



Commission for
Communications Regulation

Wholesale Broadband Access:

Price control obligation in relation to current generation Bitstream

Further Consultation and Draft Decision

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An Coimisiún um Rialáil Cumarsáide

Commission for Communications Regulation

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Additional Information

All responses to this consultation should be clearly marked:-
“Reference: Submissions to ComReg Document No 13/90” as indicated above,
and sent by post, facsimile, email or online at www.comreg.ie (current consultations), to arrive on or before 17:00 on 1 November 2013, to:

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Please note ComReg will publish all respondents' submissions with the Response to this Consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information in ComReg Document No 05/24.

Redacted Information

Please note that this is a non-confidential version of the consultation and draft decision. Certain information within the consultation has been redacted for reasons of confidentiality and commercial sensitivity, with such redactions indicated by the symbol ✂.

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Chapter 1

1 Introduction

- 1.1 This further consultation and draft decision is a follow up to Consultation Document No. 10/56¹ (referred to throughout this document as the ‘2010 Bitstream Consultation’) which addresses the appropriate price control for Bitstream services in the wholesale broadband access (“WBA”) market.
- 1.2 This consultation only relates to the price control obligation for standalone current generation wholesale Bitstream services. The price control applicable to next generation access (“NGA”) services in the WBA market is set out separately in ComReg Decision D03/13² (referred to throughout this document as the ‘NGA Decision’).
- 1.3 The key proposals in this consultation and draft decision are a further specification of the margin squeeze obligation and the imposition, amendment and withdrawal of the price control and the transparency obligations contained in the WBA Market Decision in ComReg Decision D06/11³ (referred to throughout this document as the ‘WBA Market Decision’), as follows:
- Eircom Limited (“Eircom”) should be subject to a national cost orientation obligation with regard to the monthly rentals associated with Bitstream and Bitstream Managed Backhaul (“BMB”) services insofar as Eircom should recover no more than its actual costs adjusted for efficiency (plus a reasonable rate of return⁴), nationally;
 - Outside the larger exchange area (“LEA”), Eircom should recover no more than its actual costs adjusted for efficiency (plus a reasonable rate of return) relating to the monthly rentals for Bitstream and BMB services associated with the area Outside the LEA;

¹ ComReg Document No 10/56 entitled “Wholesale Broadband Access – Consultation and Draft Decision on the appropriate price control” dated 15 July 2010.

² ComReg Decision No D03/13, ComReg Document No 13/11: Remedies in Next Generation Access Markets; dated 31 January 2013.

³ ComReg Document No 11/49 entitled “Market Review: Wholesale Broadband Access” dated 8 July 2011.

⁴ The reasonable rate of return is currently based on Eircom’s weighted average cost of capital (“WACC”) of 10.21%.

- Outside the LEA Eircom should not increase the prices for the monthly rentals associated with Bitstream and BMB or introduce a new current generation Bitstream product without ComReg's approval. As part of the notification and approvals process Eircom should demonstrate to ComReg that the increased / new Bitstream and BMB monthly rental prices recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) for the area Outside the LEA, while also ensuring that it complies with the overriding national cost orientation obligation;
- Outside the LEA, Eircom should recover no more than its long run incremental costs associated with the megabit per second ("Mbps") usage which is above the average usage costs;
- Eircom should be subject to a retail margin squeeze test in the LEA and Outside the LEA.

1.4 There are also a number of other related Decisions which are relevant to this consultation and these are discussed in Chapter 3.

1.5 This document is structured as follows:

- **Chapter 2:** Executive Summary: This section summarises the main points of the consultation and ComReg's overall objectives.
- **Chapter 3:** Background: This section summarises the technical background, other relevant Decisions associated with Bitstream and the main views of respondents from the 2010 Bitstream Consultation.
- **Chapter 4:** Market Developments: This section sets out the competitive and / or structural developments that may vary prospectively in the WBA market.
- **Chapter 5:** Appropriate form of price control: This section sets out the proposed form of price control that should apply in the LEA and Outside of the LEA.
- **Chapter 6:** Costing methodology and cost model: This section sets out the proposed methodology for the Bitstream cost model and the inputs and assumptions of the draft Bitstream cost model.
- **Chapter 7:** Retail margin squeeze test: This section sets out the proposed principles that should apply for the retail margin squeeze tests.
- **Chapter 8:** Bitstream ancillary charges: This section consults on Eircom's current Bitstream ancillary charges in the WBA market.

- **Chapter 9:** Bitstream Price Floors: This section consults on proposed updates to the Bitstream price floor model since publication of ComReg Decision D06/12 (referred to throughout this document as the 'WBA Price Floors Decision').
- **Chapter 10:** Appropriate Market 4 Access Input for standalone broadband ("SABB"): This section sets out the proposed price control obligation for SABB Outside of the LEA.
- **Chapter 11:** Draft Decision Instrument: This section sets out the draft decision instrument associated with the price control and transparency obligation for current generation Bitstream in the WBA market.
- **Chapter 12:** Regulatory Impact Assessment: This section sets out an analysis of the likely effect of the proposed changes to the price control obligation for current generation Bitstream.
- **Chapter 13:** Submitting comments: This section sets out the timelines for consultation response and how confidential information should be dealt with.

Chapter 2

2 Executive Summary

- 2.1 ComReg is the regulator for the electronic communications sector in Ireland. The European Commission has recommended a number of markets as being susceptible to *ex ante* regulation⁵. These markets have been reviewed in an Irish context and obligations were imposed where operators were designated with significant market power (“SMP”). One such market is wholesale broadband access (“WBA”) or Market 5 of the Relevant Markets Recommendation. Current Generation WBA, or ‘Bitstream’ (which is the term referred to throughout this document) has been identified as a key requirement which allows OAOs replicate the fixed retail broadband offers of the SMP operator, Eircom across Ireland.
- 2.2 Eircom was designated with SMP in the WBA Market Decision and a price control obligation and a margin squeeze obligation was imposed on it. This consultation and draft decision now reviews the current price control in place and sets out a proposed updated regulatory framework going forward for current generation Bitstream monthly rentals, with particular emphasis on the appropriate pricing approach Outside the LEA.
- 2.3 In order to understand the proposed approach for WBA pricing, it is important to highlight the main objectives that we are trying to achieve, the obligations that are already in place to ensure that we achieve those objectives and the changes necessary going forward. This is discussed below and in more detail later in the document.
- 2.4 Our objectives in line with Section 12 of the Communications Regulations Act 2002⁶ (“the Communications Regulations Act”) are to promote competition, to promote the interests of users within the community and to encourage access to the internet at a reasonable cost to end-users. In this context it is important that the following goals are achieved with regard to the WBA market:
- Avoid excessive prices being charged by Eircom wholesale
 - Avoid predatory pricing/foreclosure by Eircom Retail

⁵ Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

⁶ Communications Regulation Act 2002 (No. 20 of 2002), as amended by the Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), the Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and the Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011).

- Avoid predatory pricing/foreclosure by Eircom Wholesale in the LEA
- Incentivise efficient network investment by Eircom and other operators
- Ensure Eircom Wholesale recovers its efficient investment together with an appropriate rate of return.

2.5 In order to understand the proposals put forward in this consultation it is important to recap on the current price control remedies across the access network i.e., the price controls in place in the wholesale physical network infrastructure access (“WPNIA”) market (or Market 4 of the Relevant Markets Recommendation) and in the WBA market (also referred to as Market 5).

2.6 Currently, the price control in place in the WPNIA market for local loop unbundling (“LLU”), sub loop unbundling (“SLU”) and line share is cost orientation. The monthly rental price for LLU and SLU is based on a bottom-up long run average incremental costs plus an apportionment of common costs (“BU-LRAIC+”) methodology using the copper access model (“CAM”), as set out in ComReg Decision D01/10⁷ (referred to throughout this document as the ‘LLU Pricing Decision’). ComReg considers that the BU-LRAIC+ approach for access services sends the appropriate “build or buy” signals to the market place and encourages efficient investment and innovation in new and enhanced infrastructures. The price for the line share service is based on the recovery of the incremental costs of providing this service, given that line share must be purchased with single billing wholesale line rental (“SB-WLR”) which recovers the entire portion of the physical access network costs.

2.7 In the WBA market, Eircom is currently subject to a retail-minus price control nationally. Therefore, current generation Bitstream prices are capped at a value based on the retail price less retail costs. In addition, Eircom is also subject to a Bitstream price floor, as set out in the WBA Price Floors Decision⁸, in those areas of the country where LLU is present or likely to be present in the foreseeable future. This control ensures that Eircom cannot set its wholesale Bitstream monthly rentals below a certain level which could discourage or foreclose investment by other operators.

⁷ ComReg Document No 10/10: Response to Consultation and Decision – Local Loop Unbundling (“LLU”) and Sub Loop Unbundling (“SLU”) Maximum Monthly Rental Charges; dated 9 February 2010.

⁸ ComReg Document No 12/32 (ComReg Decision No D06/12): Wholesale Broadband Access: Further specification to the price control obligation and an amendment to the transparency obligation; dated 5 April 2012.

- 2.8 Before we discuss the details of the proposed pricing approach for current generation Bitstream for the next three years, it is helpful to provide some background regarding Eircom's exchanges in Ireland. There are approximately 300 Eircom exchanges covering the entire population of Ireland for voice telephony services, mainly over copper infrastructure, with exceptional areas using a wireless solution for voice. Of these 300 exchanges, approximately 100 of them cover circa 100 of the premises in Ireland and around 100 of broadband enabled premises. These exchanges are, for the most part, located in large urban centres. LLU operators have co-located in approximately 100 of these exchanges. That is to say, that such exchanges have at least one alternative operator co-located and who are serving broadband using their own equipment. It is possible that one or more operators will extend their co-location footprint to more of these exchanges at some point in the future. However, it is highly unlikely that this will go beyond the largest 100 exchanges given the low economies of scale of these areas, the cost of backhaul to the relevant exchanges for other operators and the unlikely probability of a commercial business case. UPC's cable footprint also largely overlaps with the largest 100 Eircom exchanges.
- 2.9 Given the above, this leaves approximately 200 exchanges in the rest of the country served by only one wholesale fixed broadband provider, Eircom, and which serves circa 200 of the premises of Ireland. ComReg considers that this situation is unlikely to change absent state intervention or the possible entry of the Electricity Supply network company which might be in a position to leverage from its own access network and backhaul network. However, at this point it is not clear what impact that these might have on the broadband market. In addition, the Irish Government has announced a National Broadband Plan⁹ ("NBP"), which proposes to deliver up to 30Mbps download speeds to all premises in Ireland where a commercial provider will not deliver an equivalent service. This rollout may potentially address a significant proportion of the 200 exchanges, possibly even where digital subscriber line ("DSL") broadband is already available. The current National Broadband Scheme ("NBS"), currently operated by Hutchinson 3G Ireland ("H3GI"), also serves the more rural parts of the country but only to a small proportion of users served by the 200 exchanges and generally in areas where Eircom do not provide basic broadband.

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<http://www.dcenr.gov.ie/Communications/Communications+Development/Next+Generation+Broadband/>

- 2.10 In November 2012¹⁰, ComReg announced the result of a multi-band spectrum licence auction. Spectrum made available as a result of this process should enable operators to provide more advanced mobile broadband services. However, it currently remains to be seen how effective these services will be in terms of exercising a constraint on fixed broadband pricing.
- 2.11 Earlier in 2013, ComReg published its Decision on the regulation of Retail Bundled Offers that includes retail fixed narrowband access (“RFNA”) or voice, in ComReg Decision No D04/13¹¹ (referred to throughout this document as the ‘Bundles Decision’). In the Bundles Decision, ComReg identified two geographic areas with varying competitive conditions, prospectively. One geographic area, known as the larger exchange area (“LEA”), where more than one competing infrastructure exists, and the balance being the more rural area (known throughout this paper as ‘Outside the LEA’) where infrastructure based competition does not exist to any appreciable extent. As part of our assessment of the appropriate price control for Bitstream going forward, we considered the varying competitive conditions between the LEA and Outside the LEA prospectively in the WBA market which may warrant a change from the current national price control remedy for current generation Bitstream. In the LEA, ComReg considers that Eircom is unlikely to increase wholesale Bitstream prices, in the presence of a retail margin squeeze obligation, given that Eircom faces some retail competitive pressure in the LEA where UPC has rolled out its fibre broadband network. In addition, Eircom is also constrained at a retail level where it faces retail and wholesale competition from OAOs that have unbundled Eircom’s exchanges. In the LEA, the evidence suggests that Eircom is price constrained, at least to some extent, at a retail level given the availability of alternative infrastructure. This view is supported by our consultants, Oxera, as set out in ComReg Document No 13/11a.

¹⁰ Information Notice 12/123 on “Results of the Multiband Spectrum Auction” dated 15 November 2012.

¹¹ ComReg Decision No D04/13, ComReg Document No 13/14: Price Regulation of Bundled Offers – Further specification of certain price control obligations in Market 1 and Market 4; dated 8 February 2013.

- 2.12 In addition, recent trends show a significant reduction to wholesale prices, for example, the price for Eircom's Bitstream managed backhaul ("BMB") reduced from €50 to €30 in July 2012 and on the 1 July 2013 the BMB charge was reduced further to €20¹², nationally. In addition, the national price for LLU was also reduced from €12.41 to €9.91¹³ from 1 February 2013 and in the LEA Eircom applied a discount of €3 to the SB-WLR price which means that the SB-WLR price is now €15.02¹⁴ when it is bought with Bitstream. However, it is noteworthy that the wholesale price reductions were made in the context of regulation. In particular, retail price reductions often require a corresponding wholesale price reduction only because of the presence of various requirements imposed by ComReg to ensure an appropriate gap between retail prices and wholesale prices and also between the prices of the various wholesale products. As a result of the above, and in the context of current regulatory rules, it is clear that cable and LLU based competition is exerting pressure on the Incumbent's retail and wholesale prices in the LEA. However, it is not clear that prices have been driven to underlying cost (including a return).
- 2.13 In the context of this review we consider that the risk of excessive pricing in the LEA is lower although not non-existent. In particular, much of the pricing constraint in the LEA is at the retail level (via UPC). Absent regulation there does not appear to be any mechanism whereby this constraint would feed through to wholesale prices. In the short term, Eircom would be able to foreclose its wholesale Bitstream customers and it is for this reason that ComReg proposes that a retail minus (or in this context a retail margin squeeze) continues to be required in the LEA in order to prevent predatory pricing.
- 2.14 Outside the LEA, the same retail constraints do not appear to exist. The recent wholesale discount announced by Eircom in relation to SB-WLR for example is not offered Outside the LEA. There have been no reductions to current generation asymmetric digital subscriber line ("ADSL") or ADSL1 Bitstream prices (i.e., products up to 3 Mbps) in recent years.

¹² Please refer to Eircom Bitstream Service Price List Version 7.21 (Table 2.3.3) on Eircom wholesale website at www.eircomwholesale.ie

¹³ Please refer to Information Notice 13/01: Price reductions to local loop unbundling ("LLU") and sub loop unbundling ("SLU"); dated 11 January 2013.

¹⁴ Please refer to Eircom Reference Interconnect Offer (RIO) price list Version 2.70, Service Schedule 401 on Eircom wholesale website at www.eircomwholesale.ie

- 2.15 Given that Eircom's Bitstream monthly rental prices in the LEA have not yet been driven down to either actual cost adjusted for efficiency (plus a reasonable rate of return) or the Bitstream price floors, current Wholesale Bitstream prices in the LEA still contribute to the overall cost of provision of Bitstream services Outside the LEA. The cost modelling work undertaken by our consultants, TERA, suggests that at a national level Eircom's prices are currently not leading to any material under or over recovery of actual cost incurred (plus a reasonable rate of return) in aggregate at a national level. The model (referred to throughout this document as the 'Bitstream cost model') takes Eircom's actual national Bitstream costs adjusted for efficiency (plus a rate of return) for the financial year 2012 and Eircom's volumes for 2012 and it forecasts costs and volumes for the three year price control period. Currently, ComReg does not have sufficient detail on the historical costs by geographic area to monitor the exact costs of providing wholesale broadband in any particular exchange. Reasonable assumptions however have been made which gives indicative cost estimates by area in the Bitstream cost model.
- 2.16 In the LEA there is an argument that prices should be set at local / regional efficient cost (plus a reasonable rate of return) since there is evidence of local over recovery. On the other hand it is notable that there is an alternative provider of wholesale Bitstream in this area - BT. Furthermore, several Bitstream customers in this area (notably Sky and Vodafone) are likely to have at least some bargaining power when negotiating with Eircom and BT for Bitstream access thereby increasing the chances that wholesale market forces might drive Bitstream prices to competitive levels over time. Smaller niche players are unlikely to enjoy any such bargaining power. In addition, Eircom's retail prices in the LEA are constrained by the presence of the cable operator, UPC, with corresponding pass through to wholesale prices by means of regulatory price controls. Overall, these conditions seem to point to the desirability of some degree of flexibility in the LEA for Eircom.
- 2.17 On the other hand, we are of the view that in the LEA there is a risk of foreclosure of LLU based competition whereby Eircom could render LLU based competition unviable by cutting Bitstream prices to a level where investment in LLU (or VUA infrastructure) is undermined. We therefore propose to maintain the existing control of a Bitstream price floor in the LEA.
- 2.18 Outside the LEA, Eircom is the main wholesale fixed broadband provider and there are little or no alternative providers in this area. Therefore, Outside the LEA Eircom may have an incentive to price excessively absent regulatory intervention.

- 2.19 An important consideration for ComReg then is how best to balance a desire for affordable pricing for broadband Outside the LEA (thereby increasing demand) with the objective of encouraging roll out of broadband while at the same time preventing excessive pricing. Again it seems to us that commercial operators may be best placed to evaluate these trade-offs, that is whether they should invest in LLU or whether they should buy Eircom's Bitstream service.
- 2.20 One of ComReg's main objectives Outside the LEA is to prevent excessive pricing. Accordingly, we are of the view that an obligation regarding the recovery of local costs Outside the LEA may be necessary to prevent excessive pricing in this area.
- 2.21 In addition, we have considered whether, in the presence of a cost oriented price control, a margin squeeze test against retail prices is necessary. For the reasons set out in Chapter 5 of this document we draw the preliminary conclusion that such a test is necessary.
- 2.22 Consequently, ComReg proposes the following pricing approach for current generation wholesale Bitstream and BMB monthly rentals in the WBA market:
- 1) To maintain the Bitstream price floor in the LEA relative to LLU in order to protect those operators who have invested or plan to invest in their own infrastructure (up to a maximum of around 150 exchanges). The Bitstream price floors are based on the BU-LRAIC+ approach (based on the inputs from the LLU model and the Leased Lines model) plus the cost to other operators of co-location. The objective of this test is to ensure there is a sufficient economic space for alternative operators to compete successfully through efficient investment in their own infrastructure, which sets the appropriate "build or buy" signals for operators considering investing. ComReg is therefore maintaining the status quo with regard to the Bitstream price floors.
 - 2) To impose a national cost orientation obligation on Eircom regarding the monthly rentals for its current generation Bitstream and BMB services so that Eircom should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return), nationally.

- 3) To ensure that Outside the LEA Eircom recovers no more than its actual costs adjusted for efficiency (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB in that specific area i.e., Outside the LEA. Accordingly, we propose that Eircom should not increase its current Bitstream and BMB monthly rental prices Outside the LEA without ComReg's prior approval and to demonstrate to ComReg that its increased Bitstream and BMB monthly rental prices Outside the LEA are reflective of the obligation above with regard to local cost recovery while also ensuring that it complies with the overriding national cost orientation obligation. Any new current generation Bitstream product(s) launched by Eircom would also be subject to those provisions.
- 4) Instead of the current retail minus control nationally, ComReg proposes that a retail margin squeeze test should continue to apply nationally, but monitored separately for Bitstream services sold in the LEA and Outside the LEA. This should ensure regulatory consistency with the NGA Decision and the Bundles Decision. The objective is to arrive at an economic replicability test using a Discounted Cash Flow ("DCF") model which allows competing broadband providers using Eircom's network, to compete effectively in the upstream market.

It is proposed that the retail margin squeeze Outside the LEA will be based on similarly efficient operator ("SEO") costs. Eircom is the main fixed broadband provider Outside the LEA with a significant share of the retail broadband market in this area. There are a number of small wholesale operators (resellers) Outside the LEA who have very little retail market penetration (with the exception of Vodafone) and who are vulnerable to exclusionary behaviour given that they do not share Eircom's economies of scale and they have no realistic alternative means of provision. ComReg considers that the SEO approach should allow sufficient margin for these smaller operators to compete over the price control period. Each retail offer would be assessed on a product-by-product basis to ensure that there is a sufficient margin.

In the LEA it is proposed that the retail margin squeeze test will be based on a mixture of SEO and equally efficient operator (“EEO”) costs for now. Given the strong presence of some larger operators in the LEA who may benefit from the economies of scale associated with their own infrastructure, ComReg considers that a smaller margin may be more appropriate. In the LEA the retail offers would be assessed on a portfolio basis which means that Eircom would have some flexibility to price above and below the retail costs on some products so long as the weighted average of retail and wholesale costs are covered by retail revenues.

2.23 With regard to the proposal at point (2) above regarding the cost orientation obligation, currently, the Bitstream cost model appears to show that Eircom’s current wholesale Bitstream prices in the LEA are likely to be above their actual cost (plus a reasonable rate of return) which means that Eircom appear to be over-recovering in the LEA, while it is likely that Eircom is under-recovering their actual costs (plus a reasonable rate of return) Outside the LEA i.e., there is a cross subsidy¹⁵ from the LEA into areas Outside the LEA. However, the Bitstream cost model currently suggests that on an overall national basis there does not appear to be any material over or under recovery of the actual Bitstream costs adjusted for efficiency (plus a reasonable rate of return) when the costs are compared to the current revenues, i.e., the Bitstream revenues (based on Eircom’s current Bitstream prices by volumes) are in line with the actual national efficient Bitstream costs (plus a reasonable rate of return). Therefore, currently the Bitstream cost model breaks-even (revenues are in line with efficient costs) based on Eircom’s current national Bitstream prices. On that basis we see no reason to intervene for now with regard to Eircom’s current national Bitstream prices. However, we will reserve our rights with regard to ComReg’s future discretion in relation to its statutory powers.

2.24 It is important to point out that the objective of the national Bitstream cost model, unlike the Bitstream price floors model, is not to stimulate alternative operator investment where it is clear no commercial operator might invest, but to ensure Eircom do not materially over or under recover their costs adjusted for efficiency (including a reasonable rate of return) nationally. It is important to note that the actual costs that we are referring to in the context of this review are the costs associated with the core network (costs up to the line card at the exchange), and not the access network (costs from the line card in the exchange to the customer premises). The relevant modern equivalent asset (“MEA”) network costs of a new entrant in the LEA were previously addressed by ComReg in the WBA Price Floors Decision. The access

¹⁵ It is important to note that the split of costs between LEA and Outside the LEA has not been fully established. Therefore, our view on this point is currently tentative.

network costs were previously modelled in the LLU Pricing Decision, which was based on BU-LRAIC+ approach. However, in this consultation we are proposing to use Eircom's actual historical costs / volumes for 2011/12 as the starting point and these costs and volumes are forecasted forward with adjustments for efficiencies over the three year price control period. This approach is preferred to the Modern Equivalent Asset ("MEA") approach / BU-LRAIC+ approach which was adopted in those areas of the country where competing infrastructure exist (i.e., the LEA). The risk of using the BU-LRAIC+ approach is that it could calculate the cost of a new network being built today and not the actual costs incurred by Eircom and therefore, could reward Eircom for investments that did not / may not take place, especially Outside the LEA. It could also send out the wrong build / buy investment signals to operators (including Eircom) and lead to inefficient investment. This is discussed in Chapter 6.

- 2.25 Further to the proposal at point (3) above regarding local cost recovery Outside the LEA, ComReg proposes that where Eircom wishes to increase its Bitstream and BMB monthly rental prices Outside the LEA or where it introduces a new current generation Bitstream product to the market Outside the LEA, then Eircom should seek ComReg's prior approval through a formal notification and approvals process as set out in Chapter 5. As part of the notification and approvals process, Eircom would be required to demonstrate that it recovers no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream and BMB services Outside the LEA while also ensuring that it complies with the overriding national cost orientation obligation. Depending on the materiality of any changes and / or new prices proposed by Eircom, ComReg may consult with the industry, as appropriate. Any such consultation may assess the potential impact on stakeholders, including OAOs and consumers as well as any likely effect on competition.
- 2.26 While we consider that Eircom should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) Outside the LEA in order to prevent concerns of excessive pricing, in the LEA we consider that this obligation is not appropriate. In the LEA, Eircom faces some competitive pressure as already set out above and as discussed in detail in the NGA Decision and the Bundles Decision and excessive pricing is less of a concern.

- 2.27 On an annual basis ComReg also proposes that Eircom should compare / reconcile the wholesale current generation Bitstream (or WBA) results from its Regulated Accounts¹⁶ with the planned costs and revenues in the Bitstream cost model for the three year price control period. The comparison carried out by Eircom annually as well as the underlying supporting information should be provided to ComReg by the end of February in the year subsequent to the financial year end. If, as a result of this review, it is clear that Eircom significantly under / over recover their overall actual national Bitstream costs adjusted for efficiency (plus a reasonable rate of return) then we may have to assess how any issues of cost recovery might be addressed going forward. Depending on the materiality of any changes required as a result of the annual review, ComReg may consult with the industry, as appropriate.
- 2.28 This consultation also includes a pricing proposal with regard to standalone broadband ("SABB"). Up until recently, the wholesale Bitstream service provided by Eircom could only be purchased in conjunction with legacy narrowband or "POTS"¹⁷ based Bitstream service. Since 1 July 2013, Eircom offer a SABB service which means that customers can buy a Bitstream service without a POTS voice service i.e., there is no narrowband service. This raises the question as to how best to price this service since up to now the full cost of the access network has been borne entirely by narrowband services. In the Bundles Decision, ComReg specified the minimum price floor for SABB. However, given concerns that Eircom could price excessively for SABB Outside the LEA we are proposing that Eircom should be subject to a cost orientation obligation for SABB. This is discussed in detail in Chapter 10.
- 2.29 ComReg is also proposing in this consultation that Eircom's throughput / usage charges Outside the LEA should recover no more than the long run incremental cost ("LRIC") for data transmission costs, based on the cost of the traffic for the particular operator being charged, which is over and above the average throughput currently used in the Bitstream cost model. This proposal is to ensure that operators that have a particular customer base of high data users compared to the overall average customer are not charged excessively for using the Eircom network. This proposal is discussed in more detail in Chapter 6.

