€35	€45	€60
Download Speed	Up to 500 Mbps	Up to 1000 Mbps	Up to 2000 Mbps
Download Allowance	Unlimited		
Other Services included	Standard Fibre Connection Gigabox modem	Full Fibre Connection Gigabox modem with 4G backup	Full Fibre Connection Premium Gigabox+ modem

Residential and Business Mobile broadband

A 8.40 This section gives a brief outline of the mobile broadband packages on offer to retail and business customers. Mobile broadband packages are offered by Three, Eircom, Magnet and Vodafone. A total of 27 packages are available, 11 residential and 16 business.

[1523] https://n.vodafone.ie/shop/broadband.html, accessed November 2022.

[1524] https://n.vodafone.ie/business.html accessed August 2023.

[1525] https://n.vodafone.ie/business/products-and-solutions/fixed-communications/single-line.html accessed August 2023.

Table A8.25: Mobile Broadband Packages

Service Provider	Packages
Eir	5
Magnet	4
Three	12
Vodafone	6
Total	27

Eircom

Residential Packages

A 8.41 Eircom offers three residential mobile broadband packages over its mobile network. Table A8.26 below outlines the components of each:

Table A8.26: Eircom Residential Mobile Broadband tariffs[1526]

	5G Broadband	4G Broadband	eir Mobile Broadband
Contract Length	12 months		6 months
Price (inc. VAT) p/m	€39.99	€34.99	€19.99
Download Speed	Up to 1.65Gbps	Up to 600 Mbps	
Upload Speed	Up to 250 Mbps	Up to 100 Mbps	
3G/4G/5G	5G and 4G enabled	4G enabled	
Device	Huawei 5G CPE Pro 5	Huawei B628	Huawei E5783 4G Hotspot

Business Packages

A 8.42 Eircom offers business mobile broadband packages over its mobile network, for small businesses. Table A8.27 below outlines the components for each broadband package:

Table A8.27: Eircom Business Mobile Broadband tariffs

	Small Business (SMB)[1527]	
	5G Broadband	4G Broadband
Contract Length	12 months	
Price ex VAT pm	€35.99	€29.99
Download Speed	Up to 1.65 Gbps	Up to 600 Mbps
Upload Speed	Up to 250 Mbps	Up to 100 Mbps
Download Allowance		
3G/4G/5G	5G & 4G enabled	4G enabled

[1526] https://www.eir.ie/mobile/broadband/ accessed August 2023.

[1527] https://www.eir.ie/business/smb/mobile-broadband/ accessed August 2023.

Device	Huawei 5G CPE Pro router	Huawei B628 router

Magnet

Business Packages

A 8.43 Magnet offers four business mobile broadband packages. Table A8.28 below outlines the components of each:

Table A8.28: Magnet Business Mobile Broadband tariffs[1528]

	Anywhere 100GB	Anywhere 250GB	Anywhere 600GB	Anywhere 1000Gb
Price (exc. VAT) p/m	€64	€74	€94	€124
Download Allowance	100GB	250GB	600GB	1000GB

Three

A 8.44 Three offers 12 mobile broadband packages, five residential and seven business.

Residential Packages

A 8.45 Three's mobile broadband packages are divided between prepay and bill pay (direct debit) and are described in Table A8.29 below:

Table A8.29: Three Residential Mobile Broadband tariffs[1529]

	Unlimited 5G Gold	Unlimited 5G Silver	Unlimited 5G 12 Months	Unlimited	Prepay Broadband[1530]
Contract	24 months		12 months	24 months	28 days
Price (inc. VAT) p/m	First 3 months free €39 thereafter	First 3 months free €39 thereafter	€45	€30	€30
Download Speed	Up to 500 Mbps	Up to 500 Mbps	Up to 500 Mbps		
Download Allowance	Unlimited*				30GB
3G/4G/5G	5G enabled			4G enabled	
One-off Charges					€109.99 for Huawei B535-232a router, or €79.99 for Huawei E5783-230a router
Other services included	Expert install				
* Unlimited Broadband is subject to the fair usage policy of 750GB per billing cycle.					

[1528] https://www.magnetplus.ie/business/wireless-broadband/ accessed August 2023.

[1529] https://www.three.ie/broadband.html accessed August 2023.

[1530] https://www.three.ie/shop/broadband/prepay-broadband-plans.html accessed August 2023.

Business Packages

A 8.46 Three offers seven mobile broadband packages for businesses, outlined in Table A8.30 below:

Table A8.30: Three Business Mobile Broadband tariffs[1531]

	Broadband Express	Broadband Advanced	Broadband+	Express SIM Only	Mobile Broadband 3GB	Mobile Broadband 15GB	Unlimited
Contract Length	24 months			30-day rolling	24 months		
Price (ex. VAT) p/m	€25	€30	€30	€25	€7	€15	€25
Download Allowance	Unlimited				3GB ROI & EU	15GB	Unlimited
3G/4G/5G	5G enabled		4G enabled	5G enabled	4G enabled		
One-off Charges		€49 set up cost	€49 set up cost				

Vodafone

A 8.47 Vodafone offers both residential and business mobile broadband packages.

Residential Packages

A 8.48 Table A8.31 below provides an overview of the mobile broadband packages available from Vodafone:

Table A8.31: Vodafone Residential Mobile Broadband tariffs[1532]

	5G Unlimited Mobile Broadband	4G Unlimited Mobile Broadband	30 Day Mobile Broadband
Contract Length	12 months		30-day rolling contract
Price (inc. VAT) p/m	€40 for 6 months €45 thereafter	€30 for 6 months €40 thereafter	€35 per month
Download Allowance	Unlimited		300GB
3G/4G/5G	5G or 4G enabled, depending on modem	4G	4G
Device	Huawei H122 5G CPE modem for €99.99	Free Alcatel HH71 modem	Alcatel HH71 modem for €99.99

1531 https://www.three.ie/business/shop-and-plans/broadband-plans.html#business-and-home-office and https://www.three.ie/business/shop-and-plans/broadband-plans.html#on-the-go accessed August 2023.

1532 https://n.vodafone.ie/shop/broadband/mobile-broadband.html accessed August 2023.

Business Package

A 8.49 Table A8.32 below provides an overview of the single business mobile broadband package available from Vodafone:

Table A8.32: Vodafone Business Mobile Broadband tariffs[1533]

	5G Unlimited Mobile Broadband	4G Unlimited Mobile Broadband	30 Day Mobile Broadband
Contract Length	12 months		30-day rolling contract
Price (exc. VAT) p/m	€32.52 for 6 months €36.59 thereafter	€24.39 for 6 months €32.52 thereafter	€28.46
Download Allowance	Unlimited		300GB
3G/4G/5G	5G or 4G enabled, depending on modem	4G	
Device	Huawei H122 5G CPE modem for €81.29	Alcatel HH71 modem for free	Alcatel HH71 modem for €81.29

1533 https://n.vodafone.ie/business/products-and-solutions/fixed-communications/mobile-broadband.html accessed August 2023.

Annex 9 Market Definition Assessment - Assessing Potential Substitutes

Approach to Assessing Potential Substitutes for Market Definition purposes

A 9.1 When assessing whether or not potential substitute products fall within a particular relevant product market, ComReg takes account of the following:

(a) Demand-side substitution;

(b) Supply-side substitution; and

(c) In respect of wholesale product markets only, the indirect retail constraint generated by self-supply of vertically-integrated SPs.

A 9.2 These analytical concepts are briefly described below.

Demand-Side Substitution

A 9.3 Demand-side substitution measures the extent to which a purchaser of services would, in response to the levying by a HM of a SSNIP[1534] of the relevant focal product above the competitive level, switch to an alternative product, such that it would render the price increase unprofitable. If the level of switching away from the HM to the alternative product is sufficient to render the focal product price increase unprofitable (for instance, due to the resulting loss of sales), then the alternative product will be included in the relevant product market.

A 9.4 As noted in paragraph 13 of the Notice on Market Definition, demand-side substitution constitutes the most immediate and effective disciplinary force on the suppliers of a product. If the relevant focal product is priced above the competitive level, a switch to an alternative product may render the price increase unprofitable. If the level of switching away from the HM to the alternative product is sufficient to render the focal product price increase unprofitable, then the alternative product will be included in the relevant product market:

> *"…the assessment of demand substitution entails a determination of the range of products which are viewed as substitutes by the consumer".*[1535]

[1534] Typically, a long-term and non-transitory price increase in the range of 5% to 10%.

[1535] Paragraph 15 of the Notice on Market Definition.

A 9.5 For products to be considered effective demand-side substitutes and included in the relevant market, it is necessary that a sufficient number of customers are not only capable of switching between such products, but that they would be likely to actually do so in the short term (usually one year), in response to a price change.

A 9.6 In this regard, the SMP Guidelines state[1536] that demand-side substitution must effectively constrain the pricing of the parties' products in the short term. Furthermore, in order for two products to be considered to fall within the same relevant market, demand must be sufficiently responsive to small changes in relative prices above the competitive level.

A 9.7 For the purposes of market definition, the Notice on Market Definition suggests that constraints imposed by actual competitors are among the most relevant elements to be assessed:

> *"The objective of defining a market in both its product and geographic dimension is to identify those actual competitors of the Undertakings involved that are capable of constraining those Undertakings' behaviour and of preventing them from behaving independently of effective competitive pressure".*[1537]

Supply-Side Substitution

A 9.8 ComReg also considers the impact of supply-side substitution, that is, the extent to which a producer not currently active in supplying the candidate products within the market would, in response to a HM's SSNIP above the competitive level, switch production in the immediate to short term without incurring significant costs, and start supplying potential substitute products of equivalent characteristics and/or prices and, as a consequence of such provision, render the HM's price increase unprofitable.[1538]

A 9.9 Such an alternative potential substitute product could be included within the overall product market as a supply-side substitute if the production facilities (or network) would provide a sufficient competitive constraint to prevent a profitable price increase by the HM supplier of the candidate product(s), say because of the resulting loss of sales through switching to the alternative producer's product.

A 9.10 In such circumstances, the Notice on Market Definition indicates that supply-side substitutes can be included within the product market:[1539]

[1536] SMP Guidelines, paragraph 33.

[1537] Notice on Market Definition, paragraph 2.

[1538] SMP Guidelines, paragraph 41.

[1539] Notice on Market Definition, paragraph 20.

> *"…in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. This means that suppliers are able to switch production to the relevant products and market them in the short term*[1540] *without incurring significant additional costs or risks in response to small and permanent changes in relative prices. When these conditions are met, the additional production that is put on the market will have a disciplinary effect on the competitive behaviour of the companies involved. Such an impact in terms of effectiveness and immediacy is equivalent to the demand substitution effect."*

A 9.11 The Notice on Market Definition also notes that:[1541]

> *"When supply-side substitutability would entail the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays, it will not be considered at the stage of market definition. ……. In these cases, the effects of supply-side substitutability and other forms of potential competition would then be examined at a later stage."*

A 9.12 Therefore, any potential relevant supply-side substitutes should be sufficiently imminent in terms of their presence in the market in order to be capable of constraining a SSNIP.

A 9.13 The SMP Guidelines also suggest that, when defining a relevant market, mere hypothetical supply-side substitution is not sufficient.[1542]

> *"NRAs will need to ascertain whether a given supplier would actually use or switch its productive assets to produce the relevant product or offer the relevant service (for instance, whether their capacity is committed under long-term supply agreements, etc.)."*

Individual Network Operator Coverage

A 9.14 Conditions of competition between Modified EAs may also be appreciably different and distinguished from other Modified EAs where there are sufficient differences in individual NO coverage levels between Modified EAs. ComReg considers that materially differing NO coverage between Modified EAs is a useful indicator of differing competitive conditions across EAs, with this also reflecting the extent to which a NO can supply NG WLA.

[1540] A period that does not entail a significant adjustment of existing tangible and intangible assets.

[1541] See paragraph 23 of the Notice on Market Definition.

[1542] See paragraph 41 of the SMP Guidelines.

A 9.15 However, examining the coverage of the largest NO, in the absence of an analysis of the size and scale of competitor NOs is not likely to be sufficient, and the Phase 2 assessment criteria should also consider the size and strength of competitors in a Modified EA. ComReg is of the view that, for a NO to contribute to differing competitive conditions it must have a minimum presence in an EA, such that Access Seekers (and potential subscribers) view it as a sufficiently viable alternative supplier in any potential switching decision.

A 9.16 In setting a minimum coverage level for NOs, ComReg seeks to ensure that a sufficient degree of competition exists – or is likely to exist within a reasonable timeframe, with a reasonable degree of certainty - within a Modified EA to be suggestive of potentially differing competitive conditions. In this regard, BEREC research[1543] indicates that the number of competitors with individual infrastructure coverage above a certain threshold was the most commonly-used criterion by NRAs in determining whether it was appropriate to define sub-national geographic markets in the provision of WLA. ComReg's approach is therefore consistent with NRA practice in assessing WLA geographic markets.

A 9.17 ComReg's market definition exercise is required to be forward-looking. Therefore, it is important to consider how, based on reliable and accurate evidence, NO coverage might evolve over the market review period and whether any variations in current or historic coverage levels are likely to increase or remain relatively stable. In this regard, ComReg must consider whether each NO's coverage within a Modified EA might change sufficiently over the review period, such that it changes conditions of competition.