¹⁶ Please refer to ComReg Document No. 10/67 entitled "Accounting Separation and Cost Accounting Review of Eircom Ltd." dated 31 August 201

¹⁷ Plain Old Telephony Service

- 2.30 ComReg believes that the proposed pricing approach set out in this draft decision strikes the right balance between ensuring that any likely anti-competitive effects associated with the activities of the SMP operator are minimised and ensures a consistent and flexible pricing approach going forward which is reactive to the changing dynamic of the WBA market. The proposed approach should not jeopardise Eircom's cost recovery (and therefore investment) nor its ability to meet competition inside and Outside the LEA. This draft Decision, when considered in conjunction with other related Decisions on Bundles, NGA and the Bitstream price floors should ensure that competition is incentivised and fostered in the long term so that consumers benefit from a wide variety of choice at affordable prices.
- 2.31 ComReg in making its final decision will consider all the views of respondents to this consultation and will take utmost account of any comments from the European Commission in deciding on the appropriate price control for the WBA market. Responses to this consultation must arrive at ComReg by 5pm, Friday 1 November 2013.

Chapter 3

3 Background to the Consultation

3.1 Introduction

3.1 In this Chapter we discuss the following main areas:

- Technical background
- Other relevant Decisions
- Summary of main points raised in response to the 2010 Bitstream Consultation.

3.2 Each of the above are discussed in turn below.

3.2 Technical background

3.3 WBA has been included as one of the seven recommended markets susceptible to *ex ante* regulation by the European Commission. These markets are defined by the European Commission in accordance with the principles of competition law. National Regulatory Authorities (“NRAs”), must, as soon as possible after the adoption of the European Commission’s recommendation, carry out an analysis of the relevant markets, taking utmost account of the European Commission’s guidelines¹⁸.

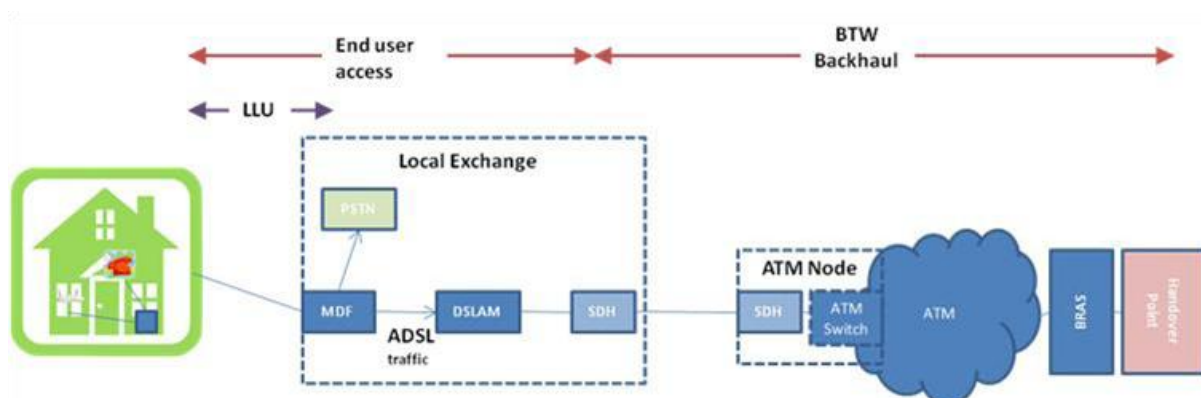
3.4 Eircom delivers current generation broadband access using DSL technology over the same lines as used by the Public Switched Telephone Network (‘PSTN’) technology used to deliver voice products. OAOs without their own access infrastructure but who wish to sell equivalent services to Eircom Retail have two choices:

- rent access to Eircom’s underlying copper loop infrastructure, by purchasing WPNIA products, namely the unbundled access product (LLU) or through the shared access product, LLU line share; or
- rent access to the non-physical network product on Eircom’s DSL network by purchasing the WBA product known as Bitstream i.e., simple reselling of Eircom’s Bitstream product.

¹⁸ Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services” dated 11th July 2002, Official Journal C165, 11/07/2002, p. 6 – 31.

- 3.5 These two choices allow OAOs to trade off the greater flexibility offered by using their own access equipment against the lower investment costs of using a wholesale broadband offer (Bitstream). However, as set out in the 2010 Bitstream Consultation, ComReg believes that it is important that the relative pricing of wholesale products provides the correct incentives to OAOs to invest in their own access equipment and protects those that have already made significant investments from foreclosure.
- 3.6 The current generation Bitstream service is available on PSTN lines where broadband infrastructure is installed. OAOs which utilise the Bitstream service pay a monthly rental per user to Eircom for this service and are called Bitstream access seekers (referred to throughout this document as OAOs). We have illustrated below the key elements of a WBA service. Please refer to Chapter 2 in the 2010 Bitstream Consultation for further general discussion on the Bitstream product set and network components necessary for the provision of the Bitstream service.

Figure 3.1 Elements of a WBA service¹⁹



Source: Ofcom²⁰

¹⁹ This diagram is showing an ATM based bitstream offer. IP/Ethernet based bitstream offers would have a slightly different description.

²⁰ <http://stakeholders.ofcom.org.uk/binaries/consultations/823069/statement/statement.pdf>

3.3 Other relevant Decisions

- 3.7 2006 Retail Minus Decision²¹: Since 2006, Eircom has been subject to a national retail minus price control based on ComReg Decision D01/06. This means that the maximum Bitstream prices that Eircom could charge / offer for a Bitstream product is derived by applying a discount (i.e., retail margin) to the related retail price. In essence, the retail minus price control sets a margin for each product expressed as a combination of a fixed element and an element proportional to the retail price. As new retail broadband products are introduced by Eircom, additional WBA products are introduced on a matching basis. The margins for these products were derived from a DCF model, as described in more detail in the 2006 Retail Minus Decision.
- 3.8 When introduced in 2006, the current national retail minus approach was deemed the most effective way to regulate WBA products. At the time, these products were still relatively new, and it was difficult to estimate the forward looking level of costs or of demand with any degree of certainty. As such, at that time, any other form of price control (in particular cost orientation) risked being either ineffective if the costs estimated were too high (or low) and / or acting as a disincentive to infrastructure investment if the costs estimated were below the efficient cost plus a reasonable return.
- 3.9 WBA Market Decision: In 2011 ComReg published its WBA Market Decision in ComReg Decision D06/11, where Eircom was re-designated with SMP in the WBA market on a national basis. The competition problems identified as part of that decision included excessive pricing, potential leverage by Eircom as well as the potential for exclusionary / predatory behaviour. A number of obligations were imposed on Eircom, including a price control obligation and an obligation not to cause a margin squeeze. The WBA Market Decision specified that the 2006 Retail Minus Decision would continue to apply to Eircom pending any other decisions or directions by ComReg in relation to the appropriate price control.
- 3.10 2010 Bitstream Consultation: Aside from the WBA Market Decision, in July 2010, ComReg published a consultation (ComReg Document No 10/56) seeking the views of the Industry on the appropriate pricing approach for Bitstream. The main proposals consulted on in the 2010 Bitstream Consultation included:
1. Setting ceiling prices in the WBA market to guard against excessive pricing;

²¹ ComReg Decision D01/06: ComReg Document No 06/01 entitled "Retail minus wholesale price control for Wholesale Broadband Access Market" dated January 2006.

2. Setting floor prices in the WBA market to ensure the maintenance of an appropriate economic space between the relative pricing of the regulated markets of WBA and WPNIA in order to protect investment in LLU;
 3. Setting a retail margin squeeze test between the price of WBA products and the associated retail offering(s).
- 3.11 Subsequently, in ComReg Document No 10/108, ComReg further consulted on point 2 above but it was decided to consult at a later stage on the Bitstream price ceilings and the retail margin squeeze test in the WBA market.
- 3.12 LLU Pricing Decision: The price control in place in the WPNIA market for LLU and SLU access is cost orientation. The monthly rental price for LLU and SLU is based on a bottom-up long run average incremental costs plus an apportionment of common costs ("BU-LRAIC+") methodology using the copper access model ("CAM"), as set out in ComReg Decision D01/10. More recently, in January 2013, Eircom reduced the rental price for LLU from €12.41 to €9.91, as noted in ComReg Information Notice 13/01. Eircom's main reason for the change in the price was due to the fact that less exchanges have been unbundled by OAOs over the past few years compared to what was initially envisaged as part of the LLU pricing review in 2010. The LLU access price is used in the calculation of a minimum price floor for SABB, as discussed in Chapter 10 of this document.
- 3.13 WBA Price Floors Decision: In 2012 ComReg published its decision on the Bitstream price floors in ComReg Decision No D06/12, such that Eircom cannot set Bitstream prices below the following:
- Monthly port cost €4.55
 - Monthly backhaul cost – Fixed €1.33
 - Monthly backhaul cost per Mbps - Variable €8.14
- 3.14 The objective of the WBA Price Floors Decision was to prevent Eircom from setting Bitstream prices too low such that they could discourage investment in LLU. The Bitstream price floors are relevant where LLU is likely to be rolled out i.e., the LLU footprint. By virtue of the criteria set out in the Bundles Decision which is referred to below, the LLU footprint is part of the LEA. The Bitstream price floors are set on the basis of the costs borne by a reasonably efficient operator ("REO") investing in LLU. Please refer to the WBA Price Floors Decision for the full details. We have assessed whether any changes are required to the Bitstream price floors as part of this consultation which is discussed at Chapter 9.

- 3.15 NGA Decision: In 2013 ComReg published its NGA Decision in ComReg Decision D03/13. The NGA Decision specifies the obligations relating to next generation services in the WBA market, including a price control obligation. The pricing approach for NGA is based on a retail margin squeeze test with a number of wholesale margin squeeze tests. In the NGA Decision we formed the view that Eircom is sufficiently constrained in its retail pricing in areas where NGA is likely to be rolled out because of the presence of cable infrastructure and LLU based providers. By virtue of the criteria set out in the Bundles Decision below, the “NGA areas” are now part of the LEA. Given the retail constraints already identified in the NGA Decision, we consider that current generation Bitstream is also likely to be constrained in the LEA. Therefore, we propose that there should be consistency of pricing principles between the NGA and Bundles Decisions and current generation Bitstream pricing. Based on the criteria set out in the Bundles Decision with regard to the LEA, it is important to note that once Eircom gives six months prior notification regarding the launch of NGA services in cabinets in the relevant exchange area then those exchanges become part of the LEA²².
- 3.16 Bundles Decision: In 2013, ComReg published the Bundles Decision in ComReg Decision D04/13. The Bundles Decision defined two geographic areas with varying competitive conditions, prospectively. One geographic area, known as the LEA, where more than one competing infrastructure exist, and the balance being the more rural area (known throughout this paper as “Outside the LEA”) where infrastructure based competition does not exist to any appreciable extent. The Bundles Decision specifies the net revenue test (“NRT”) by LEA and outside the LEA, which Eircom must pass when it sells retail fixed narrowband access (“RFNA”) in a bundle with one or more other services, predominantly broadband / Bitstream. As part of our consultation we must assess the relevant cost associated with standalone Bitstream which should then serve as the cost input for Bitstream used in the NRT under the Bundles regime.

²² Subject to the condition that those proposed NGA-enabled cabinets must serve at least a reasonable number of lines in that exchange area. See ComReg Decision No D04/13 for further discussion.

3.4 Summary of main points raised in response to the 2010 Bitstream Consultation

3.17 As already set out above, in the 2010 Bitstream Consultation ComReg consulted on the proposal to implement price floors and price ceilings in relation to Bitstream services. The main concerns previously raised by respondents as part of its response in 2010 are outlined below. However, it is important to note that the broadband market has evolved somewhat since the 2010 Bitstream Consultation and it should also be pointed out that the 2010 Bitstream Consultation paper proposed a national price ceiling.

3.18 There were six respondents to the 2010 Bitstream Consultation:

- Magnet Networks Limited ("Magnet");
- Eircom;
- BT Communications Ireland Limited ("BT");
- Vodafone Ireland Limited ("Vodafone");
- Sky;
- Alternative Operators in the Communications Market ("ALTO").

3.19 In general, the majority of respondents agreed with the proposal to have Bitstream price ceilings, except for some concerns noted by Vodafone and Eircom. Those concerns are reflected as part of the relevant discussions in this consultation document.

3.20 In summary, Eircom believed that the current retail-minus price control was burdensome and rigid and no longer suited to market conditions. However, Eircom did not believe that maximum prices should be set and that the cost-oriented minimum prices and a margin squeeze test (other than the one proposed) were sufficient. Eircom stated that it did not believe competition was homogeneous throughout Ireland and that this needed to be reflected in the remedy. Eircom also stated that if maximum prices must be set it must reflect higher costs in rural areas which are unlikely to be unbundled and must preserve existing investment in broadband including any future investment in NGA.

- 3.21 Eircom also believed that pricing flexibility such as gradient pricing and geographic de-averaging needed to be explored. In its response, Eircom requested that a compulsory mechanism for the review of the price control should be put in place so that it cannot exceed 3 years without review. Eircom also stated that the impact of NGA needs to be considered which may make current Bitstream obsolete.
- 3.22 Vodafone did not agree with a pricing range (i.e., a price floor and a price ceiling) as they considered that this would create significant pricing and regulatory uncertainty in the WBA market. Vodafone believed that the per port and per Mbps charges already gave the flexibility required. In addition, Vodafone requested greater detail on the model and the outputs of it to ensure that the maximum price was not too high.

Chapter 4

4 Market Developments

4.1 Introduction

- 4.1 As part of our assessment of the appropriate price control for current generation Bitstream services over the next three years we have considered whether there are differences in competitive conditions in different geographic areas prospectively, to such an extent that sub-national price controls could be warranted or whether a national pricing remedy should continue to apply. If there is evidence of significant structural / competitive differences prospectively, then a less stringent form of regulation could be considered for the more competitive area (i.e., the LEA) with a more stringent approach in those areas where competition is less prevalent (i.e., “Outside the LEA”). This approach would be consistent with the Bundles Decision and the NGA Decision.
- 4.2 As already set out earlier in the consultation, currently approximately ⅓ Eircom exchanges exist. Of these approximately ⅓ exchanges reach approximately ⅓ of the premises in Ireland and around ⅓ of broadband enabled premises. These exchanges largely relate to cities and large urban centres, where LLU operators and UPC is present, which is known as the LEA. The balance of exchanges (circa ⅔) relate to Outside the LEA.
- 4.3 The rest of this section is discussed as follows:
- Market developments in the LEA
 - Market developments Outside the LEA.

4.2 Market developments in the LEA

4.4 The LEA is typically an exchange area being served with Eircom's current generation retail broadband products, NGA services as well as services from an alternative infrastructure-based provider or LLU-based services. The technical considerations used when determining whether an exchange is in the LEA, or not, are set out in the Bundles Decision where it was stated that: *the "Larger Exchange Area" means the total geographic area comprising individual exchange areas each of which satisfies at least one of the following criteria:*

(i) Criterion 1: *An exchange area in which:*

- a) *at least one AIP is providing telecommunications services at the retail level to End-Users; and*
- b) *at least one OAO (not being an AIP) is providing telecommunications services at the retail level to End-Users from the relevant exchange using LLU or VUA (either by means of direct provision by that OAO to End-Users or via a wholesale service provided to that OAO by another OAO by means of LLU or VUA), subject to the condition that the said AIP(s) and the said OAO(s) using LLU or VUA must, all taken collectively, have a reasonable market share and reasonable market coverage in the relevant exchange area;*

(ii) Criterion 2: *An exchange area in which at least two OAOs (not being AIPs) are providing telecommunications services at the retail level to End-Users from the relevant exchange using LLU or VUA (either by means of direct provision by those OAO(s) to End-Users or via a wholesale service provided to those OAO(s) by another OAO by means of LLU or VUA) - subject to the condition that the said OAOs using LLU or VUA must, taken collectively, have a reasonable market share and reasonable market coverage in the relevant exchange area;*

(iii) Criterion 3: *An exchange area in which:*

- a) *at least one AIP is providing telecommunications services at the retail level to End-Users; and*
- b) *Eircom (and OAOs (not being AIPs) relying on wholesale inputs provided by Eircom) are providing retail fixed broadband services to less than 20 per cent of the premises in that exchange area,*

subject to the condition that the said AIP(s) must, taken collectively, have a reasonable market share and reasonable market coverage in the relevant exchange area;

(iv) Criterion 4: An exchange area in respect of which Eircom has provided at least six months prior notification (or such shorter period as may be agreed by ComReg) on its publicly available Wholesale website (in accordance with Section 9.13(i) of the Decision Instrument contained in Annex 1 of ComReg Decision D03/13 and/or Section 9.13(i) of the Decision Instrument contained in Annex 2 of ComReg Decision D03/13) regarding the launch of NGA services by Eircom in cabinets in the relevant exchange area, subject to the condition that those proposed NGA-enabled cabinets must serve at least a reasonable number of lines in that exchange area;

(v) Criterion 5: exceptionally, and subject to case-by-case assessment by ComReg, an exchange area in which the relevant exchange:

- a) Is surrounded by Qualifying Exchanges; or*
- b) Serves fewer than 500 residential premises and is located either adjacent to, or in reasonable proximity to, Qualifying Exchange(s); or*
- c) Is determined, to the satisfaction of ComReg, to have an economic affinity with adjacent Qualifying Exchange(s), subject to the total residential premises served by Qualifying Exchanges under this sub-criterion 5(c) not exceeding 5% of the total residential premises in the Larger Exchange Area (excluding those residential premises which are served by Qualifying Exchanges under sub-criterion 5(b) above).*

4.5 In the LEA Eircom faces some competitive pressure at the retail level where UPC has rolled out its bidirectional cable network and where Eircom also faces retail and wholesale competition from OAOs that have unbundled Eircom's exchanges.

4.6 As already established in the context of the NGA Decision, published earlier this year, there is evidence to suggest that Eircom's NGA wholesale and retail pricing is likely to be constrained by LLU operators and UPC in the LEA.

4.7 Retail competition between Eircom and UPC in the LEA generally occurs between bundled offers of telephone calls, high-speed broadband access and television content. While Eircom has not tended to make reductions to the headline prices of its current generation bundled offers over the last three years, the strategy has been to increase the value of existing packages with a mixture of 'free' upgrades, time-limited promotions and customer-specific offers. These may be targeted specifically at those customers who may be more likely to switch to an alternative platform. In particular where those offers (such as a free upgrade) are conditional on a new contract, the strategy

appears to be to lock in customers who could potentially churn to an alternative supplier for a further 12 - 18 months. Similar to Eircom, UPC tends to increase the value of its bundles with free upgrades for existing customers or limited-period discounts for new customers (this is discussed further below). The main alternative operator, Vodafone, also offers bundles of broadband and calls which ultimately rely on Eircom for wholesale network inputs. Therefore, the retail strategy in the LEA, in particular for Eircom and UPC, appears to focus on increasing the value of bundles, rather than offering a lower retail headline price.

4.8 Further to the retail competition between Eircom and UPC, Eircom's retail prices in the LEA are also constrained by OAOs' offers. This is more so the case where operators have deployed their own active equipment and use LLU. Alternative providers that rely on LLU-based inputs from Eircom may also be able to compete with Eircom's retail broadband offerings. Where an operator has control over the technical specifications of the infrastructure i.e., bandwidth and contention they have scope to offer a service that is differentiated from the Incumbent's. Access to the physical wholesale inputs (LLU) also gives the alternative operators greater control over the value chain, thus allowing them more flexibility in retail pricing. A significant difference between simple Bitstream reselling is the upfront and sunk investment of unbundling an exchange. For an operator using LLU in the LEA the marginal cost of connecting an additional retail customer is low, since all the necessary investment has been made. These factors are also likely to help constrain Eircom's pricing power within the areas where these alternative operators are active i.e., usually within a particular exchange area where they have invested in unbundling capability. Market data shows that unbundling (line share) is a far more prevalent form of broadband connection in the LEA while DSL has a lower share of connections with UPC accounting for around half of broadband connections in the LEA.

4.9 While unbundling has been relatively limited in Ireland so far, an important development has been the entry of Sky to the Irish retail broadband market with very competitive retail offers. BT Ireland, the most significant LLU provider in Ireland, is providing a wholesale Bitstream access service to Sky. In addition, the Electricity Supply network company may be present in the LEA in the medium term by leveraging from their own access network and backhaul network. Prospectively, therefore further competition in the retail broadband market may come from offers that are not reliant on Eircom's active access services in the WBA market.

- 4.10 With regard to publically available data on retail broadband market shares²³, the data does not reflect competition in the national markets but it is apparent that consumers are responding to UPC's relatively attractive product offering, putting pressure on both Eircom and Eircom's wholesale customers to provide competitive offerings to those who have the ability to access the UPC cable network in the LEA.
- 4.11 Nationally, DSL is the dominant form of broadband access, with circa 70%²⁴ of the retail fixed-line subscribers i.e., excluding fixed wireless access, broadband subscriptions in 2013. However, it is losing retail broadband market share to other platforms, most notably cable. Year-on-year (Q1 2012 to Q1 2013) subscription growth rates for cable are about 16%. At the retail level, Eircom's fixed-line broadband market share decreased from above 43% in Q1 2012 to around 40% in Q1 2013. UPC increased its share from around 25% in Q1 2012 to approximately 28% in Q1 2013.
- 4.12 As these figures are national, they mask the extent of the shifts in retail broadband market shares occurring within the footprint of UPC's cable network. Recent market data suggests that in the LEA UPC is a significant competitor. It is also important to note that the decline in Eircom's retail broadband market share (and UPC's market share gain) is more significant in urban areas than the national figures suggest. The pattern suggests that UPC is able to attract churning subscribers from Eircom retail (and wholesale) products, as well new broadband subscribers, while Eircom is losing subscribers in a growing retail market.
- 4.13 As already noted above, Eircom's retail broadband pricing strategy in response to UPC competition has been to focus on increasing product value at the same retail price by providing free upgrades in certain areas. In 2010, certain 1Mbps, 3Mbps and 7Mbps retail packages were upgraded free of charge to 8Mb plans with varying levels of usage included. More recently, Eircom has moved all its customers onto the 24 Mbps plan in the LEA and in a limited number of ADSL2 enabled exchanges Outside the LEA. While the decision to upgrade customers may be technical i.e., based on availability, the decision to upgrade LEA exchanges itself may arise from competitive pressures.

²³ Broadband market share data (based on volume of subscribers) referred to in this consultation is based on confidential disaggregated data up to June 2013 received from Eircom which has been sense checked against data collected by ComReg as part of the published ComReg quarterly reports. The UPC data is based on confidential disaggregated data received from UPC in September 2012 which has been extrapolated forward based on UPC growth rates evident from the data collected as part of the ongoing ComReg quarterly reports.

²⁴ Please refer to ComReg Document No 13/56: Quarterly Key Data Report (Data as of Q1 2013); 13 June 2013 regarding all Q1 2013 data referred to above and to ComReg Document No 12/62R: Quarterly Key Data Report; 14 June 2012 for all Q1 2012 data referred to above.

- 4.14 Eircom has separately recently reduced the prices for certain wholesale access products. For example, the usage component of the BMB 8Mbps and 24Mbps product was reduced from €50 to €30 in July 2012 and was more recently reduced to €20, from 1 July 2013. These price reductions apply in the NGB area which relates to approximately over 300 exchanges, extending beyond the current LEA area.
- 4.15 While Eircom has not lowered its wholesale prices to such an extent that they would reach the Bitstream price floors in the WBA Price Floors Decision, there is evidence to suggest that the structural competitive circumstances may vary prospectively across the two areas. As noted above, the competitive pressure is recognised and reflected in the regulation of bundled offers, and there are good reasons to apply remedies which are consistent. Specifically, as structural differences are reflected in the regulation of bundled offers, it makes sense to ensure consistency in the regulatory design of standalone products as well.
- 4.16 Furthermore, it seems appropriate to ensure consistency between the regulation of NGA and current generation broadband products. NGA is already regulated on the basis of a retail margin squeeze test, based on the finding of retail pricing constraints. The evidence established as part of the NGA Decision indicates that NGA retail based broadband prices is constrained by UPC. This implies that the wholesale inputs underlying current generation broadband should be priced in a consistent manner. Furthermore, where Eircom has to reduce its copper prices due to the pricing constraints in, say, NGA-based competition, the reduced copper prices should also apply to current generation wholesale products. This has already taken place with regard to price for SB-WLR where Eircom has introduced a discount of €3 which has reduced the price for SB-WLR to €15.02²⁵ in the LEA where SB-WLR is sold with Bitstream. This indicates that the pricing constraints that Eircom faces in this area are becoming more effective.

²⁵ Please refer to the Eircom RIO price list on the Eircom Wholesale website at www.eircomwholesale.ie

4.3 Market developments Outside the LEA

- 4.17 The area Outside the LEA corresponds to those exchanges (i.e., about 8% exchanges) which are in the more sub-urban, rural and remote areas of Ireland. This area has typically higher costs for potential entrants due to longer local loop lengths, greater distance to provide backhaul, and fewer economies of aggregation. Outside the LEA the prospects for entry by a further LLU operator may be limited.
- 4.18 DSL is an important access medium Outside the LEA. However, alternative DSL-based operators are almost entirely reliant on Bitstream from Eircom in order to provide their retail offering, with only a very small proportion of DSL-based subscribers using line share. Eircom Wholesale is the main provider of wholesale fixed broadband services Outside the LEA with in excess of 80% wholesale market share (in terms of subscribers) while Eircom Retail maintains about 8% retail broadband market share Outside the LEA. This highlights a key structural difference compared to the LEA, as there are fewer access alternatives available Outside the LEA. The operators that do offer services Outside the LEA have less scope for product and cost differentiation compared to other suppliers in the retail broadband market. Hence, this provides only a limited competitive constraint on Eircom.
- 4.19 Eircom's retail prices for broadband offers in both the LEA and Outside the LEA are identical. However, Eircom's Talktime Chatter group (24Mbps 'Ultimate') offer is only available in the NGB enabled exchanges, which has had a recent wholesale price reduction from €30 to €20, effective from 1 July 2013. This activity suggests that price reductions or quality adjustments are not generally available Outside the LEA.
- 4.20 In terms of entry prospects Outside the LEA, ComReg consider that they are limited, largely due to the less favourable cost and scale characteristics. It seems that UPC's current investment plans focus on upgrading its existing network rather than expanding its footprint. Further plans by Eircom to roll out NGA networks is limited to LEA while the prospect of future LLU unbundling in these areas is also limited, as take-up to date of LLU access has been limited.
- 4.21 Therefore, currently Outside the LEA there is realistically only one fixed broadband provider, Eircom. This is unlikely to change absent state intervention or the possible entry of the Electricity Supply network company who could leverage from their own access network and backhaul network. Nothing concrete has happened to date with regard to the Electricity Supply network other than a tender process for a possible retail partner.

- 4.22 The Irish Government has announced a NBP²⁶ which proposes up to 30Mbps download speeds to all premises in Ireland where a commercial provider will not deliver the equivalent service. It is therefore envisaged that the NBP will cover a significant proportion of the exchanges Outside the LEA. The impact of this development will need to be monitored by ComReg.
- 4.23 Given that Eircom has little or no competition from alternative providers Outside the LEA, ComReg has concerns that Eircom may price excessively in this area to the detriment of consumers. ComReg considers that the form of price control should take this into account. This is discussed further in Chapter 5.

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<http://www.dcenr.gov.ie/Communications/Communications+Development/Next+Generation+Broadband/>

Chapter 5

5 Appropriate form of price control

5.1 Introduction

- 5.1 In Chapter 4 we discussed the prospective competitive and structural changes in the WBA market, which may warrant a differentiated price control between the LEA and Outside the LEA for current generation Bitstream services. This Chapter assesses the most appropriate form of price control for Bitstream and BMB monthly rental charges in the WBA market, both in the LEA and Outside the LEA.
- 5.2 ComReg must take account of a number of factors, as set out in the Access Regulations²⁷, the Framework Regulations²⁸ as well as the Communications Regulations Act prior to imposing any SMP obligation and in particular a price control obligation. This is discussed in detail in Chapter 12 of this document in the context of the regulatory impact assessment (“RIA”).
- 5.3 The rest of this Chapter looks at the options available to ComReg in terms of the most appropriate form of price control to adopt in the WBA market for current generation Bitstream services and which is discussed under the following headings:
1. Appropriate forms of price control for Bitstream
 2. Implementation of the cost based price control
 3. Price control period and annual reviews
 4. Wholesale price notification and compliance procedures.

²⁷ S.I. No 334 of 2011 European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011.

²⁸ S.I. No 333 of 2011 European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011

5.2 Appropriate forms of price control for Bitstream

- 5.4 In order to understand the proposed pricing approach for wholesale Bitstream services going forward, it is important to recap on the current price control remedies already in place across the access network. Currently, the price control in place in the WPNIA market for LLU, SLU and line share is cost orientation. The monthly rental price for LLU and SLU is based on BU-LRAIC+ while the line share price is based on the incremental costs given that line share must be purchased with SB-WLR which recovers the entire access network costs.
- 5.5 In the WBA market, Eircom is currently subject to a national retail minus price control. Therefore, the wholesale current generation Bitstream prices are capped at a value based on the retail price less the relevant retail costs.
- 5.6 In addition, Eircom is also subject to a Bitstream price floor, as set out in the WBA Price Floors Decision, in those areas of the country where LLU is present or likely to be present. The Bitstream price floor is based on the cost of providing Bitstream to an LLU operator. The objective of this test is to ensure there is a sufficient economic space for alternative operators to compete successfully through efficient investment in their own infrastructure (LLU). Therefore, the underlying methodology for the Bitstream price floors in the LEA sets the appropriate “build or buy” signals for operators considering investing.
- 5.7 This section of the consultation now assesses what is the appropriate form of price control for current generation Bitstream in the WBA market over the next three years.
- 5.8 ComReg considers that a single national price control applied across the LEA and Outside the LEA may be ineffective in ensuring efficient cost recovery and protecting consumers from excessive prices, where competitive and structural conditions may vary prospectively. In this case, we believe that the price control in each type of area may need to be tailored to the specific market conditions encountered but the two areas cannot and should not be considered independent of each other.

- 5.9 In our assessment we have taken into account the view that retail pricing constraints are present in the LEA while excessive pricing is a concern Outside the LEA because competing infrastructure do not exist Outside the LEA. Please refer to Chapter 7 of ComReg Document No 10/81²⁹ (and the WBA Market Decision) which discusses the competition problems in the WBA market.
- 5.10 There are a number of options available to ComReg in the form of a price control for Bitstream services and the relevance and appropriateness of each approach in the context of the WBA market are discussed below under the following headings:
- Option 1: Regulatory forbearance
 - Option 2: Cost orientation
 - Option 3: Retail minus / retail margin squeeze test.

5.2.1 Option 1: Regulatory Forbearance

- 5.11 This option would mean ‘No price control’ where Eircom would have freedom to set the wholesale Bitstream monthly rental prices at the level of their choice. In this situation, ComReg would have no influence over the wholesale Bitstream monthly rental prices in the WBA market.
- 5.12 However, ComReg considers that this option would not be appropriate for the following reasons:
- It would not address the competition problems identified in the WBA market analysis (ComReg Document No 10/81 and the WBA Market Decision).
 - It would not be appropriate given that Eircom has SMP in the WBA market.
 - It would contradict our experience to date of monitoring compliance with our previous ComReg Decisions which indicate that a price control obligation continues to be necessary.
- 5.13 ComReg is therefore of the preliminary view that currently this option is not appropriate for the reasons outlined above.

²⁹ Consultation and draft decision: Market Review – Wholesale Broadband Access (Market 5); 1 October 2010.

5.2.2 Option 2: Cost orientation

5.14 Given that forbearance is not considered to be appropriate and given the risk of excessive Bitstream prices by Eircom as set out in the WBA Market Decision, it is important to establish the most appropriate form of price control regarding the monthly rentals for current generation wholesale Bitstream services. Before we discuss the proposed cost orientation obligation, it is important to point out that when considering the need for a national cost orientation obligation, ComReg's assessment is done considering the competition problems in the LEA and Outside the LEA and where a retail minus has to date been in place and where it is proposed to continue with a retail margin squeeze test in both areas.

5.15 A cost orientation obligation should allow the SMP operator to ensure that its wholesale prices recover no more than its actual incurred costs adjusted for efficiency plus a reasonable rate of return. Therefore, the question to be addressed and considered in detail below is as follows:

Would a national cost orientation obligation be justified regarding current generation wholesale Bitstream monthly rentals?

5.16 To give some context to the meaning of cost orientation, a cost based price control considers the actual (or hypothetical) cost of providing the regulated service plus a reasonable rate of return. The estimate of the level of costs typically includes the efficiently incurred operating costs of the operator (Incumbent) plus an allowance for the appropriate cost of capital (or rate of return³⁰). In the context of NGA, the European Commission³¹ recommends the use of cost orientation for access pricing of wholesale broadband inputs where possible but it also advises that a retail margin squeeze (or replicability test) should be used where there are strict non-discrimination obligations and sufficient retail pricing constraints.

5.17 Regulation 13(1) of the Access Regulations provides that ComReg may, *inter alia*, impose on an operator obligations relating to cost recovery and price controls. These include obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of access or interconnection in situations where a market analysis indicates that a lack of effective competition means that the operator concerned may sustain prices at an excessively high level or may apply a price squeeze to the detriment of end-users.

³⁰ The rate of return applied is equivalent to the current Eircom pre tax WACC of 10.21%.

³¹ Commission Recommendation dated 11 September 2013 on 'Consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment'.

5.18 ComReg considers that a national cost orientation obligation could be justified for wholesale Bitstream for the following reasons:

- In the WBA Market Decision, we define the WBA market as a national market where Eircom has SMP.
- Eircom has around 80% of the WBA market nationally.
- Eircom has around 80% of the WBA market in the LEA.
- Currently, Eircom's wholesale prices are not fully constrained given that they are pricing above their likely actual cost adjusted for efficiency (plus a reasonable rate of return) in the LEA.
- A national cost orientation obligation would allow Eircom some flexibility as to how it recovers its costs i.e. possible cross subsidisation between the LEA and Outside the LEA.

5.19 In light of the above and in recognition that Eircom faces more significant retail constraints in the LEA, ComReg is of the preliminary view that the following should be considered when deciding on the appropriate form of cost orientation to apply:

- a) Should Eircom be allowed to cross subsidise between various wholesale products when setting wholesale Bitstream prices.
- b) Should Eircom be allowed to cross subsidise between the different geographic areas i.e. LEA and Outside the LEA when setting wholesale Bitstream prices.

5.20 Option (a) above would be a stricter control involving micro-management of Eircom's entire wholesale Bitstream products. ComReg is of the preliminary view that this approach would be complex given the high degree of fixed and common costs to be apportioned across the various products / services and the need for judgement calls on the appropriate allocation / apportionment basis. It is likely that some products may have more or less elasticity than others and the Incumbent should be free to price in a manner that maximises the use of the network to the extent that it does not create any anti-competitive effects and that overall it recovers no more than its actual costs adjusted for efficiency plus a reasonable rate of return.

- 5.21 In relation to option (b) above, ComReg is of the preliminary view that as Eircom's current Bitstream monthly rental prices in the LEA are likely to be above their actual cost (plus a reasonable rate of return), any excess profits from the LEA should be offset against any losses from selling Bitstream services Outside the LEA. In other words no more than the actual costs adjusted for efficiency (plus a reasonable rate of return) should be recovered nationally. This seems compatible with preventing harm to competition and consumers where the cross subsidy is (as appears to be the case currently) from urban (LEA) areas to rural areas (where there are fewer concerns about competing infrastructure, at least for now). The European Commission recognises that, in principle, the EU regulatory framework does not preclude the imposition of different remedies in the same relevant market.³² However, ComReg is also of the preliminary view that where LEA Bitstream monthly rental prices are set at actual cost adjusted for efficiency (plus a reasonable rate of return) or below that, consumers Outside the LEA should not subsidise losses in the LEA. This is to ensure that in the event of a price increase Outside the LEA that such increases are not to distort competition in the LEA. In any event, Eircom is subject to a price floor for Bitstream in the LEA by virtue of the WBA Price Floors Decision.
- 5.22 ComReg has, with the assistance of TERA Consultants, developed a Bitstream cost model, which is based on Eircom's actual national Bitstream costs adjusted for efficiency (plus a reasonable rate of return) taken from Eircom's HCAs for 2011/12 and projected forward for the three year price control period. The Bitstream cost model therefore determines the actual national efficient costs (plus a reasonable rate of return) that should be recovered by Eircom over the 3 years. This is discussed in detail in Chapter 6. ComReg do not have the details on the actual historic costs by area (LEA versus Outside the LEA) but we have made assumptions in the Bitstream cost model to arrive at indicative cost estimates by area, both LEA and Outside the LEA.

³² See, for example, Case AT/2008/0757 (Wholesale broadband access in Austria); see also ERG Common Position on Geographic Aspects of Market Analysis: Definition and Remedies, October 2008. See also "Whilst such differences in market shares are not necessarily in itself proof of heterogeneous competitive conditions, which would justify the definition of a separate economic market, in particular if they are not stable over time, the Commission would like to point out that in such circumstances it would be appropriate and justified for NRAs to respond to such diverging competitive conditions between different areas within a geographically defined market caused by the presence of several alternative infrastructures or infrastructure-based operators, by imposing geographically differentiated remedies and access products." (Case LV/2013/1487 and LV/2013/1492).

- 5.23 In the Bitstream cost model we have compared the actual national costs adjusted for efficiency (plus a reasonable rate of return) to the actual Eircom Bitstream revenues (i.e., current Eircom Bitstream prices by volumes). Eircom's wholesale Bitstream prices in LEA appear to be above their likely actual costs plus a reasonable rate of return (and are above the Bitstream price floor) which means that Eircom appear to be over-recovering in the LEA, while they appear to be under-recovering their likely actual costs (plus a reasonable rate of return) Outside the LEA i.e., there is a cross subsidy from the LEA into areas Outside the LEA. However, on an overall national basis Eircom is not materially over / under recovering their actual Bitstream costs adjusted for efficiency (plus a reasonable rate of return) i.e., the Bitstream revenues (based on Eircom's current prices by volumes) are in line with Eircom's actual costs adjusted for efficiency plus the rate of return, nationally.
- 5.24 Therefore, currently, we see no reason to intervene to reduce prices nationally at this time based on Eircom's current national monthly rental Bitstream and BMB prices given that costs and revenues are consistent, nationally, based on the Bitstream cost model. However, we would reserve our rights with regard to ComReg's future discretion in relation to its statutory powers.
- 5.25 Therefore, ComReg is of the preliminary view that option (b) seems the most appropriate approach and allows Eircom some flexibility to cross subsidise from the LEA to Outside the LEA while ensuring that overall Eircom recovers no more than its actual national costs adjusted for efficiency (plus a reasonable rate of return) in the provision of Bitstream and BMB products and services, nationally.
- 5.26 Another important question raised as part of this assessment is:
- Should a sub-national obligation be imposed on Eircom in addition to the proposed national cost orientation obligation in order to avoid excessive pricing and provide certainty to the WBA market of the likely evolution of regulated wholesale prices?*
- 5.27 Before we discuss the sub-national obligation below it is important to point out that ComReg considers that a national cost orientation obligation may remain appropriate even where the actual costs adjusted for efficiency by area (LEA versus Outside the LEA) can be determined, given that currently Eircom appear to over-recover its likely actual costs in the LEA. Therefore, absent sufficient evidence that Eircom's LEA Bitstream prices are based on an efficient cost level in the LEA, it is likely that the national cost orientation would remain appropriate.

- 5.28 Aside from the above, Outside the LEA Eircom has in excess of 80% of the WBA market and around 80% of the retail broadband market. There are very few or no alternative infrastructure broadband providers Outside the LEA and ComReg has concerns that Eircom could price excessively in that specific area absent regulatory intervention. On that basis ComReg is of the preliminary view that Outside the LEA Eircom should recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB in that specific area i.e., Outside the LEA.
- 5.29 Accordingly, we propose that Eircom should not increase its current Bitstream and BMB monthly rental prices Outside the LEA without ComReg's prior approval, as set out in the notification and approval procedures at subsection 5.5 below. We propose that Eircom, as part of the notification process, should be required to demonstrate to ComReg that its increased Bitstream and BMB monthly rental prices Outside the LEA should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA while also ensuring that it complies with the overriding national cost orientation obligation.
- 5.30 In the LEA we consider Eircom wholesale are less likely to increase wholesale Bitstream prices in the LEA in the presence of a margin squeeze test against retail prices, given that Eircom faces some competitive pressure in the LEA (from UPC and LLU providers). Therefore, we consider that it is not necessary to impose an obligation with regard to the recovery of actual local costs adjusted for efficiency (plus a reasonable rate of return) regarding Bitstream and BMB in that specific area. This approach is supported by our consultants, Oxera, as set out in the Oxera Report in ComReg Document No 13/90a. In the LEA, the presence of a retail margin squeeze test (which is discussed further below) is essential to arrive at this conclusion because otherwise the pricing constraints at a retail level would not be transmitted to the wholesale Bitstream monthly rental prices.
- 5.31 ComReg considers that the proposals above with regard to cost orientation are consistent with Regulation 13(2) and Regulation 13(4) of the Access Regulations as discussed in the RIA at Chapter 12.

- 5.32 With regard to any new current generation Bitstream products introduced by Eircom Outside the LEA, ComReg proposes that the Bitstream monthly rental prices should recover no more than their actual costs adjusted for efficiency (plus a reasonable rate of return) associated with the area Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. This approach ensures consistency with the approach proposed by ComReg for any price increases to existing Bitstream and BMB monthly rental prices Outside the LEA. ComReg may consult with industry, as appropriate, depending on the material nature of the new current generation Bitstream product been launched by Eircom Outside the LEA.
- 5.33 ComReg considers that these new Bitstream products should be notified to ComReg in line with the standard wholesale notification timeline of three (3) months. However, the notification and approval procedure set out in subsection 5.5 below should be followed by Eircom with regard to any new current generation Bitstream services launched Outside the LEA.
- 5.34 Depending on the materiality of any price increases and / or new current generation Bitstream products launched by Eircom relating to Bitstream and BMB monthly rental charges Outside the LEA during the price control period, ComReg may consult with industry, as appropriate. Any such consultation may assess the potential impact on stakeholders in the market place and / or the effect on competition, as the result of any proposed changes to the wholesale Bitstream and BMB monthly rental prices and / or new current generation Bitstream products launched.
- 5.35 Further to the proposals above regarding the cost orientation obligation, ComReg then considered the following:

Would cost orientation alone be sufficient to address the competition problems in the WBA market or would a Retail margin squeeze test(s) also be required?

- 5.36 In ComReg Document No 10/81, ComReg discussed the competition problems associated with the WBA market, which is also consistent with the WBA Market Decision. Some of the key competition problems associated with the WBA market was predatory / exclusionary behaviour as well as vertical leverage. ComReg therefore considers that cost orientation on its own may not be sufficient to address such competition issues and that a retail margin squeeze test may also be required. This is discussed below.

5.2.3 Option 3: Retail margin squeeze test

- 5.37 To date, a national “retail minus” price control has been in place in the WBA market. A retail minus price control establishes the wholesale access price by considering what proportion of retail and other downstream costs would need to be deducted from the retail price in order to be left with the appropriate wholesale price at which competitors, reliant on the upstream (wholesale) input, can effectively replicate the retail offer of the upstream arm of the Incumbent. However, given the recent determination in the Bundles Decision that structural and competitive circumstances may vary across the two areas prospectively it now seems appropriate to take this into account in setting the price control remedy in the WBA market.
- 5.38 In the NGA Decision and the Bundles Decision a retail margin squeeze approach was implemented. A retail margin squeeze test compares the retail revenues with the retail and wholesale costs to see if the margin is positive or negative. If there is a negative margin the wholesale price and / or the retail price may have to change.
- 5.39 In the LEA ComReg’s preliminary view is that a retail margin squeeze test is required for the following reasons:
- i) Wholesale Bitstream prices in the LEA do not appear to cover actual cost (plus a reasonable rate of return) (although ComReg cannot be fully conclusive about this with the information available at present).
 - ii) ComReg is proposing that in the LEA there should be no LEA specific cost orientation obligation as already set out above.
 - iii) Retail constraints (from UPC and LLU) would not transfer to wholesale Bitstream prices (and changes to same) in the LEA without a margin squeeze test given the vertically integrated nature of Eircom. Please refer to ComReg Document No 10/81 and the WBA Market Decision for discussion around vertical integration.
 - iv) In the LEA, Eircom Retail has around 30% retail broadband market share while UPC has approximately 30% retail broadband market share and the excess (around 40%) relates to OAOs providing retail broadband via Bitstream and LLU / Line Share.
 - v) In the WBA market, Eircom has a market share of around 30% which together with its vertically integrated nature is in a position to either price excessively or cause a margin squeeze.

- vi) The retail margin squeeze test should also protect operators that rely on LLU and line share wholesale inputs. This is particularly important in the LEA where most unbundling activity takes place.
- vii) The retail margin squeeze test should allow Eircom to meet competition at the retail level in the LEA. There is evidence to suggest that, going forward, Eircom might reflect the competition it faces inside the LEA in its wholesale prices. Therefore, the risk of wholesale prices being too high inside the LEA may be reduced.
- viii) The retail margin squeeze test will ensure consistency with the retail margin squeeze approach taken with regard to NGA services in the WBA market.

5.40 Outside the LEA the question arises as to why Eircom would have an incentive to cause a retail margin squeeze in the presence of a national cost orientation obligation and an obligation that Eircom should recover no more than its local efficiently incurred costs (plus a reasonable rate of return) regarding the provision of Bitstream in the area Outside the LEA. It could be argued that Eircom is unlikely to price below its actual cost on a vertically integrated basis and that cost orientation at the wholesale level should ensure that it cannot price squeeze without selling below actual cost adjusted for efficiency (plus a reasonable rate of return). However, we are of the preliminary view that there are good reasons why a retail margin squeeze test is required Outside the LEA, as follows:

- i) Eircom continues to have a significant share of the WBA market (in excess of 30%) and the retail broadband market (around 30%) Outside the LEA with little or no other wholesale alternative providers in that area. In this case an operator may attempt to foreclose competition in the retail broadband market as, given its dominant position in the WBA market it is likely to have the incentive and ability to do so.
- ii) There are a number of smaller operators (IFA Telecom, Digiweb, etc.) Outside the LEA that collectively have a retail market share of about 30% (of the 30% retail market share in that area) but which individually are small, having market shares typically of 30% or less. Given their lack of scale these are vulnerable to exclusionary behaviour given that they do not share Eircom's economies of scale and that they have no realistic alternative means of provision.

- iii) A national cost orientation obligation alone may not necessarily prevent price squeeze in retail markets in rural areas. There is, in fact, no cost based price floor in the LEA. Instead Eircom must maintain an economic space between Bitstream prices and the cost of providing LLU. This results in a floor that is not necessarily based on the cost of provision of Bitstream. Also of note is that Eircom can cut LLU prices which form the main input into the Bitstream price floor calculation. (Note that this approach has been adopted by ComReg in order to maintain competitive intensity in urban areas). The upshot is that Eircom could price excessively at the wholesale level Outside the LEA thereby causing a price squeeze at the retail level.
- iv) Furthermore, the presence of a wholesale cost orientation obligation specific to the area Outside the LEA is also no guarantee that Eircom would not impose a margin / price squeeze at the retail level:
- Eircom continues to be the primary wholesale broadband supplier in Ireland and controls a ubiquitous access infrastructure which is not easily replicated by competitors. ComReg considers that Eircom has both the ability and incentive to obstruct the development of retail competition based on Bitstream which is by far the most important source of competition Outside the LEA.
 - Many of Eircom's retail costs are likely to be both fixed and sunk (for example billing costs). In the event that Eircom was to reduce retail prices Outside the LEA it may have every incentive not to pass on such reductions at the wholesale level.
 - Similarly most of its wholesale costs are likely to be fixed and sunk (for example the cost of DSLAMs and backhaul). Eircom could easily sell below its reported accounting cost and still earn a positive cash flow.
 - In any event all cost allocations of fixed and common cost rely on judgements as to cost allocation. A reported accounting loss by Eircom may not in reality be a sufficient deterrent to ensuring the appropriate level of pricing that would prevent retail foreclosure.

- One consequence of these considerations is that there is a risk that a vertically integrated SMP operator controlling its own wholesale inputs provided to downstream operators could - through a combination of setting Bitstream prices at the upper limits of the cost oriented wholesale price control and pricing its retail broadband unprofitably low - engage in anti-competitive margin squeeze with a view to leveraging its dominant position from WBA to the retail broadband market. This potential margin squeeze may result in retail foreclosure of other competitors in the retail broadband market, which would be to the detriment of end users.
- v) It may be possible to avoid having a retail margin squeeze test Outside the LEA at some point in the future where there is greater clarity on the actual wholesale Bitstream costs adjusted for efficiency (plus a reasonable rate of return) so that any fears of a potential increase to Bitstream prices that might create a retail margin squeeze are allayed.

ComReg's Preliminary View:

Cost orientation obligation:

- 5.41 Eircom should be subject to a national cost orientation obligation for the monthly rental charges associated with Bitstream and BMB in the WBA market. In this regard, Eircom should ensure that it recovers no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return), nationally, with regard to the monthly rentals for the Bitstream and BMB, in line with the Bitstream Cost Model.
- 5.42 Outside the LEA, Eircom should recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB in that specific area i.e., Outside the LEA. The costing information should be assessed by Eircom in line with the costing methodology contained in the national Bitstream Cost Model.

- 5.43 Eircom should not increase its current Bitstream and BMB monthly rental prices Outside the LEA without ComReg's prior approval in line the notification and approval procedures set out in subsection 5.5 below. As part of the notification and approvals process, Eircom should demonstrate to ComReg that its increased Bitstream and BMB monthly rental prices Outside the LEA recovers no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA, while also ensuring that it complies with the overriding national cost orientation obligation.
- 5.44 Eircom should ensure that the monthly rental charges for any new current generation Bitstream and BMB products and services launched by Eircom Outside the LEA recovers no more than the actual incurred costs adjusted for efficiency plus a reasonable rate of return with regard to the provision of these products and services outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. Eircom would also be subject to the notification and approvals process outlined in subsection 5.5 in this regard.

Retail margin squeeze test:

- 5.45 Eircom should be subject to an *ex ante* retail margin squeeze test in the LEA and Outside the LEA.
- 5.46 The proposed implementation of the price control is discussed in detail below at subsection 5.3 while the details of the proposed retail margin squeeze test is discussed in Chapter 7.

5.3 Implementation of the cost based price control

- 5.47 As set out above, we are proposing that Eircom should be subject to a national cost orientation obligation with regard to the monthly rentals associated with Bitstream and BMB insofar as Eircom should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return), nationally. In addition, Outside the LEA we are also proposing that Eircom should recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB in that specific area i.e., Outside the LEA. We propose that Eircom should not increase its current Bitstream and BMB monthly rental prices Outside the LEA or introduce a new current generation Bitstream product Outside the LEA without ComReg's prior approval and that it should be required to demonstrate to ComReg that its increased and / or new Bitstream and BMB monthly rental prices Outside the LEA recovers no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area, while also ensuring compliance with the overriding national cost orientation obligation.
- 5.48 The proposed Bitstream cost model does not take account of any reductions to the prices in the LEA over the price control period i.e., costs, volumes and revenues are expected to remain relatively stable over the price control period as discussed in Chapter 6 of this document. In the scenario where Eircom Wholesale reduces certain prices in the LEA, this could mean that there may no longer be a sufficient cross subsidy from the LEA into areas Outside the LEA and as a result Eircom may under-recover its actual Bitstream costs adjusted for efficiency plus a reasonable rate of return, nationally.
- 5.49 If Eircom reduce prices in the LEA below its actual costs (plus a reasonable rate of return) in that area, we consider that this is a commercial decision by Eircom but in any event Eircom must comply with the WBA Price Floors Decision. As set out in the Oxera Report in ComReg Document No 13/90a, the Incumbent may not recover all of its investment if competition pushes prices below the (historic) costs actually incurred i.e., cost recovery does not need to be guaranteed where competitive pressures exist. However, Eircom should not be allowed to sell above the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) Outside the LEA as a result.
- 5.50 Based on the national cost information that we have to hand at the moment as part of the national Bitstream cost model, we consider that the risk of Eircom under recovering in the LEA is low. Potentially, there should be sufficient scope for Eircom Wholesale to reach more efficient cost levels in the future such that any price reductions should not result in an overall under recovery of actual costs adjusted for efficiency (plus a reasonable rate of return).