A 9.18 In the 2023 Consultation, ComReg proposed an individual NO coverage threshold of 60%. ALTO[1544] and BT[1545] both expressed concern in their Submissions that this could lead to a large cohort of end users experiencing monopoly coverage as few NOs were likely to reach 100% coverage, given huge rollout costs. In order to minimise the risk of 'competition gaps', BT and ALTO both therefore recommended that the Criterion 2 coverage threshold should be increased from 60% to 80%.

A 9.19 The purpose of the Phase 2 geographic assessment is to determine whether there are sufficient differences in competitive conditions between Modified EAs (and they are distinguishable), not to assess the presence of SMP at a Modified EA. ALTO's concerns in respect of potential monopoly coverage are more appropriately addressed at Section 6 dealing with the assessment of SMP.

[1543] BEREC Report on the application of the Common Position on geographic aspects of market analysis, BoR (18) 213 (the '**2018 BEREC Report**'), at Table 9.

[1544] ALTO Non-confidential Submission, at p.6.

[1545] BT Non-confidential Submission, at p.5.

A 9.20 In respect of the proposed 80% coverage criterion, in its 2021 FACO/RFTS draft Decision,[1546] ComReg set a single criterion - 80% coverage - in its Phase 2 assessment of the FACO geographic market. In reviewing that draft decision the EC deemed this threshold to be too high, compared to coverage criteria applied by other NRAs.[1547] Bearing in mind the EC's views on coverage thresholds, ComReg applies a coverage criterion for NG WLA of 60%, but also applies two other criteria, which must be satisfied cumulatively. Therefore, while ComReg applies a lower 60% threshold to NO coverage, it also requires two other criteria to be satisfied when assessing into which market a Modified EA should be geographically assigned.

A 9.21 ComReg has also had regard to BEREC research which indicates that, of those NRAs which applied a coverage criterion on their WLA market review, the threshold varied widely, between 20% and 75%, with the latter being cumulative coverage of three or more operators.[1548]

A 9.22 Finally, ComReg's research suggests that, based on Q1 2023 data, increasing the coverage threshold to 80% would make no material difference to the composition of the NG WLA geographic markets.

Self-Supply of vertically-integrated Service Providers

A 9.23 The indirect retail constraint generated by means of self-supply of wholesale/retail inputs on electronic communications networks by vertically-integrated SPs may also fall within the relevant market, if such self-supply exerts an effective competitive constraint on the market under consideration. Having regard to the SMP Guidelines, the 2020 Explanatory Note and the Notice on Market Definition, the following criteria are typically considered by ComReg in determining whether self-supply on a given network falls within the relevant product market:

(a) Whether sufficient demand-side substitution would be likely to arise if the self-supplied product were made available to third parties in the merchant market;

(b) Whether the network offers the coverage expected by Access Seekers;

[1546] Information Notice Market Reviews: Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non-Residential Customers - Wholesale Fixed Access and Call Origination Broadcasting Transmission Services in Ireland Publication and notification to the EC, BEREC, and Member State NRAs of draft measures under Article 32 of Directive 2018/1972, ComReg 21/65 (the '**2021 FACO/RFTS draft Decision**') https://www.comreg.ie/publication/information-notice-rfts-faco-draft-decision

[1547] Commission Decision of 17.9.2021 pursuant to Article 32(6) of Directive (EU) 2018/1972 (Withdrawal of notified draft measure) Cases IE/2021/2332-2333: markets for retail fixed telephony services and wholesale fixed access and call origination in Ireland, at paragraph 132.

[1548] 2018 BEREC Report, Table 10.

(c) Whether provision of the self-supplied product to third parties is technically feasible;

(d) Whether the SP whose self-supply is under consideration has sufficient capacity to provide the self-supplied product to third parties; and

(e) Whether the SP whose self-supply is under consideration would provide the self-supplied product to third parties in the short term without incurring significant additional costs or risks and would be likely to do so in response to small and permanent changes in relative prices.

A 9.24 Where these criteria are met, it is likely that the self-supplied service could act as an effective competitive constraint on the focal product. On that basis, the inclusion of self-supplied services in the product market is warranted.

Annex 10 Critical Loss Test for Indirect Retail Constraints

Introduction

A 10.1 In this Annex, ComReg outlines the computation of the Critical Loss Test (‘**CLT**’) set out in Section 5.2.3 above. The CLT provides further evidence in assessing the extent to which indirect retail constraints might impact the definition of the Relevant WLA Markets. The CLT supports the SSNIP analysis by estimating the percentage of customers that would have to divert away from the focal product in response to a SSNIP (in this case, the pass-through of a wholesale SSNIP) to render the increase in the price of the focal product unprofitable.

A 10.2 The CLT utilises data on prices of retail broadband, WLA prices and costs, and subscriber numbers. These data, alongside other relevant information, support the overall conclusions set out in this Decision.

A 10.3 The framework used to assess the scope of a market is the Hypothetical Monopolist Test (‘**HMT**’), also known as the SSNIP test. The test begins by considering whether a nominal focal product constitutes a market in and of itself, and can be assessed by evaluating whether a market is worth monopolising. In order to determine whether a given product, or group of products, is worth monopolising, the pricing behaviour of a HM is considered. If the HM could impose a profitable SSNIP, then the market is considered to be no wider than the focal product(s).

A 10.4 It is not necessary that all customers switch to a given potential substitute product in order for it to be defined as falling within the same relevant product market as the focal product(s). Rather, it only needs to be the case that a sufficient number of customers would switch to such alternative products, in order to prevent the SSNIP from being profitable.

A 10.5 To implement the HMT, a framework known as ‘critical loss analysis’ is used. The CLT estimates the percentage of customers that would have to divert away from the focal product in response to a SSNIP, for that price rise to be unprofitable. A prediction of actual loss can then be compared to the critical loss value (‘**CLV**’), and if the number of customers switching exceeds the CLV, then the SSNIP is considered likely to be unprofitable. The market is thus no wider than the focal product(s). Thus, the amount of demand substitution from the focal product to the potential substitute must be greater than the critical loss estimate, in order for the potential substitute to be deemed to fall in the same relevant market as the focal product.

Deriving the CLT

A 10.6 The CLT measures the percentage reduction in demand due to a SSNIP that would leave profits unaffected. If the reduction in demand due to a SSNIP is greater than the CLT, then the SSNIP will be unprofitable, and vice versa.

A 10.7 The change in profits following a SSNIP is given by:

$$\pi_1 - \pi_0 = (p_1 q_1 - p_0 q_0) - c(q_1 - q_0) \qquad (1)$$

where π is profit, c is marginal cost, p_0 is the price before the SSNIP, p_1 is the price after the SSNIP, q_0 is the original number of subscribers, and q_1 is the post-SSNIP number of subscribers. The equation states that the change in profit equals the change in revenue less the change in costs (i.e. marginal costs), which are assumed to fall if the number of subscribers falls.

A 10.8 If we specify $p_1 = p_0(1+s)$, $q_1 = q_0(1+L)$, $c = (\alpha p_0)$ and $\pi_1 - \pi_0 < 0$ the CLT can be expressed as a function of the SSNIP:

$$L < -\frac{s}{1+(s-\alpha)} \qquad (2)$$

where L is the critical loss, s is the SSNIP, and α is the ratio of marginal cost to price.

A 10.9 Alternatively, the critical loss can be computed as:[1549]

$$\frac{s}{(1-\alpha)+s}$$

or

$$\frac{s}{m+s}$$

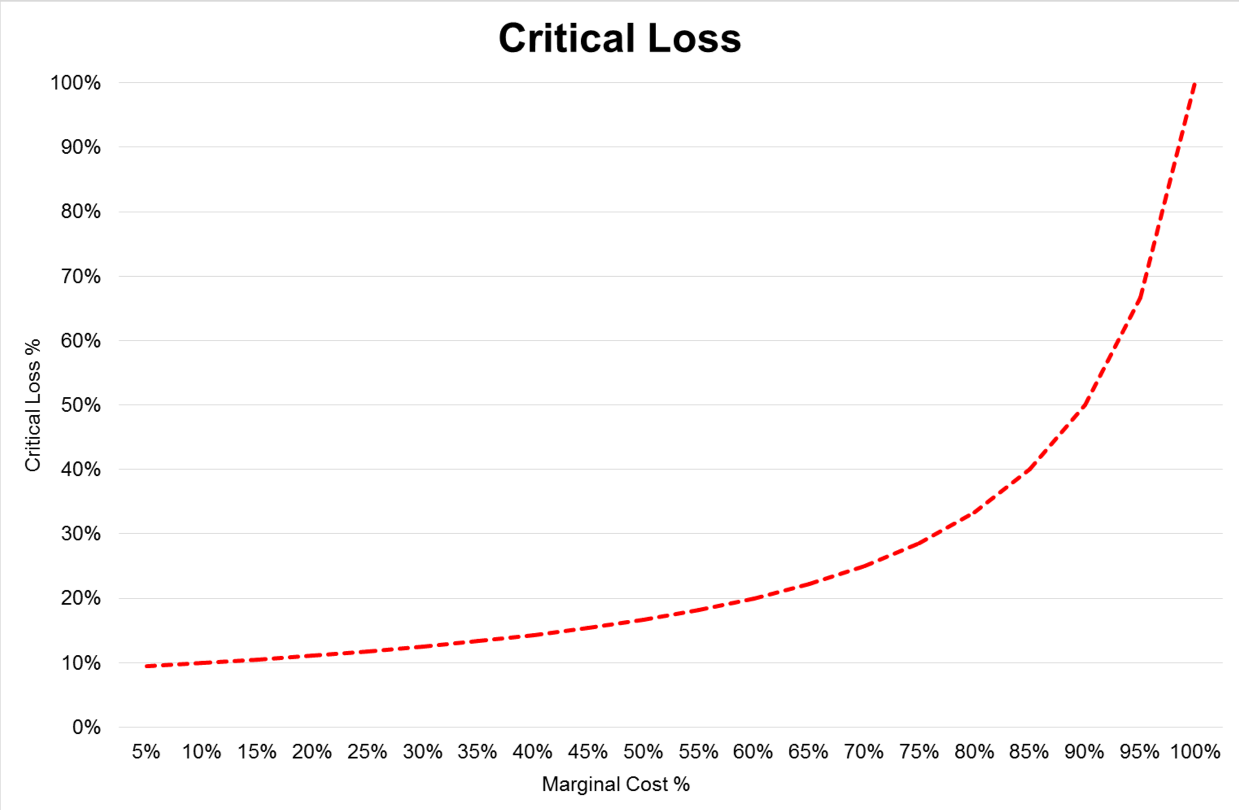
Where m = $(1-\alpha)$ i.e. the margin, as opposed to the ratio of marginal cost to price.

A 10.10 Figure A10.1 below plots the critical loss if a number of assumptions for α are made (i.e. that it is as low as 5%, or as high as 100%). If α is 100% (i.e. it is equal to the retail price charged), the lost revenue from customers who switch SP in response to the SSNIP would be offset by the costs saved from not serving those customers. In this case, profits would amount to the increase in retail prices multiplied by the number of customers who do not switch.

[1549] 'Could' or 'would'? The difference between two hypothetical monopolists', Oxera, November 2008. https://www.oxera.com/wp-content/uploads/2018/03/Hypothetical-monopolists-1.pdf

A 10.11 Conversely, if the marginal costs are as low as 5%, then the lost revenue would come from those who switch, with only a 5% associated cost saving. The lost revenue would be greater than the increase in revenue from customers who do not switch if demand falls by more than 10%:

Figure A10.1: Critical Loss with assumed values for α

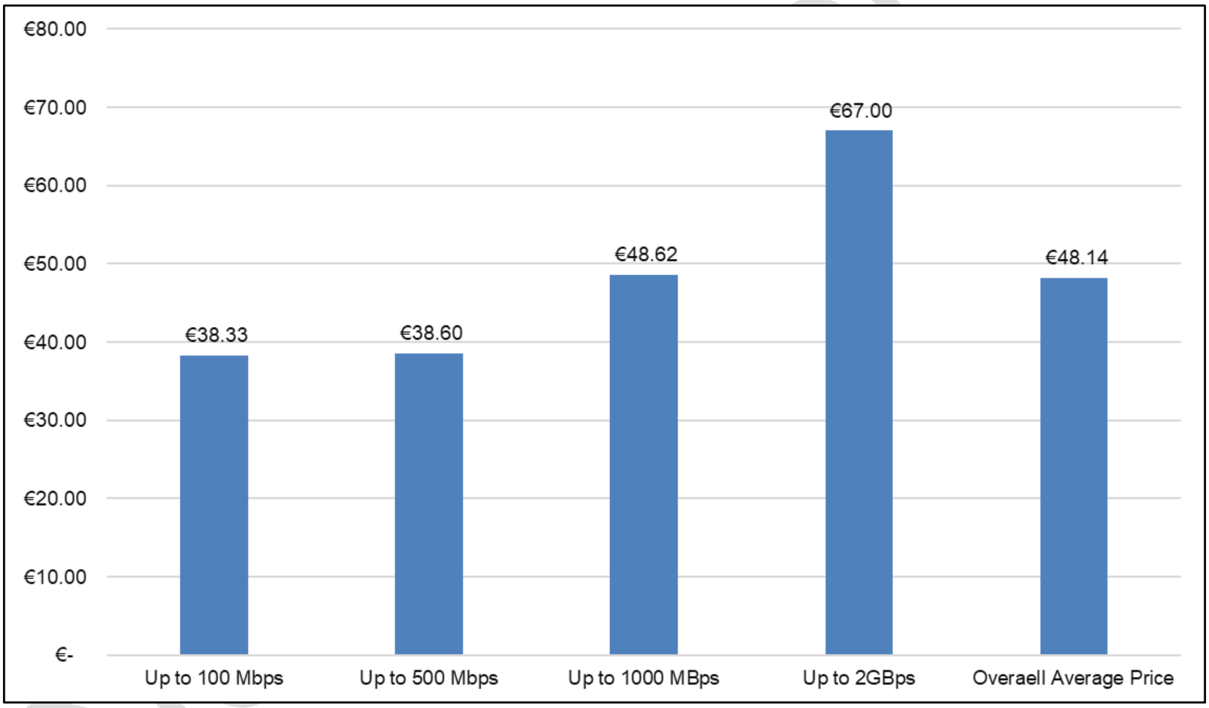


Price and cost data

A 10.12 The CLT requires detailed information regarding a number of parameters, including marginal costs. Where such relevant information is absent, ComReg uses proxies for the various parameters that are used to calculate the critical loss. The CLT is therefore no more than a general guide for ComReg's assessment of indirect retail constraints. It is by no means determinative in and of itself, and is considered alongside other information in seeking to determine whether the response by end users to an increase in the price of retail broadband resulting from the SSNIP in WLA would be likely to constrain the profitability of such a SSNIP.