- 5.51 In any event, the onus would be on Eircom to demonstrate whether it would significantly under / over recover its total actual incurred Bitstream costs adjusted for efficiency plus a reasonable rate of return, nationally. If there were evidence of such an under-recovery (which would depend on how effective the retail price constraints are within the LEAs), Eircom may be allowed to charge correspondingly higher prices Outside the LEA subject to the proposed obligations set out in subsection 5.2 and also subject to the proposed notification and approval procedures set out in subsection 5.5 below (paragraph 5.68). Depending on the materiality of any price increases proposed by Eircom, ComReg may consult with the industry, as appropriate, as outlined at paragraph 5.34 above.
- 5.52 In demonstrating compliance with its obligation contained at paragraph 5.42, 5.43 and 5.44 regarding the recovery of no more than local costs Outside the LEA, Eircom should ensure that the costing information provided to ComReg is consistent with the granularity of costing information contained in the national Bitstream cost model. We propose that the costing methodologies to be adopted in the context of the actual costs Outside the LEA should be consistent with the methodologies implemented in the national Bitstream cost model. For example, Eircom should provide the historical cost for providing Bitstream and BMB services Outside the LEA, based on its top down information from its Regulated Accounts and based on a fully allocated cost basis. The costing information and methodologies relevant to the national cost model is set out in Chapter 6.
- 5.53 If there were a material over-recovery of actual Bitstream costs adjusted for efficiency (plus a reasonable rate of return) ComReg may have to consult depending on the materiality of any changes over the price control period and the likely impact that these changes may have in terms of the various stakeholders in the marketplace.

5.4 Price control period and annual reviews

- 5.54 ComReg is of the preliminary view that the price control period should be set for three years.
- 5.55 ComReg proposes that on an annual basis Eircom should compare the wholesale current generation Bitstream (or WBA) costs and revenues from its Regulated Accounts with the costs and revenues in the Bitstream cost model for the three year period, rather than just directly comparing the results for each specific year. The Bitstream cost model looks at the costs over the three year price control period in order to assess the overall recovery of costs for the three years. Therefore, annually it is important to compare the revenues and costs from the Regulated Accounts with the overall planned costs and revenues in the Bitstream cost model for the entire three year period, otherwise there may be significant fluctuations in a specific year which when assessed over the three year period may average out. The annual review is also an opportunity to ensure that any exceptional increases / decreases in either volumes or costs can be considered.
- 5.56 Therefore, it is proposed that the annual review would involve a comparison of the WBA information (cost and revenues) from the Additional Financial Information ("AFI")³³, which is provided by Eircom to ComReg as part of its annual Regulated Accounts, to the overall planned costs and revenues in the Bitstream cost model for the three year price control period. Please refer to Annex 2 for an illustration of the level of detail that is provided as part of the AFIs for wholesale Bitstream.
- 5.57 The reconciliation carried out by Eircom annually as well as the underlying supporting information should be provided to ComReg by the end of February in the year subsequent to the financial year end and for each year over the price control period. For example, for the financial year 2012/2013, the assessment carried out by Eircom and the supporting information should be provided to ComReg by no later than 28 February 2014 and each year thereafter for the duration of the price control period.
- 5.58 Depending on the outcome of the annual review and the materiality of any changes required, ComReg may consult with industry, as appropriate. Please refer to paragraph 5.34 above for further details.

³³ Please refer to ComReg Decision D08/10: ComReg Document No. 10/67 entitled "Accounting Separation and Cost Accounting Review of Eircom Ltd." dated 31 August 2010

ComReg's Preliminary View:

- 5.59 The price control period should be three years.
- 5.60 On an annual basis, Eircom should reconcile the wholesale current generation Bitstream (WBA) costs and revenues from its Regulated Accounts, to the planned costs and revenues in the Bitstream cost model for the three year price control period. Eircom should provide this comparison and supporting information to ComReg for each financial year over the price control period, by the end of February in the year subsequent to the financial year end.

5.5 Wholesale price notification and compliance procedures

- 5.61 The notification period for ComReg and industry are essential to the proper functioning of the wholesale market and are necessary in order to protect competition.
- 5.62 In order to be consistent with the wholesale price notifications to ComReg for other wholesale services, ComReg proposes that Eircom should notify ComReg of any current generation Bitstream price changes, no later than three (3) months before the new price or the revised price is expected to come into effect. The only exception to this is where there is a wholesale price increase to an existing current generation Bitstream product / service then Eircom should notify ComReg, no later than four (4) months before the increased price is expected to come into effect. The main reason for the additional one month notice, in the event of a wholesale price increase, is to allow operators the extra time to notify its customers of the potential increase to prices, as well as an update to its budgets / business plans etc.
- 5.63 The wholesale price notifications to ComReg should be in the form of email communication. This notification approach is consistent with the approach already adopted for NGA. It should be noted that the proposed notification periods may be varied with the agreement of ComReg or at ComReg's discretion.
- 5.64 Therefore, where Eircom decides to increase the price of its Bitstream and BMB monthly rental prices Outside the LEA or to introduce a new current generation Bitstream service Outside the LEA the following proposed notification and approval procedures should apply:
- i) Eircom should notify ComReg, in writing by email, no later than four (4) months before it increases the monthly rental charge(s) for Bitstream and BMB Outside the LEA or no later than three (3) months before it launches a new current generation Bitstream product or service Outside the LEA;
 - ii) At notification, Eircom should furnish to ComReg a detailed written submission demonstrating that the proposed new or increased charge(s) recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA while also ensuring that it complies with the overriding national cost orientation obligation;

- iii) The submission should make full and true disclosure of all material facts for the purpose of demonstrating that the proposed new or increased charge(s) recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. Please refer to subsection 5.2 above for further details on this requirement;
- iv) Upon receipt of the submission³⁴, ComReg should review the submission and within one (1) month, communicate to Eircom its decision whether to give or withhold approval to implement the proposed new or increased charge(s). Such approval should not be unreasonably withheld by ComReg. Eircom should not implement any new or increased charge(s) for Bitstream and BMB Outside the LEA without having received such approval from ComReg;
- v) Prior to the expiry of the one (1) month period, ComReg may seek further information from Eircom to inform its decision as to whether approval to implement the new or increased charge(s) should be given or withheld. If such further information is not provided by Eircom within ComReg's timeline or to the standard required by ComReg, approval to implement the proposed new or increased charge(s) may be withheld pending the required information being made available to ComReg for review and consideration. Upon receipt of the requested information, ComReg would proceed to make a decision as to whether approval for implementation of the new or increased charge(s) should be granted or withheld.

5.65 ComReg believes that the proposed notification and approval timelines are proportionate and reasonable. The proposal should allow ComReg sufficient time to understand any proposed price increases or new proposed prices and to assess whether these new / increased prices comply with Eircom's obligation that it should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the area Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. It also allows OAOs to assess the likely impact of the changes in terms of its business case and to allow the OAOs time to notify its customers of a price increase, where appropriate. In addition, the proposed notification process is similar to that already imposed in the context of NGA and Bundles.

5.66 The proposed notification and compliance procedures regarding retail prices are set out in Chapter 7 of this document.

³⁴ Receipt of the submission requires an acknowledgement email from ComReg to Eircom

ComReg's Preliminary View:

- 5.67 Eircom should notify ComReg of all price changes associated with wholesale Bitstream products no later than three (3) months before the new price or the revised price is expected to come into effect. The only exception to this is where there is a wholesale price increase to an existing current generation Bitstream product / service then Eircom should notify ComReg no later than four (4) months before the increased price is expected to come into effect.
- 5.68 In the case of an increase to the price of Eircom's Bitstream and Bitstream BMB monthly rental prices Outside the LEA and / or the introduction of a new current generation Bitstream product by Eircom Outside the LEA, the following notification and approval procedures should apply:
- 5.69 Eircom should notify ComReg, in writing by email, no later than four (4) months before it increases the monthly rental charge(s) for Bitstream and BMB Outside the LEA or no later than three (3) months before a new wholesale Bitstream product or service is launched Outside the LEA. At notification, Eircom should furnish to ComReg a detailed written submission demonstrating that the proposed new or increased charge(s) recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA, while also ensuring that it complies with the overriding national cost orientation obligation. The submission should make full and true disclosure of all material facts for the purpose of demonstrating that the proposed new or increased charge(s) recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. Upon receipt of the submission, ComReg should review the submission and within one (1) month, communicate to Eircom its decision whether to give or withhold approval to implement the proposed new or increased charge(s). Such approval should not be unreasonably withheld by ComReg. Eircom should not implement any new or increased charge(s) for Bitstream and BMB Outside the LEA without having received such approval from ComReg. Prior to the expiry of the one (1) month period, ComReg may seek further information from Eircom to inform its decision as to whether approval to implement the new or increased charge(s) should be given or withheld. If such further information is not provided by Eircom within ComReg's timeline or to the standard required by ComReg, approval to implement the proposed new or increased charge(s) may be withheld pending the required information being made available to ComReg for review and consideration. Upon receipt of the requested information, ComReg would proceed to make a decision as to whether approval for implementation of the new or increased charge(s) should be granted or withheld.

Q. 1 Do you agree with ComReg's preliminary views as set out above in Chapter 5 with regard to the proposed approach for current generation Bitstream and BMB services over the price control period? Please provide reasons for your response.

Chapter 6

6 Costing Methodology and Bitstream Cost Model

6.1 Introduction:

- 6.1 In Chapter 5 we discussed our preliminary views regarding the appropriate price control to adopt in the two different areas of the WBA market.
- 6.2 In this Chapter we discuss the different modelling approaches as well as the inputs and assumptions used to determine the national level Bitstream costs. The proposed Bitstream cost model should be used by Eircom to ensure that it recovers no more than its national Bitstream costs adjusted for efficiency (plus a reasonable rate of return) between the LEA and Outside the LEA. The Bitstream cost model should also be used by Eircom and ComReg to monitor compliance with Eircom's national cost orientation obligation.
- 6.3 This section is discussed under the following main headings:
- Costing methodology approach
 - Cost Modelling approach

6.2 Costing methodology approach:

- 6.4 The costing methodology determines which costs are included in the Bitstream cost model and how this is transformed into a unit price. The following questions are relevant in determining the appropriate costing methodology to adopt:
- What cost items should be included?
 - How should costs be appraised?
 - What model should be used to arrive at unit cost?

6.2.1 Appropriate cost standard

- 6.5 The options for the appropriate cost standard for the purposes of a price control typically involve the concept of either:
- LRIC, Long run average incremental costs ("LRAIC") or LRAIC plus a mark-up for common costs ("LRAIC+"); or

- Fully allocated costs (“FAC”).
- 6.6 LRIC only includes the direct fixed, sunk capital and operating costs relevant to the increment of providing WBA. As a result, this approach does not include recovery for common or shared costs (such as overhead, billing systems etc) from other divisions of the Incumbent’s business.
- 6.7 LRAIC typically includes all of the average efficiently incurred variable and fixed costs that are directly attributable to the activity concerned, plus an apportionment of joint and common costs. “LRAIC plus” includes appropriate amounts of variable, fixed and common costs, which is the calculus faced by any operator when deciding to enter or expand. The main difference between “LRAIC plus” and “LRAIC” is that LRAIC plus includes a mark up to allow for the recovery of inter service common costs, typically using an equi-proportionate mark up (“EPMU”). The current monthly rental price for LLU and SLU is based on a BU-LRAIC+ methodology, as set out in the LLU Pricing Decision.
- 6.8 ComReg also considered the option of whether top down FAC historical cost data is more relevant for those parts of the access network where densities and demand are lower.
- 6.9 In the FAC approach the whole set of costs incurred by the regulated operator are typically allocated to products following allocation rules determined by the direct or indirect causality of costs with products. This approach includes “fixed” and common costs. The FAC approach results in a price signal which has the advantage of being relatively consistent with the recorded investments incurred by the Incumbent. The efficiency / entry signals depend on the cost appraisal and the choice between top down and bottom up, which is discussed below. However, where a FAC approach is adopted, care should be taken to ensure that inefficiently incurred costs are excluded.

6.2.2 Historical costs or current costs

- 6.10 There are two further options in terms of considering the appropriate cost base to adopt:
- Current cost
 - Historical cost.

- 6.11 The current cost approach values assets at the current market value and allows us to reflect the changes in asset prices. In addition, the current cost approach can be implemented either based on the Incumbent's accounting system in which case it is called current cost accounting or "CCA" or on a bottom-up ("BU") model basis. The first approach cannot be implemented in this case given that Eircom no longer publish its accounts on a CCA basis. The second approach enables us to reflect the costs that a hypothetical entrant would incur when investing at any particular point in a MEA. In this case, where technology is changing rapidly, the price set for the use of a particular asset may not reflect the actual costs incurred (in the past). Hence, there is less of a direct relationship between the prices charged and the actual investment made.
- 6.12 The economic rationale for the current cost approach applied by means of a BU model is that by linking the value of the assets to newly deployed network it promotes efficient investment incentives. The current cost approach also ensures that the Incumbent recovers its future costs thereby encouraging investment. A potential entrant is charged an access price in principle similar to what it might pay to build its own network, and thus has a finely balanced 'build-or-buy' decision.
- 6.13 The current cost approach is particularly relevant in the more competitive areas of the country i.e., the LEA. The current access prices for LLU and SLU are based on the BU-LRAIC+ methodology using the copper access model or CAM. ComReg considers that the BU-LRAIC+ approach for access services should send the appropriate "build or buy" signals to the market place and encourage efficient investment and innovation in new and enhanced infrastructures.
- 6.14 In addition, the Bitstream price floor in the LEA ensures there is a sufficient economic space between LLU and Bitstream so that an alternative operator can compete successfully through efficient investment in their own infrastructure. Therefore, the underlying methodology for the Bitstream price floors in the LEA sets the appropriate "build or buy" signals for operators considering investing.
- 6.15 The HCA approach on the other hand uses the Incumbents costs, which reduces the chance of under recovery of costs as the value is linked to the actual investment made. Some of the Incumbents assets may be fully depreciated but still in use and the HCA approach should ensure that Eircom is not over recovering the costs for these assets.

- 6.16 A key criterion in asset valuation is the principle of asset replicability. In other words, if there is no prospect of a competitor replicating the service in question (or bypassing the bottleneck with an alternative platform), it is reasonable to base the regulatory pricing on historical costs. Put another way, there may be limited rationale to allow the Incumbent to base its prices of unreplicable infrastructure on replacement costs if this means that the Incumbent recovers more than the cost it actually incurred. The concept of asset replicability means that if there is actual investment the Incumbent will recover the cost of the asset, if there is no investment and assets are “sweated” to get the maximum value from them then the Incumbent will not be compensated over and above the initial Gross book value. Therefore, this creates the appropriate investment signals for the Incumbent.
- 6.17 The HCA approach may be more pragmatic and practical especially where there are limited prospects of investment by alternative infrastructure. It is important to note that the HCA costs that we are referring to in the context of this pricing review are the costs associated with the core network (transmission costs), and not the access network. The relevant MEA network costs of a new entrant in the LEA were previously addressed by ComReg in the WBA Price Floors Decision.
- 6.18 ComReg considers that the HCA costs may be more appropriate especially with regard to the area Outside the LEA rather than the MEA approach or BU-LRAIC+ approach adopted in the LEA where competing infrastructures exist. The risk of using the MEA / BU-LRAIC+ approach is that it could calculate the cost of a new network being built today and not the actual costs incurred by Eircom and therefore could reward Eircom for investments that did not / may not take place.

- 6.19 We consider that the outcome of the *Arcor*³⁵ case is also very relevant in the context of this review. While the *Arcor* case relates to the pricing of LLU, the main arguments in the *Arcor* opinion could also be applied in the case of Bitstream. On 18 July, 2007, Advocate General Poiares Maduro delivered an opinion in the *Arcor* case relating to the obligation of cost orientation for setting LLU prices. The judgment and the Advocate General's opinion are a valid source of guidance for EU regulators. In answer to a question posed by the German Court about the possible use of analytical (i.e., independent) models for the setting of LLU prices the Advocate General suggested, at paragraph 84 of his opinion that not taking costs booked in the operator's accounts as a starting point for establishing charges, is not compatible with the objectives of the cost orientation principle:

"In order to assess whether the charges are consistent with the notified operator's costs, the notified operator's accounts provide the only possible starting-point for establishing those costs."

- 6.20 The Advocate General also stated that analytical models can be used if the use of gross replacement cost ("GRC") is more suitable:

"where incentives to invest in alternative infrastructure justifiably take precedence over the aim of fostering shortterm competition on the local loop access market, giving priority to the cost of investment in a new, modern and efficient network at the expense of the notified operator's actual capital costs should be regarded as compatible with the principle of rates set on the basis of cost-orientation". (See paragraph 89 and footnote 48).

- 6.21 The Advocate General also stated that it is important to bear in mind that a decision to set rates for access to the notified operator's local loop must be reached by striking a balance between two conflicting principles. On the one hand, the essential purpose of the regulation is to ensure effective and immediate unbundling of local loop access and the consequent fostering of competition on the local access market. But, on the other hand, the approved rates must not be set at such a level that they might deter investment in infrastructure. When properly interpreted, the concept of cost-orientation laid down in the regulations thus sets as a limit the requirement that a decision approving rates for access based on cost-orientation must be reached as a result of the balanced and proportionate consideration of these two principles.

³⁵ The judgment of the European Court of Justice ("the ECJ") delivered on 24 April, 2008 in Case C-55/06 *Arcor AG & Co. KG v Federal Republic of Germany* on 24 April, 2008

- 6.22 Therefore, in other words, NRAs have to consider two principles which may not always be fully consistent: 1) fostering competition 2) encouraging investment infrastructure. When the objective of encouraging alternative operator investment is less relevant, then fostering competition matters and on that basis the costs borne by the operator (i.e., those in the accounts) should be the basis for setting the charges.
- 6.23 ComReg is of the preliminary view that the HCA approach may be the appropriate cost base for the reasons discussed above.

6.2.3 Appropriate cost model

- 6.24 The cost model basis considers what level of aggregation in cost data should be used in order to develop the model.
- 6.25 ComReg has considered the following two options:
- (1) A bottom up (“BU”) model; or
 - (2) A top down (“TD”) model.
- 6.26 A TD cost model uses accounting information of the Incumbent to separate out the relevant costs down to a unit cost. The main disadvantage of this option is that the accounting information may include inefficient costs incurred by the Incumbent.
- 6.27 A BU model reflects the choices of a hypothetical, forward-looking efficient operator from both a technical and an operational point of view. A BU model is a data intensive process of dimensioning the network assets as if the network was being built (either as it stands, or with improvements to the topology). This approach is associated with models that are aimed at promoting efficient entry, since the cost model can consider how a network would be built today, rather than modelling the actual network built.
- 6.28 In its response to the 2010 Bitstream Consultation, Vodafone stated that it is imperative that ComReg obtain independent verification to ensure that all of the cost data obtained from Eircom’s Regulated Accounts accurately reflects those of an efficient operator, within the constraints of the current network dimension, to avoid the significant risk that the estimated maximum price would otherwise considerably exceed the true efficient cost oriented level. This has been discussed below in the context of the Bitstream cost model.

- 6.29 While pure BU models allow for the calculation of the efficient costs of providing a Bitstream service the main risk of this approach is it that it could reward Eircom for investment that did not take place i.e., BU models calculate the costs of assets as if the network was rebuilt today while Eircom may decide not to invest any further and to rely only on fully depreciated assets. ComReg considers that a TD HCA model dimensioned based on engineering and capacity rules of Eircom's actual network alignment seems the most appropriate approach. ComReg considers that the MEA / BU-LRAIC+ approach could reward Eircom for investments that it did not make or which may not actually take place, especially Outside the LEA.
- 6.30 As a consequence, ComReg is of the preliminary view that the preferred option is a hybrid model which is based on TD data (using Eircom's costs from the HCA accounts) and which incorporates dimensioning / engineering rules and assumptions in order to apportion the costs in the model. This approach should also give incentives to Eircom to invest in areas Outside the LEA as any further investment by Eircom could be recovered through the Bitstream prices so long as they can objectively justify the actual cost invested adjusted for efficiency.

ComReg's Preliminary View:

- 6.31 The appropriate costing methodology for the national Bitstream cost model should be as follows:
- A hybrid model with top down cost data but dimensioned with engineering and capacity rules based on actual network alignment
 - Eircom's historical costs (plus a reasonable rate of return) forecasted forward for the three year price control period and adjusted for efficiencies where appropriate
 - Costs allocated based on a FAC basis.

Q. 2 Do you agree with ComReg's preliminary views regarding the appropriate costing methodology for the Bitstream cost model? Please provide reasons for your response.

6.3 Cost Modeling Approach

6.3.1 Overview

6.32 Following the 2010 Bitstream Consultation and in addition to the WBA Price Floors Decision put in place by ComReg, ComReg issued a Section 13D(1)³⁶ Information Request in April 2012 to Eircom to gather information necessary to develop a Bitstream cost model to ensure that Eircom recovers no more than its national average Bitstream costs adjusted for efficiency (plus a reasonable rate of return i.e., Eircom's current WACC of 10.21%). Eircom made a submission to ComReg on the Bitstream cost model in June 2012. There has been ongoing analysis of the wholesale market and the relevant WBA costs since then, more significantly and as referred to earlier in this document, ComReg has published two related pricing Decisions in early 2013, the NGA Decision and the Bundles Decision.

6.33 In the 2010 Bitstream Consultation where the initial proposals for amending the price control obligations for Bitstream were set out, ComReg proposed at that time the following:

- That Bitstream price ceilings be imposed and that the Bitstream prices must be cost oriented:
 - “ComReg proposes that Bitstream rentals would be cost oriented by a set range of maximum and minimum prices on the “per port” and “monthly per bandwidth mbps” respectively...” [Paragraph 4.4, of the 2010 Bitstream Consultation]
- That the Bitstream price ceilings should be based on Eircom's costs:
 - “The maximum price would be set by reference to the efficiently incurred costs and required regulated rate of return of Eircom” [Paragraph 4.5 of the 2010 Bitstream Consultation]

³⁶ Section 13D(1) of the Communications Regulations Act 2002 – 2011 provides that: “The Commission may at any time, by notice in writing, require an undertaking to provide it with such written information as it considers necessary to enable it to carry out its functions or to comply with a requirement made to it by the Minister under section 13B.”

- 6.34 ComReg, as part of the 2010 consultation process, engaged consultants to assist with a detailed modeling exercise of the Eircom core network costs relevant to wholesale broadband. Unlike the Bitstream price floors model which calculates the costs encountered by a Reasonably Efficient Operator (“REO”) availing of LLU Line Share and uses the MEA approach to value the assets, the Bitstream cost model takes Eircom’s actual HCA information and derives a unit cost per subscriber for the provision of Bitstream services nationally.
- 6.35 One of the major differences between the Bitstream cost model approach and the Bitstream floors model approach is the number of exchanges considered.
- In the Bitstream floors model, the number of exchanges considered is 149 (the number of exchanges at the time that ComReg considered likely to be unbundled).
 - In the Bitstream cost model, the number of exchanges considered is the total number of national exchanges broadband enabled by Eircom, currently approximately 300.
- 6.36 The Bitstream cost model assesses the costs for the provision of Bitstream services at the national level i.e., for the 300 exchanges currently enabled for broadband.
- 6.37 The purpose of the proposed Bitstream cost model is to ensure that Eircom recovers no more than its national efficient Bitstream costs plus a reasonable rate of return for its Bitstream and BMB services, while ensuring that there is consistency between revenues earned (i.e., prices) and the actual costs incurred adjusted for efficiency.

6.3.2 Relevant Costs in the Model

- 6.38 The costs discussed in this section relate to Eircom's Core network, the costs associated with the Access network (i.e., the local loop) are dealt with in the Copper Access Model which is based on BU-LRAIC+ as more specifically set out in the LLU Pricing Decision which set the maximum prices for LLU and SLU.
- 6.39 The costs in the Bitstream cost model discussed in this document are taken from Eircom's 2011/12 HCAs, with a further breakdown provided to ComReg through the Additional Financial Information ("AFI's")³⁷ to achieve the necessary level of detail to arrive at national unit costs.
- 6.40 Please see Annex 2 at the end of this paper for the typical level of detail available from the Eircom Regulated Accounts which lists the relevant cost categories by Network Element Allocation. As the information provided by Eircom to this level of detail is confidential and commercially sensitive the figures have been removed.
- 6.41 The list of relevant costs included in the model are:
- Digital Subscriber Line Access Multiplexer (DSLAM) Costs
 - This is a network device, near the customer's location, that connects multiple customer DSLs to a high-speed Internet backbone line where multiple data streams are combined into one signal over a shared medium.
 - Broadband Remote Access Server (BRAS) Costs
 - This is routing equipment which provides the inter-connectivity for large circuits carrying IP traffic between different operator networks. Typically, these large circuits will carry the aggregated Bitstream data of multiple users of DSLs to their operators Internet Service Provider ("ISPs") service to the wider internet or other data service(s).
 - Repair & Maintenance Costs
 - These are the repair & maintenance costs attributable to the running of the Bitstream network, especially fault costs of the network.

³⁷ Eircom is obliged to provide AFI's to ComReg annually as set out in ComReg D08/10, Accounting Separation and Cost Accounting Review

- Line Share/Local Loop Contribution Cost
 - The local loop is the physical path, usually copper, which connects a local exchange to an end user. It is the most difficult part of a telecoms network for Eircom's competitors to replicate economically. Consequently, Eircom is legally required to allow competing operators to gain access to it, in order to allow them to provide communications services. This is a fixed charge per subscriber. It is payable by all operators and should form part of any national unit cost.
- Aggregation Node & Transmission Costs
 - An aggregation node is an electronic switch normally deployed in a hierarchical data network which aggregates or joins together a number of lower speed data circuits into a lesser number of larger data circuits.
 - Transmission costs equate to the backhaul costs associated with running Bitstream services.
 - In the Eircom HCAs, aggregation node costs and transmission costs are categorised under "Data Platforms" and "Transmission". However, they are treated as one cost in the Bitstream cost model.

6.42 The list of costs NOT included in the model are:

- Installation & Provisioning Costs
 - Installation & provisioning costs are excluded from the Bitstream cost model as they are one-off costs that are recovered from first time connection fees.
- Carrier Billing & Administration Costs
 - Carrier billing and administration costs are not taken into account in the Bitstream cost model as these are already included in the monthly line share rental price.

6.43 The equipment based costs listed above (DSLAM, BRAS & Agg. Nodes) include the following cost categories:

- Depreciation/Capital Costs

- Network Building Costs
- Network Power and Air-Conditioning Costs
- Field staff: Operating & Maintenance Costs
- Other Direct Operating & Maintenance Costs
- Indirect and Common Costs.

6.44 The model architecture, the proposed inputs and assumptions and the proposed adjustments to the Bitstream cost model are discussed in detail below.

6.3.3 Assessment of Costs for Efficiency

- 6.45 Against the backdrop of a fast moving technological environment, ComReg considers that the costs reported in Eircom's AFIs could be considered as a reasonable representation of efficient costs. Eircom has purchased broadband equipment in a market where infrastructure competition exists in the LEA. Due to the competitive pressures from other operators such as BT, Magnet and UPC (amongst others), ComReg believes that there may be a sufficient incentive for Eircom's expenditure (capital & operational) in the Core network to be reasonably efficient.
- 6.46 The model is a multi-year model and projects costs and volumes for the proposed price control period (2014 to 2017). Based on the expected changes in the levels of subscriber demand per exchange, the costs from Eircom's HCAs are forecasted forward to meet the necessary demand projected.
- 6.47 The Bitstream cost model is a national model that takes the total annual costs from Eircom's HCAs for 2011/2012 and, with adjustments where appropriate, recovers the modelled costs over the three year price control period. On an annual basis it is proposed that Eircom will reconcile the actual out turn of Bitstream costs (and revenues) incurred by Eircom from its Regulated Accounts compared to the planned costs and revenues in the Bitstream cost model over the price control period. This has been discussed at subsection 5.4 above.
- 6.48 ComReg is proposing to include an annual efficiency adjustment of approximately 5% to the forward looking operating costs in the Bitstream cost model. This efficiency should be achieved in the coming years where ComReg notes for example that there have been recent staff reductions, reductions in rents, other general reductions to costs as a result of the economic downturn in Ireland.
- 6.49 As already discussed at subsection 5.4, depending on the materiality of any differences noted as part of the annual review of costs, ComReg may consult on the most appropriate mechanism to ensure any material over/under recovery of efficient costs is dealt with. However, based on the detailed modelling exercise completed to date, ComReg does not expect any such material under/over recovery to arise during the price control period such that Bitstream monthly rental prices for Bitstream and BMB would have to be amended by ComReg.

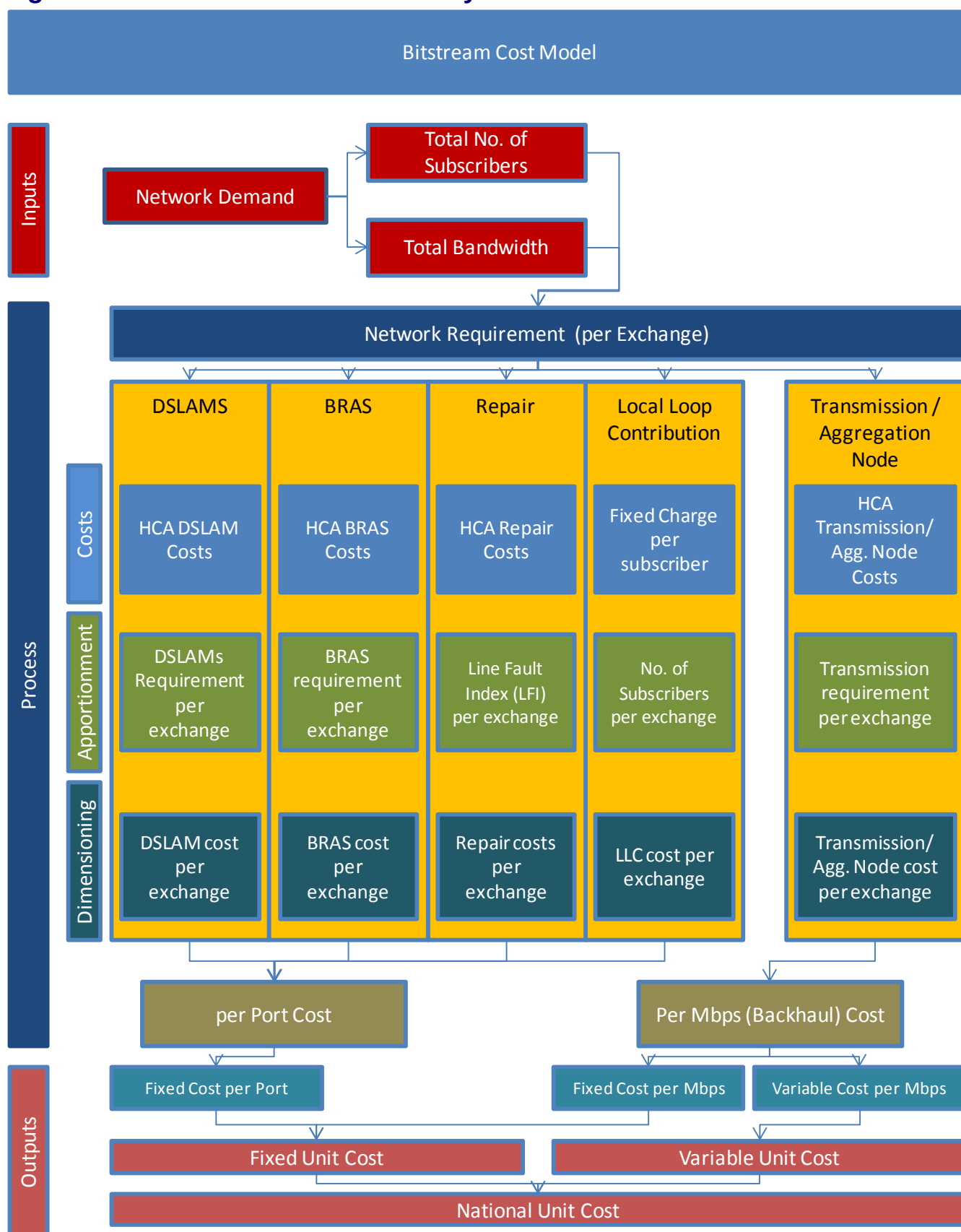
6.3.4 Model Layout/Architecture

6.50 It is important to note that we propose to use the same charging regime as the one already implemented in the WBA Price Floors Decision. Therefore, the proposed Bitstream cost model is based on the following:

- Cost Per Port
 - Monthly per port cost per user – the fixed cost associated with running the network.
- Cost per Megabit per second (Mbps)
 - Monthly Backhaul costs per user – a fixed portion of the cost per Mbps for the level of Bandwidth usage per user.
 - Monthly Backhaul costs per Mbps – a variable cost raised at the 95th percentile of the 5 minute readings in any calendar month.

6.51 The Bitstream cost model establishes a national unit cost per subscriber for the provision of Bitstream services. The Bitstream cost model looks at Eircom's network equipment and usage costs and attributes these costs to each exchange based on different dimensioning rules.

6.52 The layout of the model and process by which the national unit cost per subscriber is calculated is shown below in Figure 6.1.

Figure 6.1: Bitstream Cost Model Layout

Source: ComReg

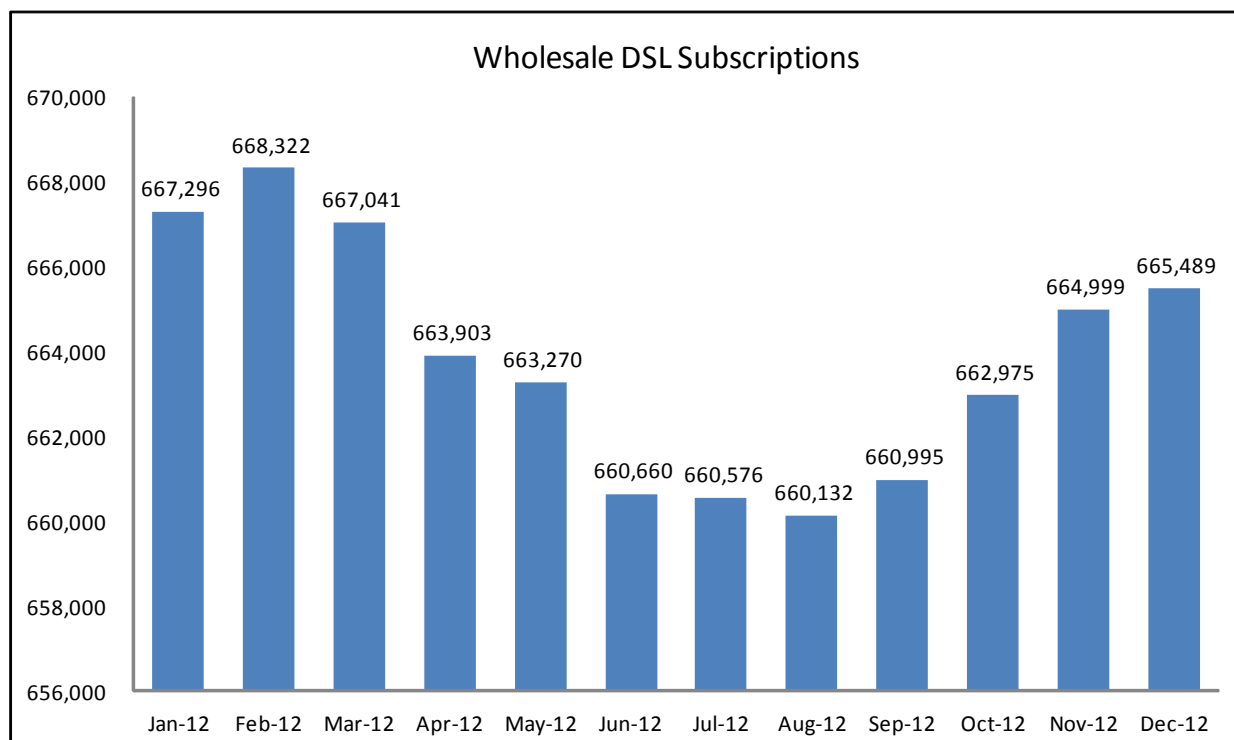
6.3.5 Model Input: Network Demand

- 6.53 Network Demand is the amount of subscriber-based demand for Eircom Bitstream and retail products that the network has to host. It is determined by the number of subscribers on the network and the amount of bandwidth these subscribers require.
- 6.54 Demand inputs were requested for the same period as Eircom's latest available Regulated Accounts. As a consequence, the number of subscribers per exchange and the bandwidth per exchange is based on actual Eircom data from June 2012 (corresponding to Eircom's Regulated Accounts for the financial year 2011/12).

Total No. of Subscribers:

- 6.55 Eircom provided ComReg with the proposed demand forecast for the total number of likely active subscribers on Eircom's network (i.e., Eircom retail + Wholesale Bitstream) over the price control period. This is used to project forward the number of active subscribers in each exchange. The subscriber numbers are projected for the period 2014 to 2017.
- 6.56 Recent market trends indicate that the retail broadband market is expanding due to the increased use of smart phones, tablets and TV-On-Demand services etc. In the LEA it is likely that the majority of fixed broadband subscribers will switch to fibre based broadband services due to the benefit of the increased speeds from the services on offer.
- 6.57 While the overall retail broadband market is expanding, it is expected that the number of wholesale Bitstream customers will remain relatively stable over the price control period. The forecasted subscriber numbers is based on the latest available figures from ComReg's quarterly reports and an assessment of past trends.
- 6.58 ComReg's decision to keep Bitstream subscribers at a stable level is taken from data collected as part of the quarterly reports process over the 2012 period.

Figure 6.2: Wholesale DSL Subscriptions (including Eircom self-supply)



Source: ComReg

- 6.59 While DSL subscriptions have experienced a level of fluctuation on a monthly basis, at an overall level subscriptions have remained relatively constant. This has informed ComReg's proposed approach to keep subscriber numbers relatively stable throughout the price control period.
- 6.60 By deriving a forecasted level of demand from the number of subscribers projected on the network, the model allocates costs on a per exchange basis; this gives an indication of the likely costs in the LEA and Outside the LEA. However, as the national costs are allocated through the model, the costs modelled by exchange may not reconcile to the actual capital cost or operating cost of that particular exchange.

Total Bandwidth:

- 6.61 The bandwidth required to run the network was supplied by Eircom as part of their submission in June 2012 (to be consistent with the latest available Regulated Accounts).

- 6.62 The bandwidth in the Bitstream cost model is based on the June 2012 demand given the number of subscribers per exchange and the split per retail product for each exchange. The total bandwidth requirement is then forecast forward based on the forecasted number of subscribers on the network and the average usage levels of subscribers.
- 6.63 ComReg has received feedback from operators about current usage levels amongst its customers. Modern technological advancements indicate that there is a growing expectation for higher bandwidth usage amongst consumers. Consequently, ComReg has taken the view that bandwidth levels will increase considerably over the price control period.
- 6.64 The model uses an average throughput per subscriber across a range of values. The range used is from 150 kbps to 300 kbps. The final bandwidth assumption used in the Bitstream cost model is an average of this range of bandwidth usage. As this input is a key component in the Bitstream cost model the methodology behind this calculation is discussed in more detail in paragraphs 6.100 – 6.110 below.

6.3.6 Model Process: Costs

6.65 As stated above, the costs in the Bitstream cost model are taken from Eircom's HCAs. However, as costs are calculated over 3 years, it is necessary to conduct forecasts. Taking the total number of subscribers and the total bandwidth requirement into consideration the total network requirement for Eircom's Core network can be established.

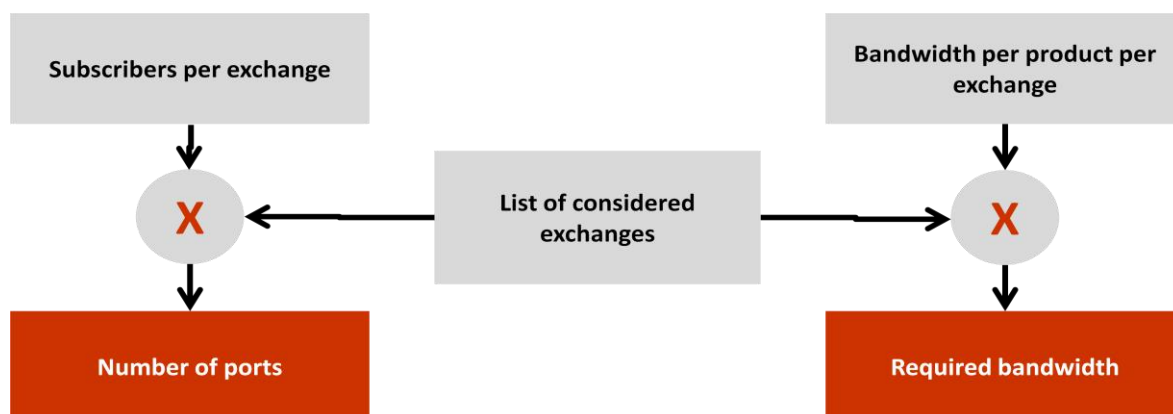
6.66 Using the network requirement, two types of cost drivers can be determined to allow the dimensioning of the network:

- Number of ports required: based on no. of subscribers per exchange to establish a per port cost per user
- Total required bandwidth: based on bandwidth per product per exchange to establish bandwidth usage levels per exchange.

6.67 Using these cost drivers, the network can be dimensioned in terms of the costs it takes to run the network i.e., the Bitstream cost model calculates the number of DSLAMs/BRAS etc required on an exchange by exchange basis. The cost drivers define the level of costs per exchange.

6.68 The network dimensioning methodology is illustrated in the graph below:

Figure 6.3: Drivers for network dimensioning



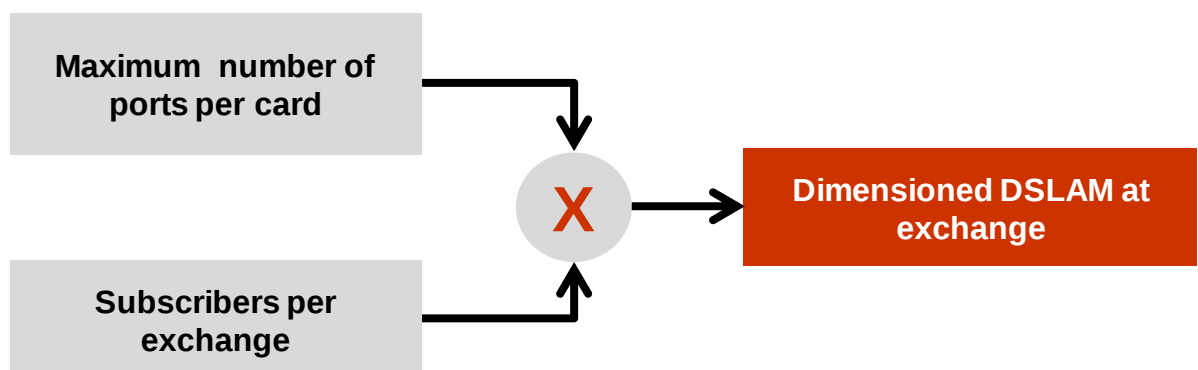
6.69 The proposed Bitstream cost model is based on network dimensioning rules which determine the assets required to run the network. This in turn determines the level of capital costs of the network. Both types of cost drivers allow for the dimensioning of the different types of equipment which is required to provide Bitstream services.

6.3.7 Model Process: Cost Apportionment & Dimensioning

DSLAM Costs

- 6.70 The DSLAM configuration (i.e., amount of investment per exchange necessary to run Bitstream services) is calculated based on an incremental number of cards which can host a set number of lines. Based on the size of the exchange, the DSLAM cost taken from Eircom's Regulated Accounts is apportioned on an exchange by exchange basis.
- 6.71 The DSLAM costs from Eircom's 2011/12 Regulated Accounts represent 8% of the modelled costs to run the Bitstream network.
- 6.72 The DSLAM equipment dimensioning per exchange is illustrated in the graph below:

Figure 6.4: DSLAM Dimensioning



- 6.73 In addition, the cost categories discussed in turn below form part of the total DSLAM cost including the methodology of their apportionment to each exchange:
- Depreciation/Capital Costs
 - Based on the number of subscribers per exchange, the required DSLAM capacity per exchange is established. Based on the capacity, the model assigns a depreciation/capital cost weighting to each exchange i.e., the depreciation / capital charge for the size of the DSLAM investment and forecast costs. This means that some exchanges would receive more DSLAM investment than others. Depreciation/capital costs are taken from Eircom's own operating costs and include a rate of return i.e., the WACC. These costs are apportioned per exchange based on this final weighting and form 8% of the total 2011/12 DSLAM cost.
 - Network Building Costs

- Based on the DSLAM footprint (i.e., floor space) per exchange, the model dimensions the network building costs to each exchange. This calculation takes into account of the size of the exchange and the network building costs are taken from Eircom's Access Reference Offer price list.³⁸ The model adjusts the weighting of the costs based on the size and location of the exchange reflecting the different rental prices across the number of exchanges. Network building costs are taken from Eircom's own operating costs and include a rate of return i.e., the WACC. These costs are forecasted and apportioned per exchange based on this final weighting and form 30% of the total 2011/12 DSLAM cost.
- Network Power and Air-Conditioning Costs
 - Based on the DSLAM requirements, the model dimensions the network power and air-conditioning to each exchange. This calculation takes into account the size of the exchange and the power and air-conditioning costs taken from Eircom's Access Reference Offer price list. This then provides a weighting for each exchange by which the HCA costs for network power and air-conditioning are apportioned. This means that some exchanges are bigger than others and incur more costs. Network power and air-conditioning costs are taken from Eircom's own operating costs and include a rate of return i.e., the WACC. These costs are forecasted based on the dimensioning of network power and air-conditioning and form 30% of the total 2011/12 DSLAM cost.
- Field staff: Operating & Maintenance (O&M) Costs
 - The apportionment of field staff costs is based on the number of subscribers per exchange and the Line Fault Index ("LFI"). Field staff costs are apportioned based on the fault weighting per DSLAM. Therefore, field staff costs are apportioned based on the actual level of operating & maintenance time spent. Field staff costs are taken from Eircom's actual operating costs. These costs are forecasted using the evolution of the number of lines and the LFI and form 30% of the total 2011/12 DSLAM cost.

³⁸ <http://www.eircomwholesale.ie/Reference-Offers/Documents/ARO-price-list-v6-6/>

- Other Direct O&M Costs
 - In the same way as depreciation/capital costs are apportioned in the Bitstream cost model, other direct O&M costs are apportioned based on the weighting defined by the DSLAM configuration in the exchange and are then forecasted forward. The Direct O&M costs are taken from Eircom's own 2011/12 operating costs and form $\times\%$ of the total DSLAM cost.
- Indirect and Common Costs
 - In the same way as depreciation/capital costs are apportioned in the Bitstream cost model, indirect and common costs are apportioned based on the weighting defined by the DSLAM configuration in the exchange and are then forecasted forward. The indirect and common costs are taken from Eircom's 2011/12 operating costs and form $\times\%$ of the total DSLAM cost.

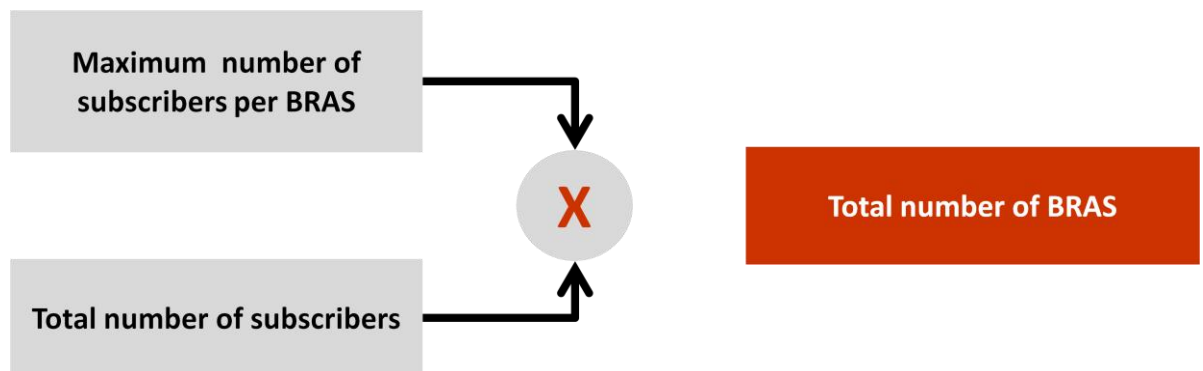
6.74 The total DSLAM costs are divided by the total number of subscribers to establish a national unit cost for DSLAMs per subscriber. This fixed unit cost forms part of the national unit cost.

BRAS Costs

6.75 Similar to the dimensioning of the DSLAMs, the total number of BRAS required by Eircom is calculated based on the total number of subscribers throughout the network.

6.76 The BRAS costs from Eircom's 2011/12 Regulated Accounts represent $\times\%$ of the total modelled costs to run the Bitstream network.

6.77 This is illustrated graphically below.

Figure 6.5: Number of BRAs

6.78 The required number of BRAS costs per exchange is based on the total number of subscribers per exchange.

6.79 The total BRAS operating cost for the provision of Bitstream services equals the sum of:

- Capital Costs
- Depreciation Costs
- Network Building Costs
- Network Power and Air-Conditioning Costs
- Field staff: Operating & Maintenance Costs
- Other Direct Operating & Maintenance Costs
- Indirect and Common Costs

6.80 The methodology for apportionment and forecasting of the BRAS costs is the same as the methodology for the DSLAM apportionment as discussed above.

6.81 The total BRAS costs are divided by the total number of subscribers to establish a national unit cost for BRAS per subscriber. This fixed unit cost forms part of the national Bitstream unit cost.

Repair Costs

6.82 The total repair costs are taken from Eircom's 2011/12 Regulated Accounts. The total repair costs in the model represent 3% of the modeled cost of running the Bitstream network.

- 6.83 In the Bitstream cost model, the costs are apportioned to exchanges using the actual data reported in the LFI. The latest available LFI was submitted by Eircom in June 2013 and is dated from the end of May 2013. The costs are weighted by the number of subscribers per exchange and a fixed unit repair cost per subscriber is then calculated and forms part of the national Bitstream unit cost

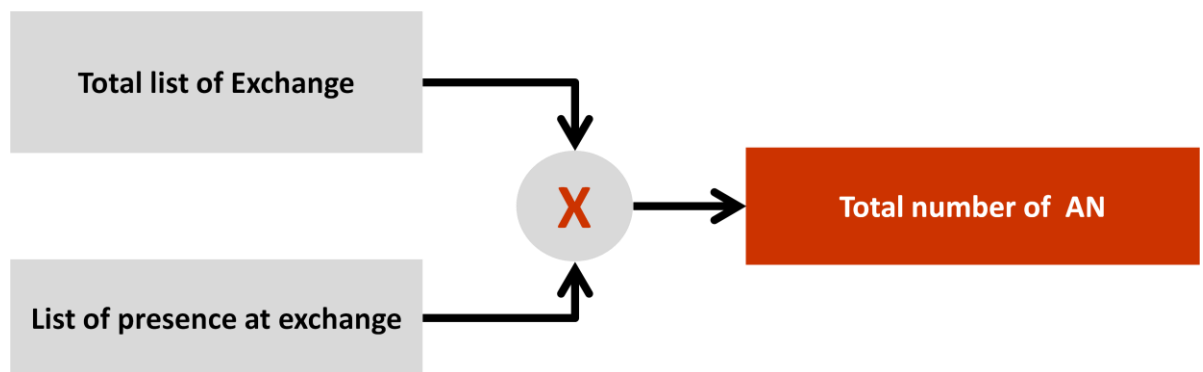
Line Share/Local loop contribution Cost

- 6.84 This is a fixed charge that every operator must incur to use Eircom's Access network. The total Line Share costs represent 3% of the modelled cost of running the Bitstream network.
- 6.85 As per the 2010 Bitstream Consultation, paragraph 5.60, in order to ensure the overall contribution to costs that WBA products make to costs of the copper access network, the Local Loop contribution should form part of the Bitstream cost stack. ComReg proposes to take the value of the Line Share rental³⁹ service (€9.24 per annum, or €0.77 per month) and allocate it on a per subscriber basis in the Bitstream cost model.
- 6.86 To date, Bitstream has been in the main purchased in conjunction with SB-WLR. However, more recently and as discussed in more detail in Chapter 10, operators can now purchase standalone broadband ("SABB") i.e., it is no longer necessary to purchase SB-WLR. However, SABB must also make a minimum contribution to the local loop and currently the price of LLU is €9.91. This is discussed separately in Chapter 10.

Aggregation Node and Transmission Costs

- 6.87 The number of aggregation nodes is dimensioned on the basis of the number of backhaul links from the installed DSLAMs. The "backhaul links" represent the Transmission costs.
- 6.88 The Transmission Costs from Eircom's 2011/12 Regulated Accounts represent 3% of the costs in the Bitstream cost model.

³⁹ ComReg Decision D04/09, ComReg Document No 09/66 entitled "Rental price for shared access to the unbundled local loop – Response to Consultation Document No 08/106 and Decision; dated 18 August 2009.