A 10.13 The relevant retail broadband prices by SP and package type are outlined in detail in Annex 8. In Figure A10.2 and Figure A10.3 below, ComReg shows average standalone broadband residential prices across all SPs. The average price per month is €48.51 for standalone broadband residential end user purchases and includes VAT. The average price across all broadband packages (both standalone and bundled) is €59.02. This is close to but not fully consistent with the 2022 Residential Market Research, which indicated that the average retail standalone broadband price per month paid by residential end users is €43 and €75 for bundled broadband services. This may be somewhat explained by the elapsed time since the 2022 Market Research, the impact of inflation on retail prices over the last year and the introduction of broadband products at speeds of 2 Gbps which tend to be more expensive than lower speed products.[1550]

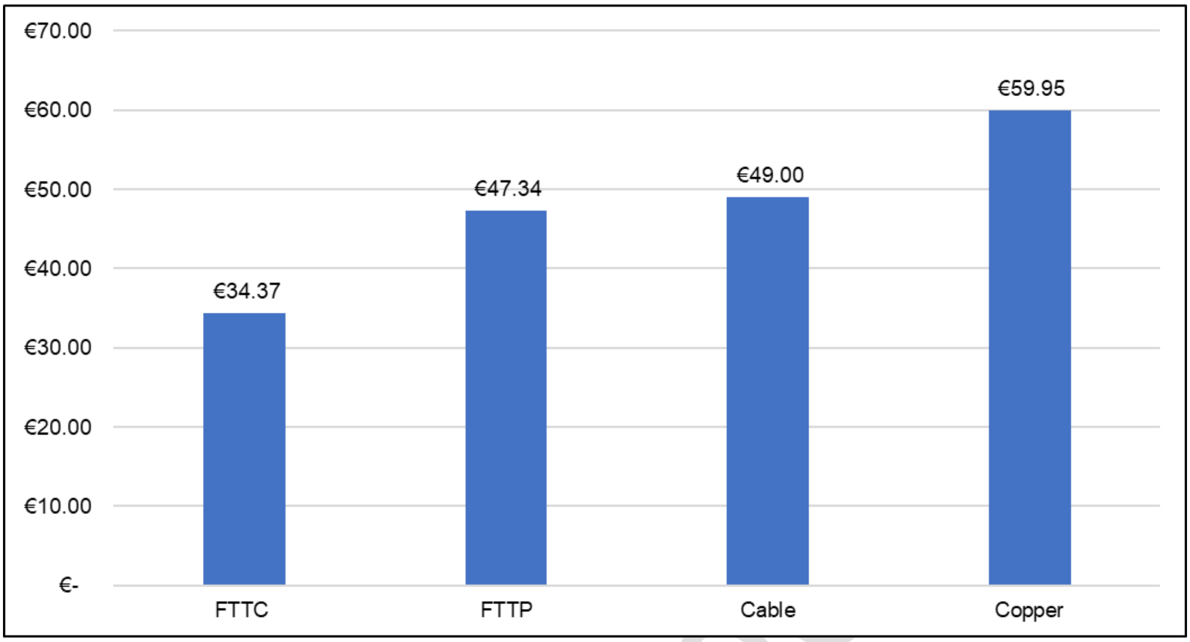
Figure A10.2: Average Monthly Residential Standalone Broadband Prices by Speed[1551]



[1550] See 2022 Residential Market Research in Annex 8.

[1551] SPs included Vodafone, Sky, VMI, Magnet, Pure Telcom and Digiweb. Average cost of plans advertised under the speed bands of 'up to' 100, 500, 1000 Mbps and 2 Gbps. ComReg calculations based on tariff data from SP websites, accessed August 2023.

Figure A10.3: Average Monthly Residential Standalone Broadband Prices by Platform[1552]



A 10.14 ComReg obtains data on the costs of servicing a residential customer per month including the WLA prices, customer services costs, billing, equipment, and connection costs. These costs are outlined in Table A10. below.

Table A10.1: Eircom WLA prices and retail costs [✂PARTIALLY REDACTED✂]

Product	Marginal Costs for Access Seeker	Residential retail prices[1553]	Business retail prices
CG WLA: LLU	[✂ [redacted][1554] ✂]	€59.95	€76.33
NG WLA: VUA	[✂ [redacted][1555] ✂]	€47.83	€56.34

1552 ComReg calculations based on tariff data from SP websites, accessed August 2023. The copper broadband product included in this chart is part of a broadband and RFTS bundle provided for by Digiweb, where RFTS is provided at no additional cost. The inclusion of this copper bundle is for informative purposes as it is the only copper product available across all SPs, outlined in Annex 8.

1553 These figures only take into account retail broadband services that are potentially provided for on the basis of Eircom WLA inputs.

1554 [✂ [redacted] ✂]

1555 [✂ [redacted] ✂]

WLA Market CLT

A 10.15 ComReg has used Eircom's Historical Cost financial statements for December 2022 to estimate Eircom's margins for WLA products, i.e. m=(1-α), and has calculated critical loss estimates accordingly.[1556] This actual historical accounting data is used to approximate the critical loss calculation where the margin 'm' is estimated based on Eircom's reported service-specific return (profit) relative to its corresponding revenue.

A 10.16 The estimates in Table A10.2 and Table A10.3 below represent the end user demand response that would be required following the pass-through of a SSNIP of VUA and LLU, in order to prevent a profitable SSNIP of WLA by Eircom.

A 10.17 Table A10.2 estimates the critical loss for VUA at **[✂ [redacted] ✂]**[1557] for a 5% SSNIP, and **[✂ [redacted] ✂]**[1558] for a 10% SSNIP. This implies that, if a HM imposed a SSNIP of 10%, it would be rendered unprofitable if demand fell by more than **[✂ [redacted] ✂]**.[1559] These critical loss estimates indicate the extent to which demand would need to switch from Eircom's WLA products for a given alternative retail product to fall within the Relevant WLA Markets:

Table A10.2: Estimates of Residential Critical Loss for SSNIP of VUA [✂PARTIALLY REDACTED✂]

	5% SSNIP	10% SSNIP
Average residential retail prices (inc. VAT)[1560]	€47.83	
Marginal costs for Access Seeker	[✂ [redacted] ✂]	
Effective Retail price increase	[✂ [redacted] ✂][1561]	[✂ [redacted] ✂][1562]
Ratio costs to prices (α)	[✂ [redacted] ✂][1563]	
Profit-maximising critical loss	[✂ [redacted] ✂]	[✂ [redacted] ✂]

[1556] https://www.eir.ie/opencms/export/sites/default/.content/pdf/regulatoryinformation/HCA.pdf

[1557] Between 1% and 10%.

[1558] Between 1% and 10%.

[1559] Between 1% and 10%.

[1560] Average residential retail prices for the CLT have been calculated across both standalone and bundle broadband plans, as the change in price from a SSNIP would affect both standalone and bundled broadband plans.

[1561] Between €0 and €10.

[1562] Between €0 and €10.

[1563] Between 70% and 80%.

A 10.18 Table A10.3 estimates the critical loss for LLU at **[✂ [redacted] ✂]**[1564] for a 5% SSNIP, and **[✂ [redacted] ✂]**[1565] for a 10% SSNIP. This implies that, if a HM imposed a SSNIP of 10%, it would be rendered unprofitable if demand fell by more than **[✂ [redacted] ✂]**.[1566] These critical loss estimates indicate the extent to which demand would need to switch from Eircom's WLA products for a given alternative retail product to fall within the Relevant WLA Markets:

Table A10.3: Estimates of Residential Critical Loss for SSNIP of LLU [✂PARTIALLY EDACTED✂]

	5% SSNIP	10% SSNIP
Average residential retail prices (inc. VAT)	€59.95	
Marginal costs for Access Seekers	[✂ [redacted] ✂]	
Effective Retail price increase	[✂ [redacted] ✂][1567]	[✂ [redacted] ✂][1568]
Ratio costs to prices (α)	[✂ [redacted] ✂][1569]	
Profit-maximising critical loss	[✂ [redacted] ✂]	[✂ [redacted] ✂]

A 10.19 The CLT for SME customers based on VUA is set out at Table A10.4 below and is estimated at **[✂ [redacted] ✂]**[1570] for a 5% SSNIP and **[✂ [redacted] ✂]**[1571] for a 10% SSNIP.

Table A10.4: Estimates of SME Critical Loss for SSNIP of VUA [✂PARTIALLY REDACTED✂]

	5% SSNIP	10% SSNIP
Average SME retail prices (inc. VAT)	€56.34	
Marginal costs for Access Seekers	[✂ [redacted] ✂]	
Effective Retail price increase	[✂ [redacted] ✂][1572]	[✂ [redacted] ✂][1573]
Ratio costs to prices (α)	[✂ [redacted] ✂][1574]	
Profit-maximising critical loss	[✂ [redacted] ✂]	[✂ [redacted] ✂]

1564 Between 1% and 10%.

1565 Between 1% and 10%.

1566 Between 1% and 10%.

1567 Between €0 and €10.

1568 Between €0 and €10.

1569 Between 10% and 20%.

1570 Between 1% and 10%.

1571 Between 1% and 10%.

1572 Between €0 and €10.

1573 Between €0 and €10.

1574 Between 60% and 70%.

A 10.20 The CLT for SME customers based on LLU is set out at Table A10.5 below and is estimated at **[✂ [redacted] ✂]**[1575] for a 5% SSNIP and **[✂ [redacted] ✂]**[1576] for a 10% SSNIP of LLU.

Table A10.5: Estimates of SME Critical Loss for SSNIP of LLU [✂PARTIALLY REDACTED✂]

	5% SSNIP	10% SSNIP
Average SME retail prices (inc. VAT)	€76.33	
Marginal costs for Access Seekers	[✂ [redacted] ✂]	
Effective Retail price increase	[✂ [redacted] ✂][1577]	[✂ [redacted] ✂][1578]
Ratio costs to prices (α)	[✂ [redacted] ✂][1579]	
Profit-maximising critical loss	[✂ [redacted] ✂]	[✂ [redacted] ✂]

1575 Between 1% and 10%.

1576 Between 1% and 10%.

1577 Between €0 and €10.

1578 Between €0 and €10.

1579 Between 10% and 20%.

Annex 11 Other Criteria for SMP Assessment

A 11.1 As noted in paragraph 6.7, ComReg has considered other factors that could be used to indicate the potential market power of an SP but which, for the reasons set out below, are considered of little or no relevance for the purposes of the SMP assessment in the Relevant WLA and WCA Markets respectively.

Technological advantages or superiority

A 11.2 Technological advances or superiority can represent a barrier to entry as well as conferring the ability for an SP to achieve cost or production advantages or efficiencies over its competitors. However, the technologies used to provide WLA and WCA have little or no bearing on the assessment of SMP in the Relevant WLA and WCA Markets. In particular, it appears that any technological advancement made by one operator could, from a purely technological point of view, be adopted over time by others. For example, FTTP or DOCSIS 3.1 technology are not proprietary technologies, and are available to all operators seeking to provide WLA, WCA and/or retail broadband services. This criterion is, therefore, considered of less relevance in the Relevant WLA and WCA Markets.

Easy or privileged access to capital markets/financial resources

A 11.3 Easy or privileged access to capital markets may act as a barrier to entry in markets where small, private companies compete with a large incumbent in the WLA or WCA markets and are not able to leverage sufficient finance to invest in alternative infrastructure and use it to compete effectively with the incumbent.

A 11.4 ComReg considers that this is unlikely to be a factor in the WLA and/or WCA markets, considering that the main potential entrants are subsidiaries of large parent companies. e.g. BT, Vodafone Ireland, Sky, VMI, SIRO, and NBI. These SPs are equally able to access capital markets and are therefore not at a disadvantage relative to the incumbent. This criterion is, therefore, considered of little or no relevance.

A highly developed distribution and sales network

A 11.5 The need to establish distribution systems might delay short term market entry or expansion, given the costs involved and could act as a barrier to entry. However, entry into the WLA and/or WCA Markets is unlikely to involve establishing extensive distribution and sales networks, since there are only a small number of potential wholesale customers.

A 11.6 In any case, given that potential entrants to either the WLA or WCA markets are most likely to operate in the WCA market (with its existing base of wholesale customers), or existing retail broadband suppliers with a significant existing retail distribution and sales network (for example, VMI, Vodafone or Sky), a highly developed sales and distribution network is unlikely to represent a significant barrier to entry in the Relevant WLA and WCA Markets.

Annex 12 NG WLA Geographic Market Assessment

Introduction

A 12.1 This Annex sets out in greater detail ComReg's approach to the Phase 2 assessment of the NG WLA geographic markets, and is structured as follows:

(a) Framework for NG WLA market geographic assessment (paragraphs A 12.3 to A 12.73);

(b) Assessment of differences in competitive conditions in the NG WLA geographic markets (paragraphs A 12.74 to A 12.89); and

(c) Overall conclusion on NG WLA geographic market assessment (paragraph A 12.89).

A 12.2 This Annex should be read in conjunction with Section 5.3 above.

Framework for NG WLA Market Geographic Assessment

A 12.3 ComReg's framework for assessing the geographic boundaries of the Relevant NG WLA Market(s) follows three steps:

(a) **Establishing the relevant geographic unit:** ComReg considers the appropriate geographic unit, taking into account the range of services offered by Eircom and other Network Operators, including those products falling into the NG WLA product market (paragraphs A 12.5 to A 12.37);

(b) **Establishing criteria for assessing competitive conditions:** ComReg sets out the criteria it uses to assess any sufficient differences in competitive conditions in the geographic areas in question (paragraphs A 12.38 to A 12.63); and

(c) **Analysis of criteria:** ComReg examines factors inputting to the criteria, which assist in distinguishing geographic areas characterised by sufficiently different conditions of competition (paragraphs A 12.64 to A 12.73).

A 12.4 The rationale for this assessment framework is set out below.

Relevant geographic unit for assessment of competitive conditions in the provision of NG WLA

A 12.5 In general, the process of defining the geographic boundaries of markets involves identifying any geographic areas where a distinct break in competitive conditions can be observed. This approach places weight on the underlying structural and behavioural factors that are relevant in determining any competitive differences within a market.

A 12.6 ComReg has considered the appropriate geographic unit to be employed in undertaking the NG WLA market Phase 2 geographic assessment.

A 12.7 In forming its view, ComReg has taken utmost account of the 2020 Recommendation and the BEREC Common Position, as well as having regard to EC comments letters on NRA market analyses. The 2020 Explanatory Note[1580] indicates that, when NRAs are examining the geographic scope of a market, they should ensure that the geographic unit of assessment is:

(a) of an appropriate size;

(b) able to reflect the network structure of all relevant SPs; and

(c) characterised by clear and stable boundaries over time.

A 12.8 The BEREC Common Position adds[1581] that geographic units should satisfy a number of quantitative criteria, namely that:

(a) they are mutually exclusive and less than national;

(b) the network structure of all relevant SPs and the services sold on the market can be mapped onto the geographic units;

(c) they have clear and stable boundaries; and

(d) they are small enough for competitive conditions to be unlikely to vary significantly within the unit but, at the same time, large enough that the burden on SPs and NRAs with regard to data delivery and analysis is reasonable.

A 12.9 Having regard to the above, ComReg's view is that geographic units should be small enough to avoid significant variations in competitive conditions within each chosen unit, but also large enough to avoid a resource intensive and burdensome micro-analysis that could lead to an unwarranted fragmentation of a market which did not reflect the reality of differing competitive conditions.

[1580] At page 14.

[1581] At paragraph 86.

A 12.10 The boundaries of any geographic unit should be relatively stable and easily understood by SPs. When applying a network structure that is not familiar to all SPs, sufficient information must be available to all parties who may use the information when considering any future changes to network structure or rollout.

A 12.11 The network structures of SPs vary. Eircom operates a FTTx network with almost-national (c.90% premises coverage, as of Q2 2023) coverage.[1582] Access Seekers using Eircom FTTx inputs accordingly have access to coverage which approximates Eircom's coverage (in those areas where they purchase Eircom VUA). Access Seekers that purchase Eircom VUA can interconnect at the local Eircom Exchange Area ('**EA**'). However, the presence of other networks complicates the mapping of differing network structures onto one geographic unit (e.g. EA boundaries). This is because other networks have different network topologies which diverge from Eircom's EA-based network layout. ComReg is aware, in particular, that SPs rolling out FTTP networks tend to develop rollout plans to optimise network coverage and minimise the amount of fibre rollout required. Furthermore, NBI's coverage footprint is based on serving specified premises which are connected back to a series of network nodes falling within 227 'Deployment Areas' ('**DA(s)**').[1583] These premises can often be non-contiguous and widely geographically dispersed. Similarly, SIRO's network footprint is delivered using existing ESB electricity distribution infrastructure. Accordingly, each network takes a differing approach to structuring and aggregation. Nevertheless, ComReg considers that the EA structure is useful, as it is well understood by market participants, even where those participants do not structure their own rollout on the basis of EA contours. Figure A12.1 below shows the 1,203 Eircom EAs:

[1582] Eir Group Results presentation, Q2 2023, at p.7: https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/news/eir-Q2-23-PRESS-RELEASE-VF.pdf

[1583] https://nbi.ie/how-is-the-rollout-determined/.

Figure A12.1: Eircom Exchange Area boundaries [✂REDACTED✂]

[redacted]

A 12.12 When assessing geographic market boundaries, ComReg notes that some NRAs use administrative units (such as local authority boundaries), rather than telecom network-based geographic units used by SPs.[1584] While administrative boundaries are relatively stable over time, in the context of this market review, they do not accurately reflect the network structure of SPs in the Irish market. Accordingly, ComReg's view is that the use of administrative units would lead to an unnecessary administrative burden on SPs, thus causing ComReg to fail to meet the objectives set out at paragraphs A 12.7 and A 12.8 above.

[1584] The Finnish NRA (FICORA) has used administrative units as (incumbent) networks match these areas well. Similarly, the Portuguese NRA (ANACOM), uses parishes as the geographic unit.

Accounting for coverage of NG broadband networks

A 12.13 In this sub-section, ComReg explains how it accounts for the presence and competitive impact of NG broadband networks which can supply VUA to Access Seekers. Coverage is referred to in terms of premises passed – and therefore capable of being served by - a given network.

A 12.14 The networks considered in this analysis are Eircom's FTTC and FTTP networks, SIRO's FTTP network and NBI's FTTP network. ComReg includes VMI FTTP in the Relevant WLA Markets, but has limited capacity to account for its future rollout at a specific local level on a forward-looking, prospective basis in the absence of it providing sufficiently reliable data on FTTP network deployment and commencement of VUA service provision. In the absence of such data, ComReg carries out a sensitivity analysis to determine the hypothetical impact on the geographic market definition exercise of VMI, assuming that its existing FTTP (RFoG or otherwise) and CATV network footprints were all converted to FTTP capable of delivering merchant market and self-supply NG WLA over the lifetime of the market review period.

A 12.15 In respect of each network, Eircode data are available for all of Eircom's FTTP network and circa 76% of Eircom's FTTC network. However, Eircode data are generally unavailable in respect of Eircom's CG copper-only network, and ComReg must therefore, if possible, rely on alternative address data, such as Geocodes or latitude and longitude data. In certain instances, Eircom has been unable to provide ComReg with accurate geolocation data in respect of premises served by its CG copper network. In such circumstances, ComReg's capacity to carry out accurate geographic market assessments is constrained by the accuracy and extent of the data provided to it by operators. Eircode data are available in respect of SIRO's network. In respect of NBI, the vast majority of IA premises have Eircodes. Where an IA premises does not have an Eircode, NBI assigns it a location identifier based on mapping and Geodirectory data.

<u>Eircom FTTx</u>

A 12.16 Figure A12.2 illustrates Eircom FTTC coverage. Eircom reports that its FTTC-only network passes 986,000 premises as of Q2 2023, declining from a peak of 1.6 million premises in Q4 2018.[1585] Eircom is currently overlaying its FTTC network with FTTP in certain areas in the State and has stated its intent to pass 1.9 million premises with FTTP by 2026, upgrading 200,000 to 250,000 premises per annum.

[1585] https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2022_2023/eir_Q2-23_results_presentation.pdf. According to Eircom, its FTTP rollout was up 27% (219,000) year on year.

Figure A12.2: Eircom FTTC (VDSL) coverage, Q2 2023 [✂REDACTED✂]

[redacted]

A 12.17 Figure A12.3 below illustrates Eircom's FTTP network which passed 1,083,000 premises, as of Q2 2023[1586] (compared to 263,000 premises in Q4 2018):

[1586] Eir Group Results press release, Q2 2023, https://www.eir.ie/pressroom/29-August-2023-eir-announces-results-for-the-quarter-ended-30-June-2023/

Figure A12.3: Eircom FTTP coverage, Q2 2023 [✂REDACTED✂]

[redacted]

SIRO

A 12.18 As set out in Section 3, SIRO is in the process of rolling out Phase 2 of its FTTP network in certain locations in the State, and reports that it has passed over 515,000 premises as of September 2023.[1587]

A 12.19 While SIRO only operates at the wholesale level supplying WLA-based VUA, Vodafone is one of its retail partners (as well as being 50% part-owner of SIRO), while at least 20 other Access Seekers, including Pure Telecom, BT, Digiweb and Sky have signed access agreements with SIRO enabling the provision of wholesale and/or retail services on the basis of SIRO VUA inputs.[1588] SIRO has some degree of presence at **[✂** [redacted] **✂]** EAs at varying levels of premises coverage. Figure A12.4 below maps SIRO's FTTP network:

[1587] www.siro.ie accessed on 05 October 2023. Data collected by ComReg suggest that the precise number of premises passed by SIRO as of Q1 2023 was **[✂** [redacted] **✂]**.

[1588] www.siro.ie. Accessed on 05 October 2023.

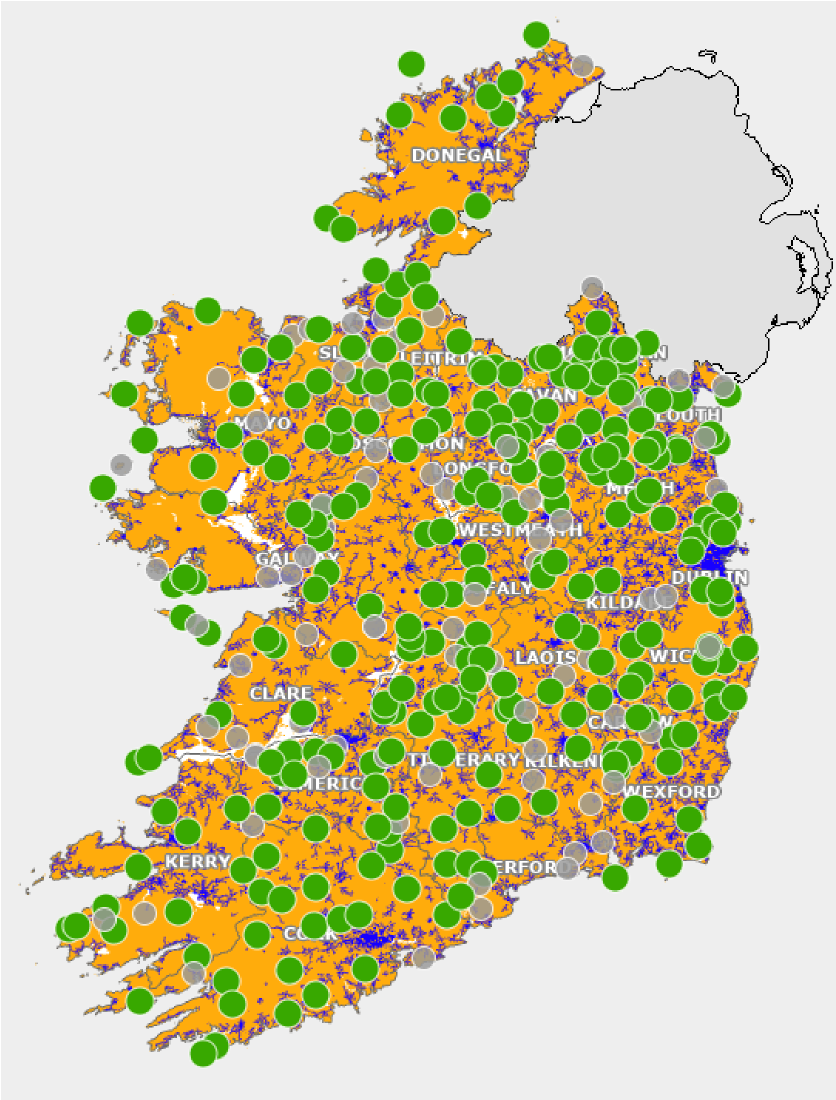
Figure A12.4: SIRO FTTP coverage, Q1 2023 [✂REDACTED✂]

[redacted]

<u>NBI</u>

A 12.20 NBI is obliged under the terms of the NBP Contract to roll NG broadband out to 569,000 delivery points located in the IA. The IA extends to every county in the State, although it is predominantly located in rural areas of lower population and premises density. ComReg's own analysis indicates that 48 EAs contain no IA premises, and that a further 32 EAs contain between 1 and 10 IA premises. Accordingly, 1,123 EAs have more than 10 IA premises in them. In the map below, the IA is coloured amber and commercial areas are coloured blue.