Figure 6.6: Number of Aggregation Nodes

- 6.89 Based on the number of subscribers in each exchange, the total bandwidth requirement for the exchange can be determined. This then determines the level of usage from each exchange. Based on this level of usage, the Bitstream cost model assigns a backhaul cost weighting per exchange. The backhaul costs are taken from Eircom's Network Price List⁴⁰. The Bitstream cost model also assigns the cost of the interconnect links for hosting the backhaul, as some exchanges would accrue greater costs for backhaul as they are further away from host servers. Each exchange is weighted according to the backhaul costs it will incur and the total transmission costs taken from Eircom's HCAs are apportioned on this basis and are forecasted forward on this basis also.
- 6.90 In order to derive a unit cost for transmission, the total transmission costs are divided by the total bandwidth requirement per subscriber (average bandwidth per subscriber multiplied by total number of subscribers). This Mbps unit cost forms part of the national Bitstream unit cost.
- 6.91 Given that transmission costs are difficult to forecast, it is important to note that any changes to transmission costs as a result of the separate annual review for leased lines under ComReg Decision D02/12⁴¹ should also be reflected in the Bitstream cost model where appropriate.

⁴⁰ http://www.eircomwholesale.ie/Reference-Offers/Documents/Network-Price-List-V5-7_Unmarked/

⁴¹ ComReg Document No 12/03: Further Specification of the Price Control Obligation in the wholesale market for the terminating segment of Leased Lines; 2 February 2012.

6.3.8 Model Outputs

6.92 Over the past number of years, it has been noted that the total Mbps usage charge incurred by OAOs has been increasing due to an increase in average usage of traffic. ComReg recognises that this trend is expected to continue in the coming years and as such we have taken this into account in developing the proposed Bitstream cost model.

6.93 This has also been recognised in the WBA Price Floors Decision, with regard to the Bitstream price floors, where ComReg stated that:

- “...this increase in Mbps usage will continue in the future, with increased streaming etc., as is the trend with fixed broadband generally. As the Mbps usage is a very sensitive input into the model, it was realised by ComReg when modeling the impacts of increased per Mbps usage, that expressing the Mbps solely as a variable charge is not reflective of the underlying cost structure — which has both a fixed and variable element. ComReg considers that to treat it solely as a variable element could create significant distortions to wholesale prices going forward.” [paragraph 3.41, the WBA Price Floors Decision]

6.94 For regulatory consistency, we consider that, the cost oriented national Bitstream price should be split into fixed and variable elements, similar to the Bitstream price floors.

Proposed national costs

6.95 For each of the costs associated with the provision of Bitstream services, the Bitstream cost model produces unit costs on per port and per Mbps basis to assess the appropriate average national Bitstream price level. Similar to the Bitstream price floors model, the Bitstream costs in the Bitstream cost model are assessed against Eircom’s costs calculated over a 36 month control period.

Monthly Fixed Cost per Port

6.96 In line with the Bitstream cost model architecture, the per port charge is assessed based on the fixed costs components attributable to DSLAMs, BRAS, line share contribution and repair costs i.e., the costs required to run the network.

Monthly Backhaul Cost (per port and per Mbps)

6.97 The monthly backhaul cost per Mbps is split into two elements:

- Fixed - The fixed element of the monthly backhaul cost refers to the costs that would be incurred regardless of the throughput level.
- Variable - The variable cost is determined by the level of throughput experienced by OAOs at the 95th percentile.

6.98 A discussion on how the proposed Bitstream cost model accounts for various levels of throughput and isolates the fixed and variable costs is set out below in paragraphs 6.99 – 6.110.

Throughput Levels in the Model

6.99 The variable element of the Bitstream monthly backhaul charge is sensitive to average subscriber bandwidth levels. As such, the way in which operators sell broadband at the retail level, such as limited or unlimited downloading, can have a significant impact on the average throughput experienced by operator and the subsequent cost of backhaul.

6.100 Based on recent data provided from Eircom in April 2013, the average wholesale throughput experienced by OAOs on Eircom's network is 256 kbps. However, there is a range of throughput levels (both higher and lower than the average) being experienced by individual operators with some experiencing close to 256 kbps. As discussed earlier in the document in relation to Total Bandwidth at paragraphs 6.61 – 6.64, there are a range of customer profiles which should be considered within the overall customer portfolio. To militate against a scenario where the backhaul price is based on one level of throughput, the Bitstream cost model performs a sensitivity analysis for a range of throughput values that takes a reasonable average throughput into account.

6.101 Consequently, the throughput costs are based on a weighted average of a range of throughput values. The range of values currently tested range from 150 kbps – 300 kbps. The average of this range of bandwidth usage is applied in the Bitstream cost model. Figure 6.7 and Figure 6.8 demonstrates how the Bitstream cost model uses these values to assess the appropriate level of the national Bitstream price.

6.102 As the figures used in the model are of a commercially sensitive nature, the results of the calculations performed by the model have been removed.

6.103 Using the weighted average transmission costs, Figure 6.7 illustrates the range of costs that are produced for each of the levels of throughput tested in the sensitivity analysis. Column A provides the tested speeds. Column B assesses what the maximum unit cost per Mbps would be, based on the total average bandwidth that is experienced by the network.

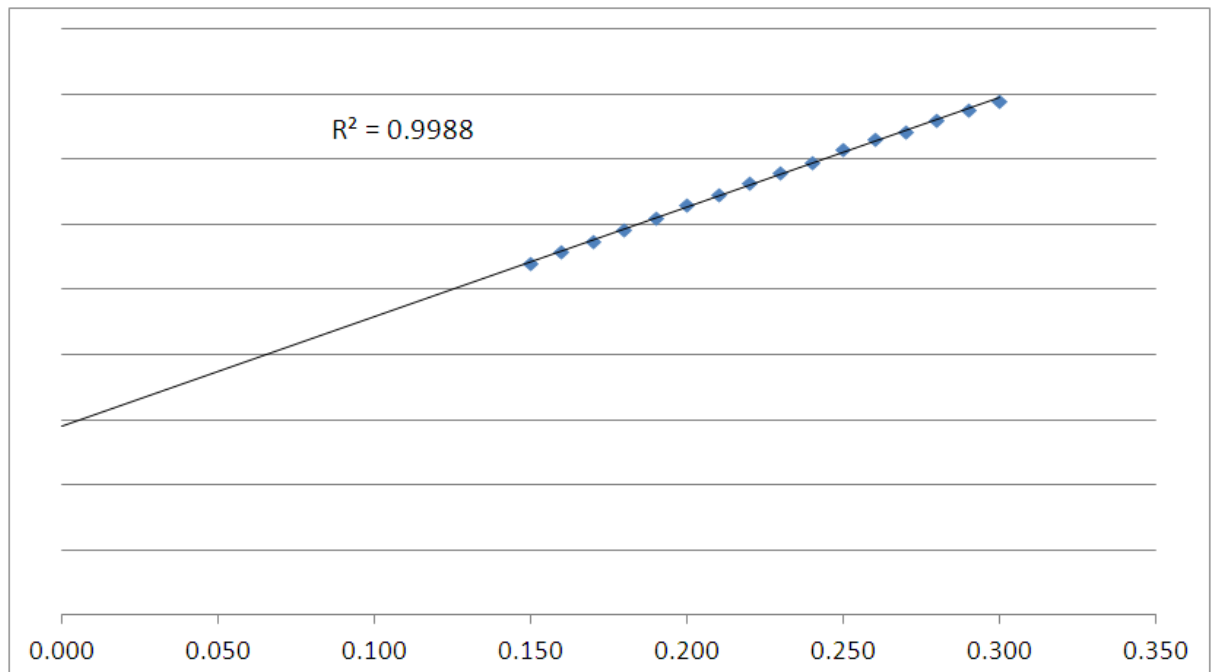
6.104 Column C is the cost at peak hour speed for each of the levels of throughput if that level of throughput was experienced by an OAO e.g. if 240 kbps is assumed the average speed on an operator's network, the cost for this level of throughput would be calculated by multiplying the corresponding row in Column A by the corresponding row in Column B.

Figure 6.7: Range of Costs for level of Throughput

A	B		C
Tested Speed	Max Unit Cost at Tested Speed		Cost at Peak Hour
0.150	x	→	x
0.160	x	→	x
0.170	x	→	x
0.180	x	→	x
0.190	x	→	x
0.200	x	→	x
0.210	x	→	x
0.220	x	→	x
0.230	x	→	x
0.240	x	→	x
0.250	x	→	x
0.260	x	→	x
0.270	x	→	x
0.280	x	→	x
0.290	x	→	x
0.300	x	→	x

6.105 The next stage of the sensitivity analysis is to plot the cost that would be experienced at the peak hour against the usage for each of the assumed levels of throughput.

6.106 Figure 6.8 illustrates the relationship between usage levels and cost.

Figure 6.8: Cost at Peak hour

- 6.107 The line in Figure 6.8 represents the incremental increases in price, for every incremental increase in the usage per subscriber. By using a regression analysis, a statistical process to establish the relationship between variables, we can plot the level of fixed costs (when usage = zero) and for one megabit of usage. This calculation gives the fixed portion of the variable costs that is added to the Per Port charge. This calculation is sensitive to the range of speeds tested (between 150 kbps and 300 kbps)
- 6.108 The formula " $r^2 = 0.9988$ " represents the coefficient of determination and shows how well a series of data fits a straight line i.e., this represents the robustness of the data set. A coefficient value close to one is indicative of a strong data set.
- 6.109 There is not a linear relationship between the levels of throughput and levels of costs experienced by Eircom. As throughput levels increase so too does the apportionment of costs of the fixed element of transmission costs. This ensures that as higher throughput is experienced by OAOs there is less fluctuation of wholesale prices, which ensures greater stability of prices and certainty for OAOs.
- 6.110 On this basis, the model allows us to assess the appropriate level of the unit cost per Mbps and the split between the appropriate fixed and variable elements.

6.3.9 Model Review

6.111 In order to ensure that the Bitstream cost model remains appropriate over the price control period, ComReg proposes that Eircom should conduct a review on an annual basis to reconcile the costs in the Bitstream cost model to Eircom's Regulated Accounts to assess whether the costs in the Bitstream cost model are an accurate representation of the actual costs adjusted for efficiency of the Bitstream network.

6.112 Please refer to subsection 5.4 above for the details of this review.

6.3.10 Usage / throughput price Outside the LEA

6.113 As already discussed in Chapter 5, we are proposing a national cost orientation obligation where Eircom should recover no more than the actual national efficient costs (plus a reasonable rate of return) associated with the provision of Bitstream and BMB services, nationally. We are also proposing that Outside the LEA Eircom should recover no more than the actual costs adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream and BMB services in the area Outside the LEA. Accordingly, Eircom should not increase its Bitstream and BMB monthly rental prices Outside the LEA or introduce a new current generation Bitstream product Outside the LEA without ComReg's prior approval and it should demonstrate that the increased / new Bitstream monthly rental prices recover no more than the actual incurred costs adjusted for efficiency plus a reasonable rate of return in that specific area, while also ensuring compliance with the overriding national cost orientation obligation. Please refer to Chapter 5 for the full details.

- 6.114 As per the Bitstream Access Reference Offer (BARO)⁴² price list, charges are split over two product sets: Bitstream Internet Protocol (Bitstream IP) and Bitstream Managed Backhaul (Bitstream MB). For example, the Bitstream Connect IP (service level is “up to 1mb download / 128 kbs upload”) price is set at €14; which includes both ‘Per port’ and ‘Per Mbps’ charge. Monthly prices for Bitstream MB are split between per port and per Mbps. For example, the 24 Mbps Bitstream MB (service level is “up to 24 Mb upload / 768 kbs upload”) price is split with a per port charge of €5.90 and a per Mbps charge of €20, with the final Mbps charge based on the level of throughput experienced by operators. We are proposing that Eircom should not increase these charges Outside the LEA without ComReg’s prior approval and without demonstrating to ComReg that its increased Bitstream monthly rental prices Outside the LEA recovers no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the area Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation, as discussed in subsection 5.2 of this document.
- 6.115 We are of the preliminary view that the current usage charge to OAOs whose usage levels are significantly above the average throughput in the Bitstream cost model is significantly above the cost to Eircom of providing transmission at the 95th percentile. To militate against excessive usage charges, for those OAOs whose usage levels are above the average throughput in the Bitstream cost model, ComReg proposes that Eircom should recover no more than the long run incremental cost (“LRIC”) that is caused by the additional traffic for those operator, which is above the average usage in the Bitstream cost model. ComReg considers that the LRIC should be equal to the cost of having to extend / build out the Eircom network as a result of the additional traffic caused by the particular OAO in question above the average cost of usage from the Bitstream cost model. In the LEA, we consider that this obligation is not required given that OAOs can use LLU or VUA. If a similar obligation was imposed on Eircom's usage charges in the LEA this could create a wholesale market distortion in that it could discourage operators with above average usage to move to alternative backhaul providers e.g. BT as these operators may effectively face a lower charge overall due to the incremental approach (above) than moving to another operator.

⁴²<http://www.eircomwholesale.ie/Reference-Offers/Documents/Bitstream-Price-List-v7-21/>

ComReg's Preliminary View:

6.116 Outside the LEA, Eircom should recover no more than the long run incremental cost for usage based on the cost of traffic for that particular OAO which is over and above the average cost for usage in the Bitstream cost model.

Q. 3 Do you agree with ComReg's preliminary view in relation to Eircom's usage charges Outside the LEA where Eircom should not recover in excess of the long run incremental cost that is caused by the additional traffic by operator on the core network, over and above the average cost for usage in the Bitstream cost model. Please provide reasons for your response.

6.3.11 Further Considerations

Future investment in DSLAMs

- 6.117 A review of Eircom's installed base of DSLAMs indicates that the current proposed network dimension in terms of the number of ports installed appears to be reasonable given the current level of demand and expected future growth.
- 6.118 Eircom may extend its investment in DSL sites to commercially viable exchanges Outside of the LEA over the next few years. One of ComReg's statutory objectives is to incentivise investment. ComReg considers one way of incentivising investment is to give assurances to Eircom that any such commercial investment that stimulates the take up of fixed broadband in more remote areas of the country should be considered as part of the annual review of costs. Where this review suggests there is a material under-recovery of efficient national Bitstream costs, ComReg may, where sound evidence is provided by Eircom of any such under-recovery allow Eircom to adjust its Bitstream prices subject to the obligations set out in Chapter 5, subsection 5.2. Depending on the materiality of any changes to the Bitstream monthly rental prices, ComReg may consult with the industry, as appropriate, as outlined in paragraph 5.34 in Chapter 5.

Migration to NGA over the price control period

- 6.119 Over the price control period, it is likely that a significant number of current generation Bitstream customers in the LEA will migrate to NGA Bitstream. This will reduce the volumes of current generation Bitstream customers and is likely to have an impact on costs and revenues of current generation Bitstream in the LEA. However, it is expected that the move in volumes to NGA Bitstream will mean a greater proportion of the costs (and revenues) will also move to NGA Bitstream.
- 6.120 ComReg does not expect there to be a material impact on the preliminary results from the Bitstream cost model as a result of the customer migration to NGA Bitstream. However, this should be kept under review by Eircom.

Timing of Inputs

6.121 The Bitstream cost model is based on data from June 2012. When the most recent data becomes available (2012/2013), ComReg intends to review the Bitstream cost model to assess if there are any relevant variances and it shall update the Bitstream cost model for any amendments as a result of its review as appropriate. The first such review will be in 2014 when the 2012/13 Regulated Account becomes available.

Q. 4 Do you agree with the proposed principles, inputs, assumptions and outputs associated with the Bitstream cost model, as set out above in Chapter 6? Please provide reasons for your response.

Chapter 7

7 Retail Margin Squeeze Test

7.1 Introduction

- 7.1 In this Chapter we discuss the principles that should apply in relation to the retail margin squeeze test for current generation Bitstream services in the LEA and Outside the LEA.
- 7.2 As discussed in Chapter 4, Eircom faces some competitive pressure in the LEA where UPC has rolled out its bidirectional cable network and it also faces some retail and wholesale competition from OAOs that have unbundled Eircom's exchanges. As a result, and as discussed in Chapter 5, ComReg considers that it is proportionate to apply an ex ante retail margin squeeze test inside the LEA, given that Eircom's retail prices in the LEA are being constrained by alternative infrastructures. The retail margin squeeze approach coupled with the Bitstream price floors already imposed on Eircom in the LEA should ensure that there are sufficient incentives for OAOs to migrate to LLU / VUA. In addition, this proposed approach would ensure consistency with the pricing principles already applied for NGA given that a retail margin squeeze test has also been adopted for NGA services.
- 7.3 As set out earlier in Chapter 5, Outside the LEA, we also propose that a retail margin squeeze test should apply to ensure that Eircom Retail does not create a margin squeeze or engage in anti-competitive pricing behaviour. Although we would, through the imposition of a national cost orientation obligation and the obligation that Outside the LEA Eircom should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream in that specific area, seek to limit the potential for excessive pricing at the wholesale level, we believe that there is still a risk that a vertically integrated SMP operator controlling wholesale inputs provided to downstream operators - could through a combination of setting Bitstream prices at the upper limits of the cost oriented wholesale price control and pricing its retail broadband unprofitably low - engage in anti-competitive margin squeeze with a view to leveraging its dominant position from WBA to the retail broadband market. This margin squeeze may result in retail foreclosure of other competitors in the retail broadband market which would be to the detriment of end users.
- 7.4 This Chapter is structured under the following headings:
1. Principles of the retail margin squeeze test

2. Implementation of the retail margin squeeze tests.

7.2 Principles of the retail margin squeeze

- 7.5 The proposed principles in the context of the retail margin squeeze tests are discussed in turn under the following headings:

- (i) Appropriate model type
- (ii) Retail costs and assumptions
- (iii) WACC
- (iv) Time horizon and terminal value
- (v) Operator cost base
- (vi) Operator volume base
- (vii) Appropriate cost standard and
- (viii) Portfolio or product by product.

7.2.1 Appropriate model type:

- 7.6 There are two model options in the context of the retail margin squeeze tests:

- Discounted cash-flow ('DCF') model (also known as a dynamic model);
or
- Static model.

- 7.7 A DCF (or dynamic) model estimates all future cash flows of the offer under consideration and discounts them to arrive at their present value. A static model is an analysis over one period, generally an accounting year.

- 7.8 A DCF model has been used to date for the retail minus price control in the 2006 Retail Minus Decision. More recently, ComReg has also used the outputs of the DCF model in the NGA and Bundles Decision. ComReg is of the preliminary view that the DCF approach remains appropriate given that it looks at costs and revenues over a number of years and takes into account the time value of money unlike the static model that just assesses one particular accounting period.

7.2.2 Retail costs and assumptions

- 7.9 With regard to the DCF model, we propose to carry forward the basic structure and underlying information contained in the current DCF model in order to apply the retail margin squeeze tests in the LEA and Outside the LEA for current generation Bitstream services.
- 7.10 In summary, as a starting point, the current DCF model uses Eircom's costs — both historic which are based on Eircom's audited Regulated Accounts and Eircom's forecast of those costs — as a data source. These costs both historic and forecast are then adjusted to reflect the likely costs that a new retail broadband market entrant would likely incur.
- 7.11 As such, the DCF model includes one-off start-up costs, ongoing fixed and variable operating costs including capital costs and a terminal value. In addition, a number of costs are further inflated by an overhead mark-up of 25% to create an additional margin buffer to reflect the likely new retail broadband market entrant mark-up of common costs. The costs categories which incur this additional mark-up are: Sales; Product Development; Help Desk; and Order Handling.
- 7.12 The costs categorised used in the current DCF model are as follows:
- **Sales costs:** These are the one-off start-up costs and ongoing customer acquisition costs faced by a new entrant to attain new residential and business customers. These costs are further inflated by a mark-up of 25% to take into account the likely higher costs of a new entrant (see paragraph 7.11).
 - **Marketing / Advertising:** These are the one-off and ongoing costs including campaign costs and are divided into initial set-up costs and promotions.
 - **Product management & development:** These are the one-off start-up costs and ongoing costs associated with the product management & development function of a new entrant. These costs take into account new product developments over an ongoing product refreshment cycle. These costs are further inflated by a mark-up of 25% to take into account the likely higher costs of a new entrant (see paragraph 7.11).
 - **Accommodation:** These are the one-off start-up costs and ongoing costs associated with the Accommodation of a new entrant.
 - **Help Desk:** These are the one-off start-up costs and ongoing costs associated with the Help Desk function of a new entrant. These costs reflect a

higher cost during the initial two years after start-up and followed by a lower ongoing cost per subscriber. All Help Desk costs are further inflated by a mark-up of 25% to take into account the likely higher costs of a new entrant (see paragraph 7.11).

- **Billing:** These are the one-off start up costs and ongoing costs per subscriber associated with the Billing function of a new entrant. Billing costs also include a credit management cost which is based on a percentage of revenue.
- **Modems:** This category takes into account the actual unit cost based on manufacturers' offer to Eircom. The cost included in the model takes into account delivery costs. In addition, the model includes respective take-up assumptions of customers requiring new modems over the DCF time period.
- **Order Handling:** These are the one-off start up costs and ongoing costs associated with the Order Handling function by a new entrant. These costs are further inflated by a mark-up of 25% to take into account the likely costs of a new entrant (see paragraph 7.11).
- **Corporate overhead:** These are the one-off and ongoing costs corporate overhead costs.
- **Servers and collocation:** These are the total servers and collocation costs faced by a new entrant. Initial start-up costs and ongoing costs are taken into account.
- **Internet connectivity (peering charges);** This is the cost of internet connectivity faced by a new entrant. The unit cost of internet connectivity is consistent with the unit cost used in the NGA model in the NGA Decision. This cost is a common cost to all the standalone broadband products offered by a new entrant and is calculated based on an average bandwidth requirement. This is based on the forecast total number of subscribers of the new entrant. This total number of subscribers is then allocated to equivalent Eircom retail products based on the actual mix of Eircom retail customers on those products to determine the average bandwidth requirement.
- **Backhaul charges:** This is the cost of backhaul faced by a new entrant based on available wholesale offers from Eircom. This cost would be a common cost to all the standalone broadband products offered by a new entrant.

- **Wholesale connection:** These are the wholesale connection charges for new customers of the new entrant and reflect the prices published in the BARO.

7.13 In order to derive the total retail costs incurred by a new entrant the above cost categories can all be adjusted for scale and scope. This is discussed further in subsection 7.2.5.

7.14 The model is designed to allow considerable flexibility in setting scenarios. The factors that can be varied include:

- Market size
- Product take-up over time (sales growth curve)
- Product mix: The weighting of this product mix is based on Eircom's actual product mix
- Customer lifetime: The current DCF model uses an assumed customer lifetime of 42 months. This is used in the model to determine churn and calculate a rolling net number of subscribers per month. The level of churn determines the per unit recovery cost per subscriber. For example, a higher churn than new additions in a given period would mean a lower number of subscribers to recover the total retail cost. As such, it ensures that all incurred costs are recovered over the relevant period.
- All costs over both time and volume as appropriate and
- Retail revenues, by product, over time.

7.15 With respect to revenues which are taken into account in the DCF these are limited to rental and connection charges. No value added service revenue is included, as the model is based on a new entrant which is limited to an internet connection business. In addition, any additional revenue from excess usage is not taken into account.

7.2.3 WACC

- 7.16 In the DCF model, ComReg will need to apply a discount rate. ComReg proposes that it would be appropriate to use a measure of the weighted average cost of capital (WACC). This may be applied on a pre-tax or post-tax basis. Eircom currently applies a pre tax WACC of 10.21% in its Regulated accounts.

7.2.4 Time Horizon and Terminal Value

- 7.17 Similar to the current DCF model, ComReg proposes to apply the DCF analysis for five years and to include a further three years where the costs and revenues remain stable to account for the terminal value.

7.2.5 Operator cost base

- 7.18 ComReg considers that there are three options for determining an operator cost base for the retail margin squeeze tests, these include:
- Equally efficient operator ('EEO')
 - Reasonably efficient operator ('REO')
 - Similarly efficient operator ('SEO').
- 7.19 The EEO test is generally based on the Incumbent costs i.e., Eircom's costs while the SEO test is based on the Incumbents costs adjusted for the fact that other operators do not yet enjoy the same economies of scale and scope as Eircom. The REO test is based on a typical entrant operator costs.
- 7.20 The EEO test therefore assumes the efficient costs based on the volumes of the Incumbent, and is more often associated with ex-post competition case law. The EEO approach recognises that in a competitive situation, an effective alternative operator will be able to compete only if it is as efficient as the SMP operator in the retail broadband market. An EEO test would result in a less strict margin squeeze test; consequently Eircom could pass these lower retail broadband costs as a lower price to its retail customers without cutting wholesale prices. However, the question arises would competing operators be able to sustain competition at these lower prices.
- 7.21 ComReg considers that the EEO approach may be more consistent with the cost orientation obligation as it would ensure cost recovery for the Incumbent. It is also worth noting that the EEO approach may be relevant where there are some large entrants i.e., Vodafone and Sky.

- 7.22 A SEO means an operator which shares the same basic cost function as Eircom but does not yet enjoy the same economies of scale and scope as Eircom. The REO is similar to the SEO standard given that they both reflect the fact that OAOs in the WBA market have not achieved the same economies of scope and scale as the SMP operator and this needs to be reflected in the margin squeeze test. In principle, ComReg believes that OAOs' costs should be used in the test. In practice, accurate verifiable OAO data is difficult to obtain. Consequently, ComReg has estimated the appropriate costs by taking Eircom's costs as a starting point as the information available to us in respect of these costs are more reliable and robust, especially given Eircom's regulatory accounting obligations. Eircom's costs are then adjusted to reflect the lower level of economies of scale and scope available to a hypothetical entrant with a retail broadband market share of 25%. ComReg believes that there is no material difference between the value of cost inputs based on REO and SEO. ComReg uses the term SEO and REO simply to signal the exact source of the costs used in the margin squeeze model – before these costs are adjusted appropriately for scale and scope for the margin squeeze test. The use of the REO signals that the OAO costs are mainly taken – usually from Eircom's wholesale price list charged to other operators. The use of the SEO simply means that Eircom's audited costs are used as a starting point for OAO cost estimation in the absence of any robust (and audited) cost data from other operators.
- 7.23 In the context of the WBA market the SEO test may be appropriate where we have a number of smaller operators, especially Outside the LEA that are vulnerable to exclusionary behaviour given that they do not share Eircom's economies of scale and that they have no realistic alternative means of provision.
- 7.24 For now, we consider that a combined (SEO and EEO) test that is consistent with the retail margin squeeze test in the context of NGA may be the appropriate cost base in the LEA. We consider that a retail margin squeeze test based entirely on EEO costs may not be appropriate at this time as there are currently no entrants in the Irish market that exhibit equal, or almost equal, economies of scale to Eircom. However, the EEO may be an option at some point in the future where OAOs have reached a greater scale on the relevant platforms. We consider that we should monitor retail broadband market share changes over the price control period and when there is evidence to show that operators have gained scale, a move to an EEO approach should be considered.
- 7.25 Similar to the approach for NGA, ComReg proposes that the following retail costs for current generation Bitstream should be based on EEO costs:

- Marketing / Advertising costs

- Billing costs
- Product management costs.

7.26 ComReg believes that there are large operators in the LEA using Eircom's network (Vodafone, Sky) with an international presence who can take advantage of economies of scale and scope between their operations in Ireland and other countries in which they operate. ComReg considers that the costs above are most susceptible to such scale / scope advantages especially in the context of bundle offers (with fixed voice, mobile voice, broadband, IPTV, etc.) which are more often sold in the LEA. This impacts both advertising costs but also product management costs since the latter can be spread over a wide scope of products. Billing costs are mainly variable costs and therefore EEO costs and SEO costs are similar. ComReg will keep this under review. Retail costs are discussed in more detail below. Please refer to paragraphs 7.10 and 7.11 above which explains how the EEO costs are derived in the DCF model.

7.27 Outside the LEA, ComReg considers that the retail margin squeeze test should be based on a SEO test given the number of smaller operators in this area. Outside the LEA, Eircom Retail holds approximately 30% of the retail broadband market while OAOs hold approximately 30% of the retail broadband market (UPC with the other 30%). Of the OAO share of 30%, the majority of these are smaller operators (IFA Telecom, Magnet, Digiweb, etc.), who have a low retail broadband market penetration (30% or less) in this area and who account for about 30% of the 30% retail broadband market share, with the exception of Vodafone who accounts for about 30% of the 30% retail broadband market share in that area. In order to allow the smaller operators (around 30%) to increase their customer base and to encourage competition Outside the LEA, ComReg considers that it may be more appropriate to use the SEO test so as to allow sufficient margin to these operators.

7.2.6 Operator volume base

7.28 There are three possible options to adjust the retail margin squeeze test to account for differences in economies of scale between Eircom and the access seekers. These options are:

- 10% market share
- 15% market share
- 25% market share.

- 7.29 A 25% market share was previously applied in the 2006 Retail Minus Decision and more recently it was adopted as part of the margin squeeze tests for NGA. The 25% retail broadband market share does not correspond to the market share of any operator today Outside the LEA but to the market share of an efficient operator in the medium term. If market shares are set too low, there could be a risk of not incentivising operators to grow sufficiently. Given that we wish to avoid inefficient entry ComReg is of the preliminary view that a 25% retail broadband market share should be applied when adopting the SEO cost base but we will keep this under review.

7.2.7 Appropriate cost standard:

- 7.30 The options for the appropriate cost standard to apply in the retail margin squeeze tests include the following:
- (i) Average Variable Cost ('AVC')
 - (ii) Average Avoidable Cost ('AAC')
 - (iii) LRAIC
 - (iv) LRAIC plus
 - (v) Average Total Cost ('ATC').
- 7.31 In summary, the AVC standard is based on the variable cost of producing an additional unit of output. AVC does not include an allocation of fixed costs, which are the major cost component faced by telecom operators. AAC represent the short-run avoidable variable and incremental fixed costs of the additional sales of the product in question. This standard is distinct from AVC insofar as it includes fixed costs which would otherwise be avoided if the incremental output were no longer produced.
- 7.32 The remaining three options presented above all include a fixed cost allocation. LRAIC is the average efficiently incurred variable and fixed costs that are directly attributable to the activity concerned over the long-run. This approach does not include an apportionment for common costs. 'LRAIC plus' is the average efficiently incurred variable and fixed costs that are directly attributable to the activity concerned over the long-run, plus a mark-up for joint and common costs. ATC is the average total cost and includes variable, fixed, joint and common costs based on historical cost data but with no adjustments for efficiencies.

- 7.33 We consider that to apply an AAC cost rule in an ex-ante context could lead to sub-optimal entry conditions with little entry occurring. This would be to the detriment of competition and, in turn, consumers. In addition, the avoidable costs is the relevant measure when assessing whether there is concerns around future exclusion or exit of current efficient competitors from the retail broadband market. Given that this is not the issue, we consider that the ATC approach is the appropriate cost standard for the retail margin squeeze test. We consider that the difference between ATC and LRAIC plus in the context of the retail costs is generally not material.
- 7.34 To date, the DCF model from the 2006 Retail Minus Decision was based on the ATC costs of Eircom. In addition, the NGA margin squeeze model now applied in the context of NGA is also based on the ATC costs of Eircom. Therefore, ComReg is of the preliminary view that the retail margin squeeze test in the context of current generation Bitstream products in the LEA and Outside the LEA should be based on the ATC costs of Eircom.

7.2.8 Portfolio or product-by-product:

- 7.35 The retail margin squeeze test can be conducted either on:
- A single product offered by the SMP operator; or
 - A number of products as a whole i.e., a portfolio of products.
- 7.36 There are sound economic reasons to allow some efficient price discrimination and hence cost recovery from a broader range of services.
- 7.37 ComReg proposes that the retail margin squeeze test in the LEA should be based on a portfolio approach where Eircom should recover the ATC costs for standalone current generation broadband services in aggregate. ComReg considers that the portfolio approach is reasonable given that Eircom is facing some retail competition from other operators in the LEA. This approach also ensures regulatory consistency given that the portfolio approach has also been applied in the Bundles Decision and in the NGA Decision.
- 7.38 Therefore, in the LEA, Eircom should ensure that the average of Eircom's retail revenues for its Retail current generation Broadband products recovers the average total retail and wholesale costs. Eircom would have some flexibility to price above or below the retail costs on certain retail current generation broadband products but it should ensure that the weighted average total retail and wholesale costs are covered by the retail current generation broadband revenues.

- 7.39 ComReg considers that Outside the LEA the product-by-product approach should be adopted. However, given that it is likely that there is more than one retail offer supported by a single wholesale offer Outside the LEA, it is reasonable for Eircom to assess the weighted average retail price against the costs associated with the wholesale offering. However, unlike the portfolio approach described above, it is proposed that Eircom would pass the margin squeeze test on a product-by-product basis where each offer would have to pass its own ATC. Therefore, Eircom would not have the flexibility to price above or below the retail costs on certain retail current generation broadband products Outside the LEA. This approach ensures regulatory consistency with the approach taken in the Bundles Decision where bundles Outside the LEA are assessed on an individual bundle basis. ComReg considers that Outside the LEA the prospective competitive conditions are not as evident as those within the LEA. The majority of competitors Outside the LEA rely on Bitstream from Eircom. As such, the added flexibility (of a portfolio approach) is not appropriate Outside the LEA.

ComReg's Preliminary View:

- 7.40 The table below sets out a summary of the proposed principles that should apply regarding the retail margin squeeze tests in the LEA and Outside the LEA for current generation wholesale Bitstream products.

Principle	Retail margin squeeze test in the LEA	Retail margin squeeze test Outside the LEA
Operator cost base	SEO and EEO costs	SEO costs
Operator market share	25% (on SEO costs only)	25%
Cost standard	ATC	ATC
Model type	DCF model	DCF model
Portfolio or product-by-product	Portfolio	Product-by-product

7.3 The retail margin squeeze tests

7.41 As set out above, ComReg proposes that the retail margin squeeze tests, both in the LEA and Outside the LEA, should be applied through the DCF Model, which was previously used under the 2006 Retail Minus Decision but which has been updated as part of this consultation to take account of the proposed inputs at subsection 7.2 above as well as the differentiation between the LEA and Outside the LEA.

7.42 The retail margin squeeze tests are discussed separately below.

7.3.1 Retail margin squeeze test in the LEA

7.43 The proposed retail margin squeeze tests in this consultation relate to standalone current generation retail broadband either sold on its own or sold as part of a bundle with other services. A current generation broadband retail product sold with RFNA is also subject to the obligation not to unreasonably bundle and therefore it is subject to a separate regime on bundles, as set out in the Bundles Decision. The current retail minus price control from the 2006 Retail Minus Decision forms part of the net revenue test in the Bundles Decision. Any amendment to the 2006 Retail Minus Decision by virtue of this consultation process will need to flow through to any future monitoring of broadband sold in a bundle with RFNA.

7.44 In the LEA, it is proposed that the retail margin squeeze test should be applied on a portfolio basis by taking the aggregate of retail services (retail revenues) and testing these against the aggregate of the retail and wholesale costs. Therefore, the retail margin squeeze test in the LEA (known as the “Retail Margin Squeeze test in the LEA”) should ensure that Eircom Retail does not create a retail margin squeeze between:

- (i) the retail price of a single current generation retail product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products’ individual prices where more than one retail product is supported by a single offering, and
- (ii) the price for wholesale current generation Bitstream.

- 7.45 Eircom should ensure that the average of Eircom's retail revenues for its Retail current generation Broadband products recovers the average total retail and wholesale costs across a portfolio of retail products. This should allow Eircom some flexibility to price above or below the retail costs on certain retail broadband products but it must ensure that the weighted average total retail and wholesale costs are covered by the retail current generation broadband revenues. ComReg considers that only where the total average revenues are not likely to cover total average retail and wholesale costs should a wholesale (or retail) price change be required to the underlying Bitstream price. The proposed retail margin squeeze test for current generation Bitstream in the LEA is consistent with the retail margin squeeze test already in place for standalone NGA services.
- 7.46 ComReg is of the preliminary view that the retail margin squeeze obligation should apply in relation to promotions, discounts and bundles, even if an offer is in the WBA market is only planned to be offered for a limited promotional period. ComReg believes that it would not make sense for promotions, discounts and bundles to fall outside of the normal regulatory controls. Just because an offer in the WBA market is offered for a promotional period does not automatically imply that it may have no potential competitive harm. Therefore, ComReg is of the preliminary view that all retail products must be consistent with the retail margin squeeze obligations set out in this draft decision.

ComReg's Preliminary View:

- 7.47 The Retail Margin Squeeze test in the LEA, based on the DCF Model, should ensure that Eircom Retail does not create a retail margin squeeze between:
- (i) the retail price of a single current generation retail product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products' individual prices where more than one retail product is supported by a single offering, and
 - (ii) the price for wholesale current generation Bitstream.

- 7.48 The Retail Margin Squeeze test in the LEA should apply to promotions, bundles and discounts that are provided in the context of current generation Bitstream products / services.

7.3.2 Retail margin squeeze test Outside the LEA

- 7.49 For the reasons set out above in subsection 7.2.8, Outside the LEA, ComReg considers that the retail margin squeeze test should be applied on a product-by-product basis. ComReg considers that given that it is likely that there is more than one retail offer supported by a single wholesale offer Outside the LEA it is reasonable for Eircom to assess the weighted average retail price against the costs associated with the wholesale offering. However, unlike the portfolio approach described above, it is proposed that Eircom would pass the margin squeeze test on a product-by-product basis and therefore it would not have any flexibility Outside the LEA to price above or below the retail costs on certain retail broadband offers. The retail margin squeeze test Outside the LEA (known as the “Retail Margin Squeeze test Outside the LEA”) should ensure that Eircom Retail does not create a retail margin squeeze between:

- (i) the retail price of a single current generation retail product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products’ individual prices where more than one retail product is supported by a single offering, and
- (ii) the price charged by Eircom for wholesale Bitstream.

- 7.50 The retail margin squeeze test Outside the LEA should be applied by taking the retail price(s) and testing it against the retail and wholesale costs associated with the equivalent wholesale service. Therefore, each retail product must pass the retail margin squeeze test as set out in the DCF model.

- 7.51 Similar to the proposal set out above at paragraph 7.46, the retail margin squeeze obligation should apply in relation to promotions, discounts and bundles, even if an offer in the WBA market is only planned to be offered for a limited promotional period.

ComReg’s Preliminary View:

- 7.52 The Retail Margin Squeeze test Outside the LEA, based on the DCF Model, should ensure that Eircom Retail does not create a retail margin squeeze between:

- (i) the retail price of a single current generation retail product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products’ individual prices where more than one retail product is supported by a single offering, and

(ii) the price charged by Eircom for wholesale Bitstream.

- 7.53 The Retail Margin Squeeze test Outside the LEA should apply to promotions, bundles and discounts that are provided in the context of current generation Bitstream products / services.

7.3.3 Retail price notification and compliance procedures:

- 7.54 ComReg is of the preliminary view that Eircom should be required to notify ComReg of all retail prices for new and amendments to existing current generation retail Bitstream products at least 5 working days before the new (or revised) prices are expected to come into effect, by email communication. If the new or amended retail price being notified gives rise to a wholesale adjustment then the notification period to ComReg of 3 months (or 4 months in the case of a wholesale price increase) also applies, as discussed in Chapter 5 of this consultation document.
- 7.55 At the point of notification of the retail price (as set out above) ComReg proposes that Eircom should also provide ComReg with a statement of compliance for all current generation broadband retail product(s) (new prices and changes to existing prices), demonstrating how it is complying with the retail margin squeeze test(s).
- 7.56 The proposed statement of compliance should include the following:
- (i) A full and true disclosure of all material facts for the purpose of demonstrating compliance with the price control and the retail margin squeeze test(s) based on the DCF Model.
 - (ii) All relevant supporting documentation for the purpose of demonstrating compliance with the price control and the retail margin squeeze test(s) based on the DCF Model.
 - (iii) Demonstration of how any amendments to the price of the equivalent wholesale offering of an existing product are and will be in compliance with the price control obligation based on the DCF Model.
- 7.57 Once ComReg receives the statement of compliance from Eircom it will assess it within 5 working days. Following the review, ComReg has a number of options in terms of how it proceeds, including the following:
- (i) Provide Eircom with both (a) an appropriate written view, insofar as possible based on the information provided by Eircom at that point in time, in relation to the statement of compliance and (b) written confirmation that the making available or offering for sale of the new or existing retail product appears to be in line with the retail margin squeeze test(s). However, any such written *prima facie* view provided by ComReg does not fetter ComReg's future discretion in relation to its statutory powers;
 - (ii) Request any further information from Eircom and set a deadline by which such information shall be provided;

- (iii) Inform Eircom in writing that the amendment(s) would in ComReg's view, not be in compliance with the price control and the retail margin squeeze test(s). This written notification would include reasoning for ComReg's view and would also inform Eircom that the amendment if made operative will or could result in the issuing of a notification of non-compliance;
- (iv) For the purpose of further requirements to be complied with by Eircom relating to the price control and the retail margin squeeze test(s), issue a direction or directions to Eircom, to refrain from making operative the corresponding amendment(s) to the equivalent wholesale offering of any new or existing product; or
- (v) For the purpose of further specifying requirements to be complied with by Eircom relating to the price control and the retail margin squeeze test(s), issue a direction or directions to Eircom, to refrain from making available or offering for sale, the equivalent wholesale offering of any new product.

7.58 ComReg considers that the options above should ensure that a product offering either about to be launched by Eircom or a change to an offering already launched in the retail broadband market is not anti-competitive and is in compliance with the price control obligations imposed on Eircom. The options allow ComReg to take action where appropriate and to ensure that products launched by Eircom can be effectively replicated by other operators, where appropriate, and are beneficial to consumers and the marketplace.

7.59 In the context of the retail margin squeeze test, it is important to note that notification by Eircom to ComReg of a statement of compliance does not mean that the product has been "approved" by ComReg. ComReg considers that assessing products for compliance with the price control obligations is an ongoing process and ComReg reserves it right to intervene at any stage (even post launch of a product / service) where it believes that Eircom may not be in compliance with its obligations.

7.60 The proposed notification and compliance procedures set out above are consistent with notification and compliance procedures already in place for NGA services, as specified in the NGA Decision.

ComReg's Preliminary View:

- 7.61 For retail prices, Eircom should notify all retail prices for new and for amendments to existing current generation Bitstream products and services no later than 5 days before the new price is expected to come into effect. At the point of notification of the retail price, Eircom should also provide ComReg with a statement of compliance which demonstrates how the new / revised price complies with the retail margin squeeze test.
- 7.62 The statement of compliance should include the following:
- (i) A full and true disclosure of all material facts for the purpose of demonstrating compliance with the price control and the retail margin squeeze test(s) based on the DCF Model.
 - (ii) All relevant supporting documentation for the purpose of demonstrating compliance with the price control and the retail margin squeeze test(s) based on the DCF Model.
 - (iii) Demonstration of how any amendments to the price of the equivalent wholesale offering of an existing product are and will be in compliance with the price control obligation based on the DCF Model.

Q. 5 Do you agree with ComReg's preliminary views above in relation to the proposed retail margin squeeze tests including the proposals regarding the notification and compliance procedures for retail prices associated with current generation Bitstream? Please provide reasons for your response.

Chapter 8

8 Bitstream Ancillary Charges

8.1 Introduction

- 8.1 In ComReg's Decision on NGA in ComReg Decision D3/13, ComReg specified that all ancillary charges associated with the provision of WBA would be subject to a cost orientation obligation which included both current generation and next generation services.
- 8.2 ComReg stated in the NGA Decision that the cost orientation obligation should ensure that essential ancillary services / facilities for the provision of current generation and next generation are not priced in a discriminatory manner and that there is a level playing field for all operators to compete. The obligation also ensures that Eircom should recover no more than the efficient cost of provision of the service plus a reasonable rate of return. ComReg also stated that the costs associated with these services / facilities should be consistent with the cost models / pricing structures already in place in Market 4 and Market 6 (Terminating segment of Leased Lines) where these services specifically relate.
- 8.3 The ancillary services referred to in the NGA Decision are as follows:
- Associated facilities, including all connection charges
 - Backhaul for Next Generation Bitstream and VUA, including backhaul based on Ethernet technology
 - Co-location
 - Interconnection, including interconnection based on Ethernet technology, to include the following:
 - i) In-building handover
 - ii) In-span handover
 - iii) Customer-sited handover
 - Migrations.

8.2 Ancillary charges in the Eircom Bitstream Price List

- 8.4 ComReg has reviewed the current version of the Eircom Bitstream Access Reference Offer (“BARO”) price list⁴³ (version 7.21), published on the Eircom wholesale website. As part of this consultation we are assessing the level of the charges in the table below to ensure that they are in line with the cost orientation obligation:

Figure 8.1: Ancillary charges in the Eircom BARO price list

Description	Price - €	Eircom table number in BARO	Notes
Service establishment charge	€8,035	Table 2.1	Note 1
Connection charges:			Note 2
<i>Bitstream IP and MB</i>	€15	Table 2.2	
<i>Bitstream VC</i>	€90		
<i>Bitstream EA</i>	€75		
Cessation charge	€15	Table 2.4	Note 3
Port transfer charge	€15	Table 2.5	Note 3
Downgrade charge	€15	Table 2.6	Note 3
Upgrade charge:			Note 3
<i>24 Mb Bitstream MB upgrade (per port)</i>	€15	Table 2.7	
Bitstream Backhaul Connection Charges:			Note 4
<i>BCS STM1 and 45M CSH⁴⁴</i>	€16,000	Table 3.1	

⁴³ [http://www.eircomwholesale.ie/Reference-Offers/BARO/.\(Version 7.21\)](http://www.eircomwholesale.ie/Reference-Offers/BARO/.(Version 7.21))

⁴⁴ Customer site handover

BCS STM1 and 45M IBH ⁴⁵	€11,000		
	€7,500		
BECS 100M – 10 GB CSH	€5,000		
BECS 500M and 1Gb IBH			
Bitstream Backhaul Annual Rental Charges:		Table 3.2	Note 5
BCS STM – 1 CSH	€40,000		
BCS STM – 1 IBH	€20,000		
BCS 45M CSH	€16,250		
BCS 45M IBH	€3,750		
BECS 100M CSH	€15,000		
BECS 250M CSH	€20,000		
BECS 500M CSH	€25,000		
BECS 500M IBH	€15,000		
BECS 1 Gb CSH	€35,000		
BECS 1 Gb IBH	€25,000		
BECS 10 Gb CSH	€55,000		

- 8.5 **Note 1:** As ComReg understands it, the service establishment charge is a one-off charge levied on each operator to recover Eircom's costs in providing authorisation and training to Operator staff in Bitstream IT systems to support order processing. ComReg considers that Eircom should review this charge as part of this consultation process and provide ComReg with a breakdown of the processes and costs involved (on a confidential basis). ComReg also welcomes the views of the Industry in relation to the current Service Establishment Charge.

⁴⁵ In-building handover

8.6 **Note 2:** As ComReg understands it, these charges relate to the cost to Eircom of connecting an access seeker to the various Bitstream service. As ComReg understands it the Bitstream Internet Protocol ("IP") service is a set of products that uses world-wide standard IP protocols for the transfer of data, the Bitstream Managed Backhaul ("MB") product is a usage based product set while the Bitstream Virtual Circuits ("VC") is an Asynchronous Transmission Mode ("ATM") based Bitstream product. ComReg considers that Eircom should review these charge as part of this consultation process and provide ComReg with a breakdown of the processes and costs involved on a confidential basis. ComReg also welcomes the views of the Industry in relation to these connection charges.

8.7 **Note 3:** The charge of €15 relates to the costs of migrations between services for example, from Bitstream to Line Share and from Line Share to LLU. In 2011, Eircom reviewed the migration processes between the various services, from Bitstream to Line Share (and LLU) and from Line Share to LLU, and assessed the overall cost of migrations. Rather than having a different migration charge for different services and to ensure that operators were not disincentivised from moving between various services, Eircom set the migration charge at €15 for all forms of migration. The migration charge of €15 is based on the administration / order handling costs (soft migrations) and the cost of truck roll (hard migrations), across all services divided by the estimated migration volumes for the various platforms.

ComReg considers that the current charge of €15 seems reasonable given that this single charge is used regardless of the service which should not disincentivise operators from moving to one service as opposed to another. We would welcome the views of respondents in this regard, including any supporting information to substantiate your response.

8.8 **Note 4:** These connection charges relate to Bitstream backhaul; customer site handover and In-building handover. Based on recent discussions with Eircom, it appears that these charges will be redundant from early 2014 given that Eircom is planning to handover current generation Bitstream traffic and BMB traffic to wholesale operators on wholesale Ethernet interconnect link ("WEIL") connections. Therefore, the WEIL charges set out on the Eircom wholesale Leased Lines price list will apply once this is in place.

- 8.9 **Note 5:** These charges relate to the rentals for Eircom's Bitstream Backhaul charges. Similar to Note 4 above and based on discussions with Eircom, it seems that these charges will also be redundant from early 2014. ComReg considers that the HCA methodology maybe the most appropriate approach for setting such prices given that the relevant assets would be substantially depreciated. This approach would ensure that Eircom does not over or under recover their actual costs adjusted for efficiency (plus a reasonable rate of return). The risk of using an alternative such as the BU-LRAIC+ approach for setting these charges is that it would calculate the cost of a new network being built today and not the actual costs incurred by Eircom.
- 8.10 While this consultation looks specifically at current generation ancillary charges, ComReg would like to point out that subject to the NGA Decision (ComReg Decision D03/13) Eircom is also obliged to ensure that its ancillary charges for NGA are cost oriented. ComReg considers that Eircom should gather all relevant process data and costing data relating to NGA ancillary services as ComReg intends to assess the ancillary services for NGA services in the coming months.

Q. 6 Do you agree with ComReg's preliminary views set out above regarding the assessment of the various Bitstream ancillary charges to ensure that the charges are in line with Eircom's cost orientation obligation? Please provide reasons for your response.

Chapter 9

9 Bitstream Price Floors

9.1 Introduction

- 9.1 In the WBA Price Floors Decision ComReg published its Decision on the Bitstream price floors which should ensure that the Eircom Bitstream prices in the LEA are not set too low relative to WPNIA products which could discourage efficient investment in access infrastructure (or LLU).
- 9.2 The current Bitstream price floors per the WBA Price Floors Decision are as follows:

Figure 9.1: Current Bitstream price floors

Description	Monthly minimum price floor ex VAT
Monthly port cost per user	€4.55
Monthly Backhaul costs per user – Fixed	€1.33
Monthly Backhaul cost per Mbps – variable raised at the 95 th percentile of the 5 minute readings in any calendar month.	€8.14

- 9.3 As part of the current consultation, ComReg reviewed the Bitstream price floors model and its inputs to ensure that the underlying assumptions remained appropriate. The various inputs and the assumptions associated with the Bitstream price floors are set out in the WBA Price Floors Decision and these assumptions largely remain relevant. The main changes to the Bitstream price floors model are set out below as well as the revised outputs from the model.

9.2 Revised Bitstream price floors model

- 9.4 The Bitstream price floors model was updated for the following:
- Subscriber demand
 - Updated Backhaul prices

- Updated Access Reference Offer (“ARO”) prices
- Updated price control period and
- Usage Levels.

9.5 Each one of the above is discussed in turn below:

9.2.1 Subscriber demand

- 9.6 The actual subscriber numbers up to June 2012 have been inputted to the Bitstream price floors model and the forecasts are based on current market trends from ComReg’s quarterly report data. In line with the subscriber assumptions in the Bitstream cost model, subscriptions to broadband services in the Bitstream price floors model are expected to drop slightly over the price control period but overall remain relatively stable.
- 9.7 The update to the subscriber numbers in the Bitstream price floors model would mean that the total per port charges would decrease by 3¢ cent and the per Mbps charge would decrease by 3¢ cents.