Figure A12.5: NBI coverage map on completion[1589]



1589 https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=99c229dc4c414971afc50818b25337ef

A 12.21 Table A12.1 below outlines proposed NBI coverage in the IA over a 7-year lifespan. ComReg notes there are 569,000 delivery points in the NBI rollout,[1590] with this represented across 486,500 Eircodes. The difference covers situations where there are multiple units at a coordinate (e.g., apartment, office block), or where premises have both business and residential uses (e.g., B&B). As NBI is contracted (and therefore has entered into a binding commitment) to rollout to all of the IA premises by the end of the market review period, ComReg's view is that all NBI coverage, both current and planned, should be included for the purposes of the geographic market assessment.

Table A12.1: Premises to be covered by NBI as of Q1 2023 [✂REDACTED✂][1591]

NBP	Premises
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

A 12.22 Table A12.2 summarises the coverage of each network as of Q1 2023:

Table A12.2: NG WLA network coverage as of Q1 2023 [✂REDACTED✂][1592]

	Coverage (premises passed)	% premises
Total premises (postal addresses)[1593]	[redacted]	
Eircom VDSL	[redacted]	[redacted]
Eircom FTTP[1594]	[redacted]	[redacted]
Eircom FTTx (total coverage accounting for Eircom VDSL/Eircom FTTP overlap)	[redacted]	[redacted]
SIRO FTTP	[redacted]	[redacted]
NBI FTTP	[redacted]	[redacted]
VMI CATV & RFoG FTTP	[redacted][1595]	[redacted]

[1590] https://nbi.ie/rollout-plan/ ComReg notes that the NBI rollout is based on 'Delivery Points'. This figure represents the number of NBI lines. This differs from the number of Eircodes included in the NBP IA (486,500 premises), which is the metric used by ComReg to compare data from different operators.

[1591] As of September 2023, NBI reported that it has passed 182,250 premises.

[1592] Data supplied to ComReg, Q1 2023.

[1593] The table above uses the 'Postal Address Star' identifier. This is taken from the Eircode database and lists all known addresses by ID per Organisation, their coordinates, their county and whether they are Business, Residential or Mixed (address type).

[1594] Eircom FTTC and FTTP networks overlap at [✂ [redacted] ✂] premises in the State. Accordingly, total Eircom FTTx coverage amounts to [✂ [redacted] ✂] premises nationally.

[1595] VMI RFoG at Q1 2023 was [✂ [redacted] ✂], compared to [✂ [redacted] ✂] in Q1 2019.

A 12.23 On the basis of its analysis, ComReg concludes that it is not reasonable to define relevant geographic units on the basis of alternative network assets, because these networks do not have ubiquitous national coverage, nor do they sufficiently relate to the network structures of other networks. For example, if the relevant geographic unit were defined on the basis of SIRO's network, substantial parts of the State may be excluded from the analysis. Alternatively, some means of accounting for areas of the State where SIRO is not present would have to be developed. In addition, Access Seekers which purchase VUA from Eircom also follow the Eircom EA topology, which, as was the case in the 2018 Decision, suggests that it is most appropriate to continue use the EA as the relevant geographic unit, bearing in mind that the SIRO and NBI networks can be mapped to EAs by ComReg because premises passed by their networks have Eircodes which can be mapped to EAs.

A 12.24 By definition, the IA encompasses those premises in the State where it is not deemed commercially viable for SPs to rollout. This, in and of itself, is inherently suggestive of a difference in competitive conditions between those areas where NBI is operating, or planning to operate, and those areas where it is not and where there is commercial rollout.

A 12.25 Additionally, the geographic structure of the IA means that the EA may not be a suitable unit of assessment. Firstly, the IA is not a single contiguous area, and 'islands' of IA premises which are not connected to the remainder of the IA may be located within a commercial area. Secondly, the IA does not map onto EA boundaries, and an EA may therefore consist of one or more discrete IA locales.

A 12.26 To address these issues, ComReg uses the concept of a 'Modified EA', which is a segmentation of Eircom's EA according to premises within the NBI IA[1596] on the one hand (the IA EA) and premises in an EA but falling outside the IA on the other (the Commercial EA).

A 12.27 ComReg considers this to be a reasonable approach and represents the most appropriate geographic unit of assessment to use, having regard to the data and network rollout specificities outlined above, while at the same time taking account of the BEREC Common Position. That part of an EA falling within the IA is described as the 'IA EA', while that part of an EA falling outside the IA is described as the 'Commercial EA'. Thus, a Modified EA may be either a Commercial IA or an IA EA.

[1596] Including only those premises listed in this Decision.

A 12.28 The Modified EA is of a size which is appropriate to allow a detailed analysis yet avoids a burdensome micro-analysis which may not add analytical value. The Modified EAs also have external boundaries which are relatively stable over time. ComReg does not allow for the boundary of a Modified EA (that is, Commercial EAs and IA EAs) to change if premises are added to, or removed from, the IA as this would give rise to uncertainty and ComReg expects changes to be minimal. The data ComReg has obtained from SIRO, NBI and Eircom, where available, also allow ComReg to superimpose these network data on the Modified EA boundaries, to allow for these network data to be taken into account in the analysis.[1597] ComReg also notes that the Modified EA reflects the NG WLA market structure as of Q1 2023 and is designed to be forward-looking where reliable data are available.

A 12.29 NBI argues in its Submission that ComReg's use of the Modified EAs, and the assumption that the NBP IA is a fixed, stable geographic unit leads to a partially flawed analysis.[1598]

A 12.30 NBI suggests that, for a long period, Eircom EAs were stable and well-defined, as the primary service was RFTS over copper, but that this is no longer the case. NBI adds that its network is not based on Eircom EAs, nor are those of SIRO nor VMI and suggests that ComReg has chosen the EA as the unit of assessment based on convenience and expediency.

A 12.31 NBI criticises the use of the EA and notes that other networks use other units of assessment. NBI's reasoning therefore suggests that *any* unit of assessment would suffer from the same issues as NBI identifies in respect of the EA. In this respect, NBI has not suggested a better alternative unit of assessment. While none of NBI, SIRO, nor VMI's network are based on Eircom EAs, it is a unit of assessment which SPs are familiar with and which ComReg has used before. Eircom has - and is expected to have - the largest NG broadband network in the State and its broadband service continues to be provided within the parameters of EAs. ComReg considers that using EAs meets the criteria identified at paragraphs A 12.7 and A 12.8 above, and has been unable to identify an alternative unit of assessment which would better satisfy those criteria. VMI agrees with ComReg on this point in its Submission,[1599] noting that the EA as a basic unit is well understood and tends to be stable over time. It further notes that ComReg rightly modifies the EA, which would otherwise be distorted (and lose its usefulness), due to the composition of the IA.

[1597] This is particularly the case in circumstances where part of Eircom's FTTC coverage and a large majority of Eircom's CG copper-only coverage can only be identified at EA, rather than premises, level.

[1598] NBI Non-confidential Submission, at p.7.

[1599] VMI Non-confidential Submission, at p.12.

A 12.32 NBI furthers notes that the IA is not a fixed set of Eircodes.[1600] Rather, it is a dynamic surface area that is constantly changing. It submits that other NOs can, and do, build to premises that they did not previously commit to serve. NBI notes that, [✂ [redacted] ✂]

A 12.33 NBI submits that it is also possible that Copper Switch-off ('**CSO**') may result in exchange-fed VDSL, or even some premises with cabinet-fed VDSL having their VDSL services withdrawn.

A 12.34 ComReg considers that this is unlikely to be the case, particularly for active VDSL customers who will migrate to alternative modern-based services before their FTTC services are terminated. On 1 November 2023, ComReg published D09/23, 'Framework for the Migration from Legacy Infrastructure to Modern Infrastructure' which sets out the minimum standard of requirements for Eircom and the principles and conditions which Eircom must comply with before Eircom may withdraw copper-based telecommunications services and switch-off its copper network.

A 12.35 In defining the parameters of the relevant geographic markets on a forward-looking basis, ComReg must balance the uncertainty arising from the need to be forward-looking on the one hand, with the need on the other hand to provide as much certainty as possible to market participants and stakeholders in carrying out its assessment. ComReg considers that fixing the boundaries of the Modified EAs avoids the risk of uncertainty over time in respect of whether a premises falls to be included in the Commercial NG WLA Market or the IA NG WLA Market, thereby providing certainty to market participants over the lifetime of this market review as to whether, ultimately, and on the basis of the geographic market definition exercise and the subsequent competition assessment, Eircom should be obliged to provided NG WLA to the premises in question on a regulated basis. In the alternative, if the boundaries of the Modified EAs were not fixed, this could lead to a situation where the regulatory status of premises varied over the lifetime of the market review period.

[1600] NBI Confidential Submission, at p.7.

A 12.36 ComReg has also sought data from NBI to inform its understanding of the magnitude of this issue. These data indicate that, as of Q1 2023, changes to the number of premises in the IA arising from the removal or addition of premises amounted to **[✂ [redacted] ✂]**[1601] of total premises passed. ComReg also notes that, while NBI expressed concern that, arising from NBI rollout, other NOs would find it commercially attractive to serve other premises in the IA, NBI data indicate that, as of Q1 2023, **[✂ [redacted] ✂]**[1602] have been removed from the IA on the basis that they were served by a commercial operator. ComReg accordingly considers that there is limited practical evidence of the concerns expressed by NBI.

Conclusion on Relevant Unit for Geographic Assessment

A 12.37 Having regard to EC and BEREC best practice guidance on the choice of geographic units, and having considered the above factors, including the presence of other networks, ComReg's view remains that the Modified EA is the appropriate unit for geographic market assessment on the NG WLA Market, and that alternative units of assessment do not appear to better the address the network topology issues identified by Respondents above.

Establishing criteria for assessing difference in competitive conditions

A 12.38 As noted above, the European Commission's *Notice on Market Definition* states that the relevant geographic market is:

> *"… an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different."*[1603]

[1601] Less than 10%.

[1602] Less than 1,000.

[1603] European Commission Notice on Market Definition, paragraph 8.

A 12.39 At Section 5.3 above, ComReg applied a set of Phase 1 criteria to determine whether the conditions of competition in the provision of NG WLA within EAs are sufficiently homogeneous or can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. If the conditions of competition are appreciably different, such that they can be distinguished from neighbouring Modified EAs, they therefore form separate geographic markets. The Phase 1 criteria suggested that it was appropriate to define sub-national geographic markets for the provision of NG WLA. Having done so, ComReg now considers which Phase 2 criteria to apply to assign units of assessment (the Modified EAs) to either the IA NG WLA Market or the Commercial NG WLA Market on an objective and non-discriminatory basis.

A 12.40 ComReg is of the view that market segmentation based on a single criterion (for example, market share or SP presence) is unlikely to be sufficient. The BEREC Common Position indicates that, although criteria may be closely related, a number of criteria should be adopted when assessing geographic market definition issues. It notes that any criteria should be applied cumulatively and in such a way that differences in competitive conditions between different geographic markets are large while competitive conditions within a geographic market are sufficiently similar.[1604]

A 12.41 Having regard to the above, ComReg sets out a range of cumulative criteria, based around the following conditions:

(a) A minimum number of Network Operators capable of providing NG WLA services within a Modified EA;

(b) Individual Network Operator coverage within an EA; and

(c) Overlapping Network Operator coverage within an EA.

Minimum Number of Network Operators

A 12.42 As noted above, a number of SPs have unbundled Modified EAs to provide retail and/or wholesale services, with the majority instead availing of VUA at those Modified EAs. A number of these SPs are relatively small in terms of their subscriber base and coverage and do not supply wholesale access products.

A 12.43 In some cases, these smaller SPs only provide services in a small geographic area. As noted in Section 6, the competitive constraints imposed by such small SPs are, in ComReg's view, not likely to be sufficiently effective.

[1604] At paragraph 130.

A 12.44 In carrying out its assessment of the NG WLA geographic market, ComReg intends to only include those SPs which it includes in the NG WLA product market. These SPs are Network Operators capable of delivering NG WLA (‘**Network Operators**’) which have a significant regional or national presence in the NG WLA market and, in ComReg’s view, are capable of exerting a degree of competitive constraint on other competitors and thereby potentially contributing to differing competitive conditions. ComReg’s assessment is also forward looking as it has taken into consideration the planned network presence and rollout plans of various SPs, where sufficiently reliable deployment data are available.[1605]

A 12.45 Having regard to the above criteria, ComReg considers that the following Network Operators fall for assessment in the Phase 2 NG WLA geographic market assessment:

(a) Eircom;

(b) SIRO;

(c) NBI; and

(d) VMI.

A 12.46 Each of these Network Operators manages a network which is capable (or which ComReg considers is prospectively capable within a reasonable timeframe and without incurring significant sunk costs) of providing NG WLA (and/or WCA or retail broadband services) using its own network inputs. ComReg includes VMI as a NO on the basis that it intends to offer a NG WLA FTTP VUA product and is overlaying its CATV network with FTTP to achieve this. ComReg notes, however, in Section 5.3 that VMI is not in a position to provide detailed and reliable forecast data as to when and where it will specifically roll out its FTTP network. To the extent that it has an FTTP network in situ at the time of this Decision, ComReg has taken account of this in its geographic assessment. ComReg has also carried out a sensitivity analysis by modelling VMI’s existing CATV (and RFoG) footprint as its eventual FTTP network, and the implications of this from a geographic perspective – although ComReg considers that this overlap will not likely be completed until **[✂** [redacted] **✂]**. As noted in Section 5.3, at the time of this Decision VMI has not yet offered an FTTP VUA product and, therefore has no market share. Furthermore, **[✂** [redacted]. **✂]**

[1605] In this regard, ComReg notes that neither Eircom, SIRO, nor VMI have been able to furnish it with sufficiently reliable network deployment data beyond the very short term.

Network Operator Presence

A 12.47 In ComReg's view, absent regulation in the NG WLA market, only those Network Operators providing services in a Commercial EA or IA EA at a sufficient level of appreciability are likely to impose a degree of competitive constraint within that geographic area, such that conditions of competition might appreciably differ. ComReg is of the view that a minimum number of Network Operators must be present (or have a planned presence with a reasonable level of certainty) in a geographic area, such that conditions of competition appreciably differ.

A 12.48 The BEREC Common Position[1606] notes that a criterion based on the number of operators present in an area has an advantage over other potential criteria, in that it is easily observable. ComReg also notes that the competitive conditions in an area may not only differ according to the number of operators present, but that differences may arise from the relative size of Network Operators.

A 12.49 For conditions of competition between geographic areas to be appreciably distinguishable, precedents from both the academic literature and NRA and National Competition Authority ('**NCA**') decisions suggest that at least three firms should be present on a market to ensure the presence of effective competition:

(a) In its 2014 Review of wholesale broadband markets, Ofcom considered that the presence of two or more competitors to the incumbent at an exchange was sufficient to lead to significant declines in BT's market share. In contrast, exchanges with only one operator in addition to BT were included in the same market as monopoly exchanges, as Ofcom considered the competitive conditions to be sufficiently homogeneous;[1607]

(b) Bresnahan and Reiss[1608] showed that, in certain oligopolistic retail markets, the largest benefits to competition come with the addition of the third firm in a market;

[1606] At page 25.

[1607] Ofcom Review of the Wholesale broadband access markets, Statement, 26 June 2014, paragraphs 4.132 – 4.133 and 4.139 – 4.141. https://www.ofcom.org.uk/__data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf

[1608] Bresnahan, T.F., & P.C. Reiss. *"Entry and Competition in Concentrated Markets"*. The Journal of Political Economy, Vol. 99, No. 5. (Oct., 1991), at Figure 4 (p.996).

(c) The Dutch NRA concluded that, while there is no 'magic number' for the minimum number of competitors necessary for effective competition, unless significant economies of scale are apparent, competition is unlikely to be effective with just two firms, and the social optimal is a market with more than two firms;[1609]

(d) In considering BT's appeal of Ofcom's 2016 Business Connectivity Market Review, the UK Competition Appeals Tribunal heard expert evidence that *"mergers from five to four firms are nearly always approved by competition authorities and four to three mergers are sometimes approved, suggesting that between three and four competitors is judged sufficient for effective competition"*;[1610] and

(e) Xiao and Orazem show that, in US broadband markets, the entry of a fourth firm on the market has little effect on competitive conduct; due to data limitations, they surmise (at p.27) - but cannot demonstrate – that where a fourth entrant makes little difference to competitive conduct on broadband markets, then as few as three providers may suffice to create a competitive environment.[1611]

A 12.50 It is worth reiterating, however, that Ofcom notes that the number of firms necessary to generate effective competition varies from market to market and a case specific assessment is required. Similarly, OPTA argues that there is no 'magic number' for the minimum number of competitors necessary for effective competition.

[1609] OPTA, 2006, page 10. http://www.opta.nl/en/news/all-publications/publication/?id=2051.

[1610] CAT case 1260/3/3/16, British Telecommunications v Office of Communications (BCMR). First expert report of Chris Osborne, paragraph 4.20.

[1611] Mo Xiao and Peter Orazem, *"Does the fourth entrant make any difference?: Entry and competition in the early U.S. broadband market"*. International Journal of Industrial Organization, 2011, vol. 29, issue 5, 547-561.

A 12.51 Merger practice is also informative and suggests that even four-to-three merger cases may raise competition concerns, while three-to-two mergers are only likely to be cleared with substantial commitments. This suggests that the presence of three firms in a market is considered by the EC to be an important determinative factor in its assessment, taking mobile mergers as an example. A BEREC review of mobile mergers in Austria, Ireland, and Germany cautioned that a careful approach should be taken with four-to-three mergers. The review provided some evidence that, even with remedies, the studied four-to-three mergers led to price increases compared to a situation without the mergers in the short to medium run.[1612] Recent EC precedent suggests that the EC continues to be cautious in assessing 4-to-3 mobile mergers – from 2011 to 2021 the EC blocked two such mergers, cleared one with divestment and cleared one with no conditions.[1613] The EC has shown itself to be much more cautious of three to two mergers, but cleared a Belgian merger of providers of fixed and mobile telephony services which resulted in a three-to-two merger in areas covered by VOO and Brutélé's own fixed networks, eliminating Orange as a competitive constraint, subject to commitments in respect of guaranteed access for third parties.[1614]

A 12.52 In its Submission on behalf of Eircom, Copenhagen Economics[1615] argued that *"Available evidence on the competitive dynamics within the commercial area suggests that competition does not require the presence of three operators in Ireland."* ComReg addresses the reasoning underpinning this assertion (that the SSNIP test has been applied incorrectly, and that Eircom is sufficiently constrained by overlap with one other Network Operator) at Section 5.2.3 above. More broadly, Copenhagen Economics suggests that ComReg relies too heavily on structural indicators (such as Network Operator presence), instead of evidence of actual competitive constraints, leading to an incomplete analysis of Eircom's ability to behave independently of its customers and competitors.[1616]

[1612] BEREC Report on Post-Merger Market Developments - Price Effects of Mobile Mergers in Austria, Ireland and Germany BoR (18) 119, 15 June 2018.

[1613] *"No Magic Number Means No Magic Number: Will the EU Court Turn the Tide on 4-to-3 Mobile Mergers in Europe?"* Katarzyna Czapracka (White & Case), March 4, 2021. https://competitionlawblog.kluwercompetitionlaw.com/2021/03/04/no-magic-number-means-no-magic-number-will-the-eu-court-turn-the-tide-on-4-to-3-mobile-mergers-in-europe/

[1614] M.10663 - ORANGE / VOO / BRUTELE. Last Decision Date:20.03.2023.

[1615] Copenhagen Economics Non-confidential Submission on behalf of Eircom, paragraphs 3.55 to 3.60.

[1616] Ibid., paragraph 3.56.

A 12.53 In respect of Criterion 1, Copenhagen Economics argues that, by EU standards, it sets a high threshold, given low level of multiple NG network presence in the same geographic area.[1617] Copenhagen Economics also suggests that Criterion 1 is unlikely to be met in the near future because Vodafone will be a 'major anchor tenant' on VMI's FTTP network, and also owns 50% of SIRO, suggesting that Vodafone would have no interest in developing SIRO's network where VMI is already present. In this regard, ComReg notes that network overlap data indicate that, as of Q1 2023, and despite only having rolled out **[✂** [redacted] **✂]**[1618] of its total planned rollout, **[✂** [redacted] **✂]**[1619] of VMI's CATV and FTTP network was, in fact, overlapped by SIRO's FTTP network, which is not consistent with Copenhagen Economics' contention that SIRO would have no incentive to roll out in VMI's footprint.

A 12.54 While CE suggests the three-operator criterion establishes a high threshold, ComReg notes that it is used to assess the differences in competitive conditions between Modified EAs. For the reasons set out at paragraph A 12.49 above, and having regard to practice established by Ofcom and the NMa, ComReg considers that an appreciable distinction in conditions of competition can be drawn between areas characterised by the presence of one or two Network Operators on the one hand, and three or more Network Operators, on the other hand.

A 12.55 CE also contends that ComReg's use of structural indicators only allows for a partial assessment of differences in conditions of competition:

> *"Structural indicators, such as counting the number of operators present in a certain geographic area, can be useful in informing an assessment of prevailing competitive conditions. However, considering such indicators in isolation, especially in the presence of other relevant evidence, can lead to an incomplete analysis on an operator's **ability to behave independently of its customers and competitors**."* (emphasis added)[1620]

A 12.56 CE's argument here conflates market definition with competition assessment. The text highlighted in the quote above reflects the description of dominance set out in the *United Brands* case. It is not analytically correct to assess SMP before having fully defined the product and geographic parameters of the relevant market or markets. The assessment to which CE alludes is set out in detail at Section 6 above.

[1617] BEREC, 'Report on competition amongst multiple operators of NGA networks in the same geographical region', BoR (23) 87 (the '**2023 BEREC Report**'), at Table 2.

[1618] 60-70%.

[1619] 20-30%.

[1620] At paragraph 3.54.

A 12.57 Accordingly, ComReg is of the view that a minimum of three Network Operators should be present (or reasonably forecast to be present) and providing NG WLA, absent regulation in the WLA market, for a Modified EA to be considered as potentially having sufficiently different competitive conditions relative to other Modified EAs. ComReg designates Eircom, SIRO and NBI as Network Operators on the basis of data available to it as of Q1 2023, with VMI also designated as an NO on the basis that it has credible plans to enter the NG WLA market within the lifetime of the review period (although its rollout is uncertain and its competitive impact remains to be seen).

A 12.58 In the 2023 Consultation, ComReg defined Criterion 1 to include NOs that were reasonably forecast to be present at a Modified EA, defined to mean where *"a Network Operator has provided ComReg with data on the specific premises which it will pass with a high degree of forecast reliability."* In its Submission, VMI[1621] suggested that this benchmark was subjective and unreliable - VMI pointed to differences between actual and forecast SIRO rollout. VMI therefore considered that ComReg should only use actual rather than forecast rollout data to measure Criterion 1. If ComReg does allow for forecast data, VMI suggested that this should only include forecasts where, within a specified time horizon:

(a) Contractual obligations for rollout are in place, or

(b) Expenditure has been confirmed / signed off for network build.

A 12.59 According to the SMP Guidelines,[1622] and in accordance with Regulation 49(5) of the ECC Regulations, ComReg is obliged to carry on its assessment on a forward-looking view basis. This requires ComReg to use not only actual data, but also data on where network rollout is *"reasonably forecast to be present"*. This occurs where a Network Operator has provided ComReg with evidence and data on network rollout, including on the specific premises which it will pass in a specific time period with a high degree of forecast reliability. ComReg accordingly takes into account NBI forecast rollout, for which it is contractually bound to roll out within the lifetime of this review. Other NOs, including VMI have been unable, in response to both statutory and non-statutory requests from ComReg, to provide precise rollout data satisfying the 'reasonably forecast' threshold beyond very short time horizons. For this reason, ComReg, in adherence with the SMP Guidelines, has appropriately included forecast data, as well as actual data in its market review. ComReg also has regard to general rollout plans in its overall assessment of the market and, as noted above, has carried out a sensitivity analysis as to the impact on the geographic assessment, construing VMI's CATV network as its eventual FTTP footprint.

[1621] VMI Non-confidential Submission, at pp.12-13.

[1622] At recital 13 and paragraph 25.

Overlapping Network Operator Coverage

A 12.60 For a NO providing NG WLA to contribute to geographic differences in conditions of competition at an EA, its network must have a minimum level of overlap with other NOs at that Modified EA, such that Access Seekers are capable of purchasing VUA inputs from alternative Network Operators at a particular set of premises which they serve.

A 12.61 ComReg's assessment of network coverage is undertaken on a forward-looking basis, based on information supplied by SPs.

Conclusions on Phase 2 assessment criteria

A 12.62 Having regard to the above analysis, ComReg considers that the following criteria are reasonable and should be applied in assessing the geographic scope of the Relevant WLA Markets:

(a) A minimum of three Network Operators ('**NO(s)**') must be actually present, or reasonably forecast to be present at the Modified EA within the lifetime of the market review period. 'Reasonably forecast to be present' means that an NO has provided ComReg with reliable, specific and accurate data on the specific premises which it will pass with a high degree of forecast reliability;

(b) At least three NOs are present, or reasonably forecast to be present, at a Modified EA, with each NO having individual network coverage of at least 60% of premises; and

(c) At least 50% of premises in a Modified EA must be passed by at least three Network Operators.

A 12.63 Criterion 3 passes if at least 50% of premises in a Modified EA are overlapped by at least three Network Operators.

Analysis of Geographic Criteria

A 12.64 Table A12.3 below provides a breakdown of the number of Modified EAs by the number of NOs providing services within each Modified EA. It is clear that a number of NOs have, at least to some extent, invested in network build to provide services in the WLA market at a number of EAs. This indicates that Eircom likely faces greater existing and potential competition in a number of Commercial EAs arising from the presence of SPs capable of generating effective direct or indirect constraints, but that Eircom has limited presence compared to NBI in a large number of IA EAs (which is thus suggestive of sufficiently differing competitive conditions across certain EAs).

Table A12.3: Number of Network Operators by Number of Modified EAs and Premises Covered Q1 2023

NOs	Commercial EAs	IA EAs	Premises in Commercial EAs	Premises in IA EAs
0	10	0	49	0
1	1,006	55	889,577	6,312
2	167	990	982,442	412,788
3	0	110	0	67,400

Table A12.4: Number of Network Operators by Number of Modified EAs and Premises Covered, including Hypothetical VMI Rollout Q1 2023

NOs	Commercial EAs	IA EAs	Premises in Commercial EAs	Premises in IA EAs
0	10	0	49	0
1	953	23	543,881	1676
2	100	1,001	468,529	407,775
3	120	86	859,609	44,496
4	0	45	N/A	32,553

A 12.65 ComReg has sought to establish the extent of coverage of the NBI and SIRO networks. As noted above, SIRO is currently engaged in Phase 2 of its network rollout. While ComReg has included current SIRO network rollout in its analysis, it has limited coverage on both the Commercial NG WLA Market and the IA NG WLA Market. As set out in Table A12.5 below, the SIRO network, as of Q1 2023, passed **[✂** [redacted] **✂]** premises, suggesting a national coverage level of 21% of premises (25% in the Commercial NG WLA Market and 2% coverage in the IA NG WLA Market). By the end of Phase 2 SIRO intends to have passed 770,000 premises in 154 towns.[1623]

[1623] https://siro.ie/about-us/ accessed on 09 August 2023.

Table A12.5: SIRO Rollout to Q1 2023 [✂REDACTED✂][1624]

Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

A 12.66 Table A12.6 depicts NBI network rollout. As of 22 September 2023, it has passed 182,250 premises. NBI is contracted to rollout to 560,000 premises by 2026/7.

Table A12.6: NBI FTTP rollout to Q1 2023[1625] [✂REDACTED✂]

Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Conclusion on Analysis of Criteria

A 12.67 Having regard the above analysis, ComReg applies the following cumulative criteria to be applied to Modified EAs in assessing whether there are differences in competitive conditions between those Modified EAs:

(a) **Criterion 1:** A minimum of three Network Operators must be actually present, or reasonably forecast to be present at the Modified EA within the lifetime of the market review period. 'Reasonably forecast to be present' means that a Network Operator has provided ComReg with data on the specific premises which it will pass with a high degree of forecast reliability. 'Modified EA' means that part of an EA in the IA (the 'IA EA'), or outside the IA (the 'Commercial EA'), as appropriate; and

(a) **Criterion 2:** At least three Network Operators present, or reasonably forecast to be present, at a Modified EA must have individual network coverage of at least 60%. 'Network coverage' means existing coverage and accurate and reliable forecast coverage, measured by the number of premises passed, or reasonably forecast to be passed, by Network Operators as a percentage of all relevant premises in the Modified EA. 'Premises' means an address point recorded on the Eircode database;[1626] and

[1624] SIRO rollout plans indicate that it intends to roll out its FTTP network in each location over a number of months (typically 9-12 months) with rollout underway in several locations at any one point in time.

[1625] Measured by delivery points.

[1626] For the purposes of this Decision, data from the Eircode database are taken as of Q1 2023.

(b) **Criterion 3:** At least 50% of premises in a Modified EA must be passed by at least three Network Operators. Criterion 3 passes if 50% of premises are overlapped by at least 3 Network Operators. Overlapping coverage means existing coverage or reasonably forecast coverage, measured by the number of premises passed, or reasonably forecast to be passed, by more than one Network Operator as a percentage of all premises in the Modified EA.

A 12.68 Table A12.7 and Table A12.8 show the level of coverage of each Network Operator in terms of NG broadband capable of delivering VUA. For each NO, ComReg looks at its presence at the Modified EA and the extent of NG broadband availability within the Modified EA. SIRO's network, as of September 2023,[1627] has passed approximately 515,000 premises and, according to Q1 2023 data, is present in **[✂** [redacted] **✂]** Modified EAs, with total network coverage of **[✂** [redacted] **✂]** across total premises in these EAs:

Table A12.7: SIRO Network Coverage by Modified EA Q1 2023 [✂REDACTED✂]

SIRO Network Coverage	0%	1-25%	26-49%	50-75%	>75%
Number of Commercial EAs	[redacted]				
Number of IA EAs					

A 12.69 The Eircom FTTx network, as of Q1 2023, passes 2 million premises and is present in **[✂** [redacted] **✂]** Modified EAs, with total network coverage of **[✂** [redacted] **✂]** across total premises in these EAs:

Table A12.8: Eircom Network Coverage by Modified EA Q1 2023 [✂REDACTED✂]

Eircom Network Coverage	0%	1-25%	26-49%	50-75%	>75%
Number of Commercial EAs	[redacted]				
Number of IA EAs					

A 12.70 Hypothetical VMI FTTP coverage in the Commercial NG WLA Market would pass approximately **[✂** [redacted] **✂]** premises in **[✂** [redacted] **✂]** Commercial EAs, with total network coverage of **[✂** [redacted] **✂]** across the Commercial NG WLA Market. Hypothetical VMI FTTP coverage in the IA NG WLA Market would pass approximately **[✂** [redacted] **✂]** premises in **[✂** [redacted] **✂]** IA EAs, with total network coverage of **[✂** [redacted] **✂]** across the IA NG WLA Market.

[1627] https://siro.ie/ - accessed on 6 September 2023

Table A12.9: Hypothetical VMI FTTP Network Coverage by Modified EA [✂REDACTED✂]

VMI Network Coverage	0%	1-25%	26-49%	50-75%	>75%
Number of Commercial EAs	[redacted]				
Number of IA EAs	[redacted]				

A 12.71 As of September 2023, NBI's FTTP network passes 182,250 premises,[1628] and is due to pass 486,500 premises on completion of rollout. ComReg takes account of NBI's full rollout for the purposes of its geographic market assessment, as NBI has provided ComReg with sufficiently detailed forecast deployment data to allow it to do so. NBI is due to be present at 1,155 IA EAs, with total network coverage of 100% across premises in these EAs.

A 12.72 For the purposes of the geographic market assessment, in applying the NG WLA coverage criterion, coverage is determined as the number of premises passed, or reasonably forecast to be passed, by NOs as a percentage of all premises in the Modified EA.

A 12.73 Having regard to the above analysis, ComReg applies the assessment criteria to the Modified EAs to determine to whether there are sufficient differences in competitive conditions between Modified EAs.

Assessment of Differences in Competitive Conditions in the NG WLA Market using the Geographic Criteria

A 12.74 ComReg takes the Modified EA, consisting of Commercial EAs and IA EAs, as the basis for its assessment, overlaying Eircom's FTTC and FTTP networks, SIRO's FTTP network and NBI's FTTP network coverage (and reasonably forecast network coverage). For comparison and sensitivity analysis purposes, ComReg also overlays hypothetical VMI FTTP coverage by taking its existing CATV coverage and treating this as its eventual FTTP footprint (although as noted earlier, ComReg does not know when and what specific locations it will complete this upgrade). Using this information, ComReg applies the criteria set out in paragraph A 12.67 above to each Modified EA in the State. The results of this analysis are set out below.

A 12.75 In looking at NG broadband coverage capable of delivering NG WLA, ComReg looks at the number of unique premises with NG broadband availability, bearing in mind some level of NO overlap at premises. This allows ComReg to avoid inadvertently double counting a premises passed by more than one NO. Table A12.10 shows the overlap between each NO's NG broadband networks.

[1628] https://nbi.ie/ - accessed on 5 October 2023.

Table A12.10: Overlap of NG broadband networks Q1 2023 [✂REDACTED✂]

Network	Premises passed	Overlaps with			
		Eircom FTTx	SIRO	NBI	VMI
Eircom FTTx	[redacted]				
SIRO					
NBI					
VMI					

A 12.76 The data set out at Table A12.11 below indicate differing competitive conditions across geographic areas – as evidenced from differences in NG broadband presence, coverage levels, and overlaps. In particular, conditions of competition vary between areas where NBI is (or is likely to be with a high degree of reliability) present, and areas where Eircom or SIRO are present. There are also variations in the number of Network Operators present;[1629] in the IA NG WLA Market (1,155 IA EAs), three NOs are present at 111 IA EAs, two NOs are present at 1,020 IA EAs, and only one NO is present at 24 IA EAs. Conversely, in the Commercial NG WLA Market (1,183 Commercial EAs), two NOs are present at 167 Commercial EAs, only one NO is present at 1,006 Commercial EAs, and no NO is present in 10 Commercial EAs.[1630]

A 12.77 When hypothetical VMI FTTP is included, in the IA NG WLA Market (1,155 IA EAs), four NOs are present (at any level of coverage) at 45 IA EAs, three NOs are present at 86 IA EAs, two NOs are present at 1,001 IA EAs, and only one NO is present at 23 IA EAs. In the Commercial Market three NOs are present at 120 Commercial EAs, two NOs are present at 100 Commercial EAs, and only one NO is present at 953 Commercial EAs.

A 12.78 As shown below, the Commercial NG WLA Market includes 79% of premises and 86% of retail broadband lines delivered using VUA inputs.

Table A12.11: Differences in competitive conditions by EA, applying assessment criteria, Q1 2023

NG WLA Market	Modified EAs	Premises	% premises	NG WLA lines	% lines
Commercial	1,183	1,872,068	79%	883,168	86%
IA	1,155	486,500	21%	144,392	14%
Total	**2,338**	**2,358,568**	**100%**	**1,027,560**	**100%**

[1629] Presence refers to whether an operator is present at a Modified EA with any level of coverage.

[1630] This occurs where there are premises located in a Modified EA but there are no NOs present. There are a total of 49 premises in these ten Modified EAs.

A 12.79 Table A12.12 below outlines NO presence in each of the Commercial NG WLA Market and the IA NG WLA Market, the former accounting for Eircom's existing SMP regulation and the latter absent regulation. Presence is based on current (Q1 2023) VUA lines by SP. Eircom's presence is heavily concentrated in the Commercial NG WLA Market.

Table A12.12: NG WLA Market and breakdown of NG broadband networks, Q1 2023 [✂REDACTED✂]

NG WLA Market	Modified EAs	Premises	SIRO FTTP premises	Eircom FTTx premises	NBI FTTP premises
Commercial	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
IA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

A 12.80 The list of Modified EAs that fall into each of Relevant NG WLA Markets is set out in Annex 13 below.

Table A12.13: Hypothetical NG WLA Markets and breakdown of NG broadband networks including hypothetical VMI CATV/FTTP, Q1 2023[1631] [✂REDACTED✂]

NG WLA Market	Modified EAs	Premises	SIRO FTTP premises	Eircom FTTx premises	NBI FTTP premises	VMI CATV/FTTP
Commercial	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
IA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Premises without NG broadband in the Commercial NG WLA Market

A 12.81 Within the 1,183 Commercial EAs that form the Commercial NG WLA Market, there may be some premises that do not currently have NG broadband coverage, as Criterion 2 requires that each Network Operator must have at least 60% coverage. This implies that a maximum of 40% of premises of EAs in the Commercial NG WLA Market would not have NG broadband coverage in the hypothetical scenario where Eircom and SIRO both had 60% coverage, which fully overlapped. ComReg data indicate that at least 90% of premises at over 95% of Commercial EAs are passed by NG broadband, as set out at Table A12.14 below. In the case of all but 5 Commercial EAs, this 90% coverage threshold is satisfied by Eircom alone, even where another NO is also present. In most cases, premises are passed by a single NO (usually Eircom or SIRO) or by overlapping NOs (Eircom and SIRO).

[1631] Includes hypothetical VMI FTTP rollout using RFoG FTTP and CATV as a proxy.

A 12.82 As some Commercial EAs do not have full (i.e. 100%) NG broadband coverage, this means that some premises may not be served by NG broadband capable of delivering VUA until NG broadband becomes available in the future. The extent of these premises is shown in Table A12.14 below. ComReg estimates this to be a maximum of 24,313 premises in the Commercial NG WLA Market.

A 12.83 Table A12.14 shows the distribution of NG broadband coverage for the Commercial EAs, with a small number of Commercial EAs having less than 60% coverage by at least one NO and a higher number of densely populated EAs having near 100% coverage. For example, 16 EAs totalling 6,295 premises have NG broadband coverage of 60% or less. Accordingly, 4,630 premises in these Commercial EAs are without NG broadband availability. In the EAs with 91 – 100% coverage, encompassing 1,135 EAs and 1,773,446 premises, only 3,633 premises are without NG broadband availability.

Table A12.14: Distribution of NG broadband coverage in the Commercial NG WLA market, Q1 2023[1632]

Distribution of coverage among Commercial EAs	No. of EAs	Total premises in EAs	Premises not having NG broadband coverage
0%	10	49	49
1 to 60%	16	6,295	4,631
61% to 70%	2	824	317
71% to 80%	7	29,907	6,918
81% to 90%	15	61,547	8,765
91% to 100%	1,135	1,773,446	3,633
Total	**1,185**	**1,872,068**	**24,313**

Table A12.15: Hypothetical distribution of NG broadband coverage in the Commercial NG WLA market including VMI CATV/FTTP, Q1 2023

Distribution of coverage among Commercial EAs	No. of EAs	Total premises in EAs	Premises not having NG broadband coverage
0%	10	49	49
1 to 60%	12	1019	520
61% to 70%	3	1669	613
71% to 80%	5	2,348	520
81% to 90%	11	5,078	537
91% to 100%	1142	1,861,905	725
Total	**1,183**	**1,872,068**	**2,964**

[1632] Measures the percentage of premises passed in an EA, taking into account any potential overlapping of networks.

A 12.84 The rollout figures in respect of the Commercial NG WLA Market only take into account current rollout, as planned rollout data from SIRO and Eircom are unavailable beyond the very short term. Due to the nature of the IA NG WLA Market, which accounts for the entire footprint of the current, and planned, NBI network, ComReg concludes that, unlike the Commercial NG WLA Market, this market will have NG broadband availability throughout.

Table A12.16: Application of Criteria for Assessing Competitive Conditions by Geographic Area Q1 2023 (excluding VMI)

	Modified EAs	Premises
Commercial NG WLA Market: EAs meeting Criteria 1-3	0	0
Commercial NG WLA Market: EAs not meeting Criteria 1-3	1,183	1,872,068
IA NG WLA Market: EAs meeting Criteria 1-3	3	970
IA NG WLA Market: EAs not meeting Criteria 1-3	1,152	485,530

A 12.85 For comparison purposes, ComReg has also included hypothetical VMI FTTP rollout, were all existing VMI RFoG and CATV rollout assumed to be FTTP capable of delivering NG WLA. ComReg has applied the assessment criteria to each Modified EA in the State, and the summary results of this assessment are set out below at Table A12.17:

Table A12.17: Application of Criteria for Assessing Competitive Conditions by Geographic Area Q1 2023 (including VMI)

	Modified EAs	Premises
Commercial NG WLA Market: EAs meeting Criteria 1-3	18	100,612
Commercial NG WLA Market: EAs not meeting Criteria 1-3	1,165	1,771,456
IA NG WLA Market: EAs meeting Criteria 1-3	3	970
IA NG WLA Market: EAs not meeting Criteria 1-3	1,152	485,530

A 12.86 As set out in Table A12.16, as of Q1 2023, no Commercial EA passes Criteria 1 to 3. Similarly, only three IA EAs (BSZ IA EA, DOM IA EA and TOG IA EA) pass Criteria 1 to 3. However, the overall size of these IA EAs is trivial. BSZ IA EA consists of 880 premises (compared to 5,462 BSZ Commercial EA premises),[1633] DOM IA consists of 1 premises (compared to 2,553 DOM Commercial EA premises), while TOG IA EA consists of 89 premises (compared to 422 TOG Commercial EA premises). Therefore, a total of 970 premises in the State pass Criteria 1 to 3, amounting to less than 0.05% of all premises. Bearing in mind that over 99.95% of premises fail one or more of Criteria 1 to 3, ComReg considers that there are insufficient grounds, as of Q1 2023, to define a separate geographic market consisting of IA EAs passing Criteria 1 to 3, given the small number of premises involved. ComReg will keep this figure under review.

A 12.87 As set out in Table A12.17, when hypothetical VMI CATV/FTTP is included in the assessment, the impact is limited. There are no alterations on the IA NG WLA Market, while only 18 Commercial EAs, totalling 100,612 premises, pass all criteria on the Commercial NG WLA Market, amounting to fewer than 2% of Commercial EAs, and 5% of premises in the Commercial NG WLA Market.

A 12.88 Based on its assessment, ComReg groups Modified EAs into two geographic markets:

(a) The **Commercial NG WLA Market**: 1,183 Commercial EAs where Criteria 1 to 3 have not been met; and

(b) The **IA NG WLA Market**: 1,155 IA EAs where Criteria 1 to 3 have not been met.

A 12.89 The Modified EAs that fall into each of these two geographic markets are set out at Annex 13 of this Decision.

Sensitivity analysis of Phase 2 assessment criteria

A 12.90 ComReg undertook a sensitivity analysis of the cumulative criteria set out in the Phase 2 assessment outlined in Section 5.3.3 above purely to analyse whether reducing the number of operators present at a Modified EA from three to two would increase the number of Modified EAs passing the Phase 2 assessment. Similarly, ComReg reduced the second criterion, individual Network Operator coverage from 60% to 50% and the third criterion, being at least 50% of premises in a Modified EA to be passed by at least three network operators to 40% of premises to be passed by two Network Operators. The results of this sensitivity analysis are outlined in Table A12.18: below:

[1633] BSZ IA describes that part of the BSZ EA falling into the IA (the IA EA), while BSZ COM describes that part of the BSZ EA falling outside of the IA (the Commercial EA).

Table A12.18: Sensitivity Analysis of Phase 2 Assessment

C1	C2	C3	Commercial Modified EAs passing	Premises (%)
3	**60%**	**50%**	0	0%
2	60%	50%	82	20%
2	**50%**	50%	88	23%
2	50%	**40%**	101	29%

A 12.91 ComReg notes that reducing the number of Network Operators from three to two would have the most impact in terms of an increase in the number of Modified EAs then passing. Reducing individual Network Operator coverage from 60% to 50 has a low impact in terms of additional changes, whereas adjusting the third criterion results in further changes. In the final case scenario it would lead to 101 Modified EAs passing, representing some 29% of premises.

Overall Conclusion on WLA Geographic Market Assessment

A 12.92 Having regard to the analysis above, ComReg concludes that there are two separate Relevant NG WLA Markets, encompassing two geographic markets:

(a) The **Commercial NG WLA Market**, being those 1,183 Commercial EAs where the assessment criteria have not been cumulatively met; and

(b) The **IA NG WLA Market**, being those 1,155 IA EAs where the assessment criteria have not been cumulatively met.

Annex 13 Boundaries of the Commercial NG WLA Market and the IA NG WLA Market

A 13.1 In Annex 12 ComReg set out its approach to geographic market definition in the Relevant NG WLA Markets. Based on the assessment in Annex 12, ComReg groups Modified EAs into two areas:

(a) The Commercial NG WLA Market, consisting of those 1,183 Commercial EAs which fail one or more of the assessment criteria; and

(b) The IA NG WLA Market, consisting of those 1,155 IA EAs which fail one or more of the assessment criteria.

A 13.2 The boundaries of the IA NG WLA Market are published alongside this Decision in ComReg Document 23/106b at www.comreg.ie/publication/odn-sharing-report. Any premises not included in the IA NG WLA Market are deemed to fall into the Commercial NG WLA Market.

Annex 14 Optical Distribution Network (ODN) Sharing – Report for ComReg by Analysys Mason

A 14.1 The Optical Distribution Network (**ODN**) Sharing: Report drafted by Analysys Mason for ComReg is published as ComReg Document 23/03d at www.comreg.ie.

Annex 15 Oxera Price Control Reports

A 15.1 The Reports drafted by Oxera for ComReg are published as ComReg Document 23/106c at www.comreg.ie. ComReg has asked Oxera to produce a report outlining the options for wholesale price controls and *ex ante* MSTs on services where Eircom has been found to have SMP.

Annex 16 Glossary of Terms

Acronym	Full Title
3CT	Three Criteria Test
ADSL	Asymmetric Digital Subscriber Line
ARO	Access Reference Offer
BECS	Bitstream Ethernet Connection Services
BEREC	Body of European Regulators for Electronic Communications
BMB	Bitstream Managed Backhaul
BU-LRAIC	Bottom Up-Long Run Average Incremental Cost
CA	Carrier Access
CAM	Copper Access Model
CATI	Computer Aided Telephone Interview
CATV	Cable Access Television Network
CBP	Countervailing Buyer Power
CCPC	Competition and Consumer Protection Commission
CDR	Customer Data Records
CEI	Civil Engineering Infrastructure
CG	Current Generation
CGA	Current Generation Access
CID	EU Civil Infrastructure Directive
CLFMP	Copper Loop Frequency Management Plan
CLT	Critical Loss Test

CoS	Class of Service
CPE	Customer Premises Equipment
CSH	Customer-Sited Handover
CVDSL	Cabinet-based VDSL
DOCSIS	Data Over Cable Service Interface Specification
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexers
DUG	Direct Underground
EA	Exchange Area
EC	European Commission
ECN	Electronic Communications Networks
ECS	Electronic Communications Services
EEO	Equally Efficient Operator
EFM	Ethernet First Mile
ENH	Edge Node Handover
EoI	Equivalence of Inputs
EoO	Equivalence of Outputs
EU	European Union
EVDSL	Exchange-based VDSL
FACO	Fixed Access and Call Origination
FHS	Fault Handling System
FL LRAIC+	Forward-Looking Long Run Average Incremental Cost plus

FLU	Fibre Loop Unbundling
FNA	Fixed Narrowband Access
FSP	Fixed Service Provider
FTTC	Fibre to the Cabinet
FTTH	Fibre to the Home
FTTP	Fibre to the Premises
FVCT	Fixed Voice Call Termination
FWA	Fixed Wireless Access
GAP	Geographically Averaged Pricing
GLUMP	GNP and ULMP
GNP	Geographic Number Portability
GPON	Gigabit Passive Optical Networking
HCA	Historical Cost Accounts
HM	Hypothetical Monopolist
HMT	Hypothetical Monopolist Test
IA	Intervention Area
IBH	In Building Handover
ICT	Information and Communications Technology
IN	Intelligent Network
IP	Internet Protocol
IPM	Industry Process Manual
IPTV	Internet Protocol Television

ISDN	Integrated Services Digital Network
ISDN BRA	ISDN Basic Rate Access
ISDN FRA	ISDN Fractional Rate Access
ISDN PRA	ISDN Primary Rate Access
ISH	In-Span Handover
ISP	Internet Service Provider
KPI	Key Performance Indicator
LL	Leased Line
LLU	Local Loop Unbundling
LS	Line Share
LV-CPER	Low-Value Customer Premises Equipment Rental
MDF	Main Distribution Frame
MGA	Modified Greenfield Approach
MNO	Mobile Network Operator
MOV	Multi-Operator Vectoring
MPoP	Metropolitan Point of Presence
MSP	Mobile Service Provider(s)
MTS	Mobile Telephony Service(s)
MVCT	Mobile Voice Call Termination
MVNO	Mobile Virtual Network Operator
NBI	National Broadband Ireland
NBP	National Broadband Plan

NEH	Near-End Handover
NG	Next Generation
NGA	Next Generation Access
NRA	National Regulatory Authority
NRT	Net Revenue Test
NTC	Number Translation Code(s)
NTP	Network Termination Point
NTU	Network Termination Unit
OAO	Other Authorised Operator
ODF	Optical Distribution Frame
ONT	Optical Network Terminal
OSS	Operational Support Systems
OTT	Over the Top
PABX	Private Automated Branch Exchange
PAC	Payphone Access Charge
PAR	Passive Access Records
PoH	Point of Handover
PoI	Point of Interconnection
PoP	Point of Presence
PRA	Primary Rate Access
PRS	Premium Rate Service(s)
PSTN	Public Switched Telephone Network

QKDR	Quarterly Key Data Report
QoS	Quality of Service
RFO	Ready for Order
RFTS	Retail Fixed Telephony Service(s)
RFVA	Retail Fixed Voice Access
RFVC	Retail Fixed Voice Call(s)
RGM	Regulatory Governance Model
RIA	Regulatory Impact Assessment
RIO	Reference Interconnect Offer
RSPG	Radio Spectrum Policy Group
RSU	Remote Subscriber Unit
SAB	Standalone Bitstream
SAB	Service Access Bandwidth
SABB	Standalone Broadband
SB-WLR	Single Billing-Wholesale Line Rental
SDSL	Symmetric Digital Subscriber Line
SEO	Similarly Efficient Operator
SIP	Session Internet Protocol
SIR	Statutory Information Requirement
SLA	Service Level Agreement
SLU	Sub-Loop Unbundling
SME	Small to Medium Enterprise

SMP	Significant Market Power
SoC	Statement of Compliance
SP	Service Provider
SSNIP	Small but Significant Non-transitory Increase in Price
STRPL	Switched Transit and Routing Price List
SV	Switchless Voice
TD LRAIC+	Top-Down Long Run Average Incremental Cost plus
TDM	Time-Division Multiplexing
TFEU	Treaty on the Functioning of the European Union
TWDM GPON	Time Wavelength Division Multiplexing GPON
UG	Unified Gateway
ULMP	Unbundled Local Metallic Path
USO	Universal Service Obligations
VDSL	Very-high-bit-rate Digital Subscriber Line
VEA	VDSL Ethernet Access
VoB	Voice over Broadband
VoD	Video on Demand
VoIP	Voice over Internet Protocol
VUA	Virtual Unbundled Access
VULA	Virtual Unbundled Local Access
WACC	Weighted Average Cost of Capital
WBARO	Wholesale Bitstream Access Reference Offer

WCA	Wholesale Central Access
WDM	Wavelength Division Multiplexing
WEIL	Wholesale Ethernet Interconnection Links
WHQA	Wholesale High Quality Access
WLA	Wholesale Local Access
xDSL	Digital Subscriber Line broadband technology