9.2.2 Updated Backhaul prices

- 9.8 The Bitstream price floors model has been updated to reflect the most up-to-date Backhaul prices from the leased lines price list on the Eircom wholesale website, based on the Eircom Network Price List V5.7 dated 11/06/2013⁴⁶.
- 9.9 The following price changes have been noted in relation to backhaul since the 2012 Bitstream price floors Decision:

⁴⁶ http://www.eircomwholesale.ie/Reference-Offers/Documents/Network-Price-List-V5-7_Unmarked/

Figure 9.2: Extract from Eircom price list of WSEA logical same region prices

	<i>WSEA Logical Annual rental (same region)</i>							
	<i>High density (Urban)</i>				<i>Med. Density (Provincial)</i>			
	<i>Option 5</i>		<i>Option 6</i>		<i>Option 5</i>		<i>Option 6</i>	
<i><u>Circuit Speed</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>
10 Mbps	€1,388	0%	€3,270	0%	€2,085	0%	€6,986	0%
20 Mbps	€1,446	0%	€3,531	0%	€2,236	0%	€7,665	0%
30 Mbps	€1,520	0%	€3,866	0%	€2,430	0%	€8,537	0%
40 Mbps	€1,678	0%	€4,574	0%	€2,839	0%	€10,378	0%
50 Mbps	€1,802	0%	€5,132	0%	€3,162	0%	€11,832	0%
75 Mbps	€1,936	0%	€5,738	0%	€3,512	0%	€13,407	0%
100 Mbps	€2,091	0%	€6,435	0%	€3,916	0%	€15,225	0%
150 Mbps	€2,389	0%	€7,776	0%	€4,692	0%	€18,715	0%
200 Mbps	€2,557	0%	€8,533	0%	€5,130	0%	€20,686	0%
250 Mbps	€2,744	-1%	€9,375	-1%	€5,616	-1%	€22,875	-1%
300 Mbps	€2,931	-1%	€10,216	-1%	€6,103	-1%	€25,065	-1%
450 Mbps	€3,492	-2%	€12,740	-2%	€7,563	-2%	€31,634	-2%
500 Mbps	€3,679	-2%	€13,581	-2%	€8,049	-2%	€33,825	-2%
600 Mbps	€3,839	-13%	€14,302	-16%	€8,467	-15%	€35,702	-16%
750 Mbps	€4,001	-21%	€15,030	N/A	€8,887	-25%	€37,596	N/A
1000 Mbps	€4,347	-37%	€16,587	N/A	€9,789	-42%	€41,651	N/A

Figure 9.3: Extract from Eircom price list of WSEA logical different regions

	<i>WSEA Logical Annual rental (different regions)</i>							
	<i>High to High</i>				<i>Medium to High</i>			
	<i>Option 5</i>		<i>Option 6</i>		<i>Option 5</i>		<i>Option 6</i>	
<i><u>Circuit Speed</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>	<i><u>Price</u></i>	<i><u>% Δ</u></i>
10 Mbps	€2,145	0%	€6,677	0%	€2,395	0%	€8,382	0%
20 Mbps	€2,284	0%	€7,304	0%	€2,579	0%	€9,210	0%
30 Mbps	€2,464	0%	€8,111	0%	€2,816	0%	€10,276	0%
40 Mbps	€2,842	0%	€9,814	0%	€3,316	0%	€12,525	0%
50 Mbps	€3,141	0%	€11,159	0%	€3,711	0%	€14,302	0%
75 Mbps	€3,465	0%	€12,616	0%	€4,139	0%	€16,226	0%
100 Mbps	€3,838	0%	€14,296	0%	€4,632	0%	€18,446	0%
150 Mbps	€4,555	0%	€17,523	0%	€5,579	0%	€22,709	0%
200 Mbps	€4,960	0%	€19,346	0%	€6,114	0%	€25,116	-1%
250 Mbps	€5,410	-1%	€21,371	-1%	€6,709	-1%	€27,791	-1%
300 Mbps	€5,860	-1%	€23,397	-1%	€7,303	-1%	€30,466	-1%
450 Mbps	€7,210	-2%	€29,472	-2%	€9,086	-2%	€38,490	-2%
500 Mbps	€7,660	-2%	€31,497	-2%	€9,681	-2%	€41,166	-2%
600 Mbps	€8,046	-15%	€33,233	-16%	€10,190	-16%	€43,459	-16%
750 Mbps	€8,436	-24%	€34,985	N/A	€10,705	-25%	€45,773	N/A
1000 Mbps	€9,269	-41%	€38,735	N/A	€11,805	-43%	€50,726	N/A

Figure 9.4: Wholesale LLU Backhaul IBH (In Building Handover)

LLU Backhaul Annual rental IBH (In-Building Handover)	Old € Price	New € Price
1 Gbps	17,594	12,314
10 Gbps	47,347	17,551

- 9.10 When the above backhaul price changes are reflected in the Bitstream price floors model, the total per port charges would fall by 30 cents and the per Mbps charge would fall by 30 cents.

9.2.3 Updated ARO prices

- 9.11 Since publication of the Bitstream price floors Decision in 2012 there have been some changes to the wholesale prices in the Eircom ARO price list⁴⁷. For example, the price for collocation surveys and site inspections / offers have changed. These collocation prices have now been updated in the Bitstream price floors model.
- 9.12 The main updates are set out in the table below.

Figure 9.5: Summary of ARO price list changes

Pre-ordering Service	Description	Old Price - €	New Price - €
Full Survey Request	One standard price regardless of building type	1,315	841
Combined Full Survey Request and Site Offer	One standard price regardless of building type	2,786	1,800
Site Offer	Standard price	1,471	959

- 9.13 When the ARO price changes are reflected in the Bitstream cost model this would mean that the total per port charges would fall by 30 cents and the per Mbps charge would remain constant.

⁴⁷ <http://www.eircomwholesale.ie/Reference-Offers/Documents/ARO-price-list-v6-6/>

9.2.4 Updated price control period

- 9.14 The period / duration of the Bitstream price floors model has been updated with a starting point from 1st April 2012. This may be updated further as part of the final decision.
- 9.15 This update means that the per port charge would fall by 3 cents and the per Mbps charge would fall by 3 cents.

9.2.5 Usage Levels

- 9.16 In recent months, operators have highlighted to ComReg that the nascent use by consumers of the various terrestrial i-players / on demand platforms including high-definition film and television streaming may result in an adverse deviation from the historical usage trend in Ireland. Furthermore, recent figures on BMB usage show that throughput levels are increasing on average at the 95th percentile. Consequently, ComReg considers it reasonable to assume that bandwidth levels will increase over the price control period.
- 9.17 As such, and in line with the bandwidth assumptions used in the Bitstream cost model, ComReg has revised its Bitstream price floors calculation to take account of the increasing bandwidth usage by consumers.
- 9.18 A sensitivity analysis of 16 bandwidth scenarios from 150kbps to 300 kbps is used in the model to create an average bandwidth level upon which the Bitstream price floors should be calculated over the price control period. Please refer to paragraphs 6.99 – 6.110 in Chapter 6 for a further explanation of the rationale behind the bandwidth calculation.
- 9.19 The proposed revised bandwidth results in an increase to the total per port charges of 3 cents (due to the higher apportionment of the fixed cost at higher usage levels) and a drop in the Mbps charge by € 3.

9.2.6 Revised Bitstream price floors

- 9.20 On the basis of the proposed changes above, the Bitstream price floors would be as follows:

Figure 9.6: Revised Bitstream price floors

Price control	Monthly minimum price floor ex VAT
Monthly port cost per user	€4.34

Monthly Backhaul costs per user – Fixed	€1.57
Monthly Backhaul cost per Mbps – variable raised at the 95 th percentile of the 5 minute readings in any calendar month.	€5.60

- 9.21 For example, under the current charging regime, for a usage level of 100kbps at the 95th percentile, the price floor would be $€4.55 + €1.33 + (€8.14 * 0.1 \text{ Mbps}) = €6.67$ per month.
- 9.22 By implementing the proposed revisions discussed above, this would mean that for 100kbps at the 95th percentile peak, the revised Bitstream price floor would be $€4.34 + €1.57 + (€5.60 * 0.1 \text{ Mbps}) = €6.45$ per month.
- 9.23 In general, due to the proposed higher levels of throughput assumed in the model, the per Mbps charge is falling as there is a higher apportionment of fixed costs allocated to the per port charge. However, at a blended level, the proposed changes only result in an overall decrease of 22 cents in the Bitstream price floor level for a given level of throughput (although throughput has increased). Therefore, we propose that the current Bitstream price floors that are already in place should remain in place given that the changes above do not appear to result in any overall material difference and may not yet be sufficiently stable to merit a change.
- 9.24 Eircom should continue to review the Bitstream price floors model on an ongoing basis to ensure that the main inputs and assumptions remain reasonable compared to actual information available.

Q. 7 Do you agree that the current level of Bitstream price floors should remain in place? Please provide reasons for your response.

Chapter 10

10 Appropriate Market 4 Access Input for Standalone Broadband (“SABB”)

10.1 Introduction

- 10.1 In the earlier Chapters of this document we have discussed Bitstream and the costs associated solely with Eircom’s core network i.e., transmission / backhaul costs in providing a wholesale broadband service.
- 10.2 Up until recently (1 July 2013) the wholesale Bitstream service provided by Eircom could only be purchased with a POTs based Bitstream service, where the voice and the ADSL / ADSL2plus service was integrated over the same 2-wire copper pair. From 1 July, Eircom now offers a SABB service which allows an ADSL / ADSL2plus service to be delivered over a 2-wire copper pair without a POTs or voice telephony service.
- 10.3 Therefore, SABB (or also commonly referred to as Naked DSL) is a WBA product purchased without SB-WLR. Eircom recently launched the SABB service as the wholesale equivalent of their retail standalone broadband / Naked DSL offer. This recently launched SABB service is subject to the price control obligation in the WBA market.
- 10.4 As this SABB service is no longer supported by the SB-WLR service and its associated price (currently €18.02 or €15.02 in the LEA), it is now necessary to assess the relevant underlying cost contribution from the Access network for this service.
- 10.5 Currently, all WBA products and services must comply with the retail minus or retail margin squeeze for standalone Bitstream in Market 5, subject to the 2006 Retail Minus Decision. In addition, in the Bundles Decision, ComReg specified that Eircom shall not create a margin squeeze between the WBA market and the WPNIA market in order to ensure a sufficient economic space between the price for LLU and Bitstream. As a result the concept of a minimum price floor was put in place in the Bundles Decision which Eircom must comply with when setting the price for SABB.

- 10.6 The current margin squeeze test between WPNIA and WBA (which determine the minimum price floor for SABB) in the Bundles Decision uses the LLU price as the key input into the SABB price floor to ensure an OAO using the LLU service is in a position to profitably replicate the Eircom wholesale and retail standalone broadband service. It is important to highlight that the monthly rental price for LLU (and SLU) is based on a “BU-LRAIC+” methodology using the CAM, as set out in the LLU Pricing Decision. ComReg considers that the BU-LRAIC+ methodology should send the appropriate “build or buy” signals to the market place and encourage efficient investment and innovation in new and enhanced infrastructures.
- 10.7 In the Bundles Decision, ComReg set out the appropriate components of the cost stack, which should be used to calculate the appropriate minimum price floor for the unbundled local metallic path (“ULMP”) / LLU component in a SABB product, set by reference to REO costs.
- 10.8 In the Bundles Decision ComReg specified that the price at which Eircom sells or offers a Downstream Regulated Wholesale Service⁴⁸ must be greater than the sum of:
- (i) the ULMP cost stack, and
 - (ii) the unavoidable costs of a REO that must be incurred in order to provide a service equivalent to the relevant Downstream Regulated Wholesale Service.
- 10.9 In summary and as set out in the Bundles Decision, the LLU cost stack for an OAO will be used to calculate the appropriate minimum price floor for the ULMP component in a SB-WLR product or a SABB (Naked WBA (Bitstream) DSL) product, and will be set by reference to a REO by including the following:
- The price of LLU⁴⁹;
 - The average efficient cost of fault clearance per month;
 - The cost of ULMP connection fee and ULMP disconnection fees over an average customer lifetime;
 - The appropriate cost of a line card (if any);

⁴⁸ Downstream Regulated Wholesale Service means a regulated wholesale service which is sold or offered by Eircom to OAOs downstream from the WPNIA Market and contains a ULMP component (examples of such Downstream Regulated Wholesale Services include, for example, SB-WLR and Naked WBA (Bitstream) DSL).

⁴⁹ The published price of LLU or as appropriate the relevant / equivalent cost of local loops in the relevant geographic footprint of the service.

- Where appropriate a margin for the provision of VOIP (where the line card is irrelevant);
- Contribution towards co-location charges;
- The minimum price floor model for WBA as provided by ComReg in the WBA Price Floors Decision; and
- A rate of return on the capital equipment of 10.21%, the WACC currently applied to Eircom.

10.10 Please see Chapter 7 of the Bundles Decision for a further explanation of the cost components above.

10.11 Therefore, what we are proposing to do as part of this consultation is to put indicative unit costs on the various cost components (above) in order to determine an indicative minimum price floor level for SABB. This is discussed further below under subsection 10.2.

10.12 In addition, and similar to our concerns of excessive pricing by Eircom Outside the LEA as discussed in Chapter 5, we are also proposing that SABB Outside the LEA should be cost oriented as discussed below in subsection 10.3.

10.2 SABB in the LEA

10.13 In the LEA, our objective is to protect those operators that have invested in LLU, as discussed in detail in Chapter 5. On that basis the minimum price floor components already set out in the Bundles Decision remains appropriate for SABB in the LEA.

10.14 As stated above and as set out in the Bundles Decision, the LLU cost stack is the relevant input for SABB.

10.15 In summary and in line with the cost components set out in the Bundles Decision, set out below is indicative unit costs for each cost component in order to derive an indicative minimum price floor for SABB in the LEA:

Figure 10.1: Indicative unit costs / prices as inputs to a margin squeeze test for SABB

Description	€
LLU rental	9.91*
LLU faults	0.96
Connection and migration	0.77
ADSL port and BRAS	3.42
Proposed indicative minimum price floor	15.06
Plus relevant inputs from ComReg's Decision on Bitstream price floors in the LEA: Fixed per port price of €1.33 and per Mbps usage charge of €8.14, or as amended from time to time	

* The published price of LLU or as appropriate the relevant / equivalent cost of local loops in the relevant geographic footprint of the service

10.16 At the date of publication of this consultation the prices / unit costs faced by an operator are set out above, some of these prices / unit costs are for illustrative purposes only and would require a more in-depth review in the event of a margin squeeze investigation.

10.2.1 LLU Rental:

10.17 As discussed above at subsection 10.1, the price for LLU is based on the BU-LRAIC+ methodology which is derived from the CAM. The details are set out in the LLU Pricing Decision. More recently in January 2013, Eircom reduced the rental price for LLU from €12.41 to €9.91, as noted in ComReg Information Notice 13/01. Eircom's main reason for the change in the price was due to the fact that less exchanges has been unbundled by OAOs over the past few years compared to what was initially envisaged as part of the LLU pricing review in 2010. As a result, Eircom proposed to reduce the LLU monthly rental price to €9.91 to reflect the fact that OAOs had gone to fewer exchanges than anticipated.

10.18 ComReg considers that the current LLU price of €9.91 is reflective of the BU-LRAIC+ cost of the local loop in the current designated LLU footprint only. However, the current LLU rental price may not be reflective of the relevant access network serving the SABB service, given that the provision of SABB goes beyond the LLU footprint.

10.19 In the event that the retail minus price control were to change to a cost based control for SABB in the LEA, the relevant unit cost for LLU may differ to the current monthly LLU price that is published and also to the unit cost used in the margin squeeze test in the Bundles Decision. Eircom should keep this under review.

10.20 We discuss the appropriate cost input for SABB sold Outside the LEA in subsection 10.3 below.

10.2.2 LLU Faults

10.21 In the absence of information regarding the level of faults associated with SABB, ComReg proposes that the per unit fault cost in the proposed cost stack for SABB, should be based on the LFI for LLU exchanges, which is consistent with the fault rate used by Eircom as part of the VUA cost stack for NGA. However, ComReg considers that Eircom should assess and record the actual instance of LFI associated with SABB and it should update the SABB price floor accordingly when this information is available. In any event, Eircom should ensure that the LFI is continuously monitored and where changes arise, these should be submitted to ComReg for review and updated as appropriate in the relevant cost stack.

10.2.3 Connections and migrations

10.22 ComReg proposes that the per unit cost for connections / migrations in the proposed cost stack for SABB should be based on the connection / migration charges set out in the Eircom ARO price list, which are as follows:

- Connection charge ULMP: €29.30;
- Disconnection charge ULMP: €15.00.

10.23 However, we note that the disconnection charge has been reduced to zero by Eircom since the publication of our NGA Decision and therefore this cost has not been considered relevant as part of the stack.

10.24 In calculating the per unit cost for connections / migrations we have also assumed a customer lifetime of 42 months (3.5 years) and we have also taken into account the WACC at 10.21%.

10.2.4 ADSL port

10.25 ComReg proposes that the per unit cost for the ADSL port to be included in the proposed cost stack for SABB should be consistent with the port price from the Bitstream Floors model and the Bundles Decision.

10.3 SABB Outside the LEA

10.26 While ComReg considers that the current LLU price of €9.91 may not be the appropriate cost based input for SABB Outside the LEA, the appropriate LLU cost input for SABB should be supported with the relevant cost oriented LLU access input based on the CAM. This may give rise to a change in the costing methodology (from the current BU-LRAIC+) on the basis that the prospects for investment by other entrants Outside the LEA may be limited. ComReg will consult on the appropriate costing methodology for LLU and SLU over the coming year. This will consider, among other things, whether BU-LRAIC+ remains appropriate nationally or whether an alternative is more appropriate going forward. The outcome to that consultation process will be relevant in terms of the appropriate methodology for setting the LLU price as an input to the price for SABB. The consultation process for LLU / SLU will also be required to take utmost account of the recent European Commission Recommendation with regard to network access pricing and cost recovery principles.

10.27 Outside the LEA, ComReg considers that Eircom may price excessively for SABB services, given that there is little or no alternative infrastructure competition in this area. In summary, Outside the LEA there are fewer access alternatives available and Eircom's prices do not appear to be constrained at a wholesale or retail level in this area to a similar extent to the LEA. Therefore, ComReg's objective is to protect those operators and, ultimately, consumers in rural areas from excessive prices where they decide to purchase a broadband only service from Eircom.

10.28 In order to avoid the risk of Eircom setting an excessive price for SABB Outside the LEA, ComReg proposes that the obligation of cost orientation should apply to Eircom.

10.29 In the absence of data regarding actual costs for the provision of SABB we consider that in the interim Eircom should price SABB Outside the LEA on no more than:

- SB-WLR price less the costs avoided by not providing a voice service

10.30 We consider that so long as Eircom price its SABB product in line with the proposal above we don't plan to take any compliance action in the interim.

10.31 A point to note is that the proposed pricing approach above for SABB only provides the access related network costs. Any additional broadband related costs associated with the provision of SABB may also need to be considered.

ComReg's Preliminary View:

10.32 Outside the LEA, Eircom should be subject to a cost orientation obligation in relation to SABB.

Q. 8 Do you agree with ComReg's preliminary views above with regard to the imposition of an obligation of cost orientation for SABB Outside the LEA? Please provide reasons for your response.

Chapter 11

11 Draft Decision Instrument

ComReg would appreciate respondents' views on these draft directions.

Q. 9 Do you believe that the draft text of the proposed Decision Instrument is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain your response and provide details of any specific amendments you believe are required.

1. STATUTORY POWERS GIVING RISE TO THIS DECISION INSTRUMENT

1.1. This Direction and Decision Instrument ("Decision Instrument") is made by the Commission for Communications Regulation ("ComReg") and relates to the market for wholesale broadband access as identified by the European Commission in its Recommendation of 17 December 2007 on relevant product and services markets within the electronic communications sector susceptible to *ex ante* regulation⁵⁰ ("the Recommendation") and as defined by ComReg in ComReg Decision No. D06/11.

1.2. This Decision Instrument is made:

- (i) Pursuant to Regulations 8, 9, 13 and 18 of the Access Regulations;
- (ii) Having had regard to sections 10 and 12 of the Communications Regulation Act 2002 to 2011⁵¹ and Regulation 16 of the Framework Regulations⁵² and Regulation 6 of the Access Regulations⁵³;
- (iii) Having, where appropriate, pursuant to Section 13 of the Communications Regulation Acts 2002 to 2011 complied with policy directions made by the Minister for Communications, Marine and Natural Resources⁵⁴;

⁵⁰ European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 344, 28.12.2007, p. 65).

⁵¹ Communications Regulation Act 2002 (No. 20 of 2002), as amended by the Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), the Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and the Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011).

⁵² European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011).

⁵³ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011).

⁵⁴ Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

- (iv) Pursuant to and having regard to the Significant Market Power (“SMP”) designation on Eircom in the market for wholesale broadband market and the obligations contained in ComReg Decision No. D06/11;
 - (v) Having had regard to the reasoning and analysis set out in ComReg Document No.10/56 and, where relevant, the responses thereto;
 - (vi) Having had regard to the reasoning and analysis set out in ComReg Document No. 13/90 and having taken account of submissions received from interested parties in response to ComReg Document No. 13/90 following public consultation pursuant to Regulation 12 of the Framework Regulations; and
- 1.3. Having notified the draft measure and the reasoning on which the measure is based to the European Commission, the Body of European Regulators for Electronic Communications (BEREC) and national regulatory authorities in other EU Member States pursuant to Regulations 13 and 14 of the Framework Regulations and having taken the utmost account of comments made by those parties. The provisions of ComReg Decision D06/11, ComReg Document No.10/56, ComReg Document No. 13/90 and the final decision entitled “Wholesale Broadband Access – Price control obligation in relation to current generation Bitstream” (Decision No. DXX/13, Document No. 13/XX) shall, where appropriate, be construed together with this Decision Instrument.

PART I – GENERAL PROVISIONS (SECTIONS 2 AND 3 OF THE DECISION INSTRUMENT)

2. DEFINITIONS AND INTERPRETATION

2.1. In this Decision Instrument, unless the context otherwise suggests:

“Access Regulations” means the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011);

“Additional Financial Information” means the information, as determined by ComReg, that shall be provided by Eircom on an annual basis in accordance with the Decision Instrument annexed to ComReg Decision D08/10 and has the same meaning as set out in Section 2.1 of that Decision Instrument;

“Authorisation Regulations” means the European Communities (Electronic Communications and Network Services) (Authorisation) Regulations, 2011 (S.I. No. 335 of 2011), as may be amended from time to time;

“Backhaul” means the transport capacity which connects the Eircom network and the Other Authorised Operator’s nominated Point of Handover. For example, this includes, but is not limited to, BECS/BCS;

“Bitstream” means a wholesale product provided in the Market;

“Bitstream Connection Service” or **“BCS”** means a Backhaul service currently offered by Eircom over leased line PDH/SDH interconnects/interfaces;

“Bitstream Cost Model” means the model, as amended from time to time, used by ComReg and Eircom to assess Eircom’s compliance with the obligations contained in Section 4 of this Decision Instrument. The operation and details of the Bitstream Cost Model are more particularly described in Chapter 6 of the final decision entitled “Wholesale Broadband Access – Price control obligation in relation to current generation Bitstream” (Decision No. DXX/13, Document No. 13/XX);

“Bitstream (Ethernet) Connection Service” or **“BECS”** means a Backhaul service currently offered by Eircom over Ethernet interconnects/interfaces;

“Bitstream Managed Backhaul” means a form of Backhaul provided in the Market;

“Bitstream Service Price List” means the document published by Eircom which sets out the prices relating to Eircom’s WBA products, services and facilities and forms part of the WBARO;

“Bundle” for the purpose of this Decision Instrument means a package of products or retail services, consisting of more than one service, which is on offer or on sale by Eircom;

“ComReg Decision D01/06” means ComReg Document No. 06/01 entitled “Retail minus wholesale price control for Wholesale Broadband Access Market” dated 13 January 2006; **“ComReg Decision D08/10”** means ComReg Document No. 10/67 entitled “Accounting Separation and Cost Accounting Review of Eircom Ltd.” dated 31 August 2010;

“ComReg Decision D06/11” means the ComReg Document No. 11/49 entitled “Market Review: Wholesale Broadband Access” dated 8 July 2011;

“ComReg Decision D03/13” means ComReg Document No. 13/11 entitled “Next Generation Access (“NGA”) Remedies for Next Generation Access Markets” dated 31 January 2013;

“ComReg Decision D04/13” means ComReg Document No. 13/14 entitled “Price Regulation of Bundled Offers: Further specification of certain price control obligations in Market 1 and Market 4” dated 8 February 2013;

“ComReg Document No. 10/56” means ComReg Document No. 10/56 entitled “Wholesale Broadband Access – Consultation and draft decision on the appropriate price control” dated 15 July 2010;

“ComReg Document No. 13/90” means ComReg Document No. 13/90 entitled “Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream” dated 19 September 2013;

“DCF Model” means the discounted cash flow model, as amended from time to time, used by ComReg and Eircom to monitor Eircom’s compliance with the Retail

Margin Squeeze tests regarding Current Generation WBA and is based on the following parameters;

- (i) 'Retail Margin Squeeze in the Larger Exchange Area' which is based primarily on a SEO cost base with some costs based on an EEO cost base, as described in subsection 7.2.5, Chapter 7 of ComReg Decision No. DXX/XX and is calculated based on a portfolio of products by taking into account the average total costs.
- (ii) 'Retail Margin Squeeze outside the Larger Exchange Area' which is based on a SEO cost base and is calculated on a product-by-product basis.

"Discount" means an offer or sale of a product 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; **"Eircom"** means Eircom Limited and its subsidiaries, and any Undertaking which it owns or controls, and any Undertaking which owns or controls Eircom Limited and its successors and assigns;

"Effective Date" means the date set out in Section 11.1 of this Decision Instrument;

"Equally Efficient Operator cost base" or **"EEO cost base"** is a cost base which is derived from Eircom's costs and is based on Eircom's scale of operations;

"Framework Regulations" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011);

"Historical Cost Accounts" means the historical cost accounts which Eircom is required to publish in accordance with ComReg Decision D08/10;

"Larger Exchange Area" or **"LEA"** has the meaning as set out in Section 2.1 of the Decision Instrument contained in Annex 3 of ComReg Decision D04/13;

"Long Run Incremental Cost" or **"LRIC"** means only those costs which are caused by the provision of a defined increment; **"(the) Market"** means the market for wholesale broadband access. The Market is more particularly described in Section 4 of the Decision Instrument annexed to ComReg Decision D06/11;

"Other Authorised Operator(s)" or **"OAO"** means an undertaking that is not Eircom, providing an electronic communications network or an electronic communications service authorised under Regulation 4 of the Authorisation Regulations;

"Point of Handover" means the physical point at which two networks are interconnected;

"Price Control Period" means the period of three (3) calendar years from the Effective Date;

“Promotion” means an offer in respect of a product which is available for a finite period of time and which offers a tariff reduction;

“Regulated Accounts” means the financial information referred to in Section 5.1 of this Decision Instrument annexed to ComReg Decision D08/10 and has the same meaning as set out in Section 2.1 of the Decision Instrument thereto;

“Retail Margin Squeeze in the Larger Exchange Area” as described in Section 6 of this Decision Instrument means the setting of a retail price in the Larger Exchange Area either based on a single product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products’ individual prices where more than one product is supported by a single offering by Eircom for a current generation retail broadband product(s) which does not allow another operator, relying on current generation Bitstream to provide the same or similar retail product(s) at sufficient margin by reference to the sheet entitled “Control Sheet” in the DCF Model;

“Retail Margin Squeeze outside the Larger Exchange Area” as described in Section 6 of this Decision Instrument means the setting of a retail price outside the Larger Exchange Area either based on a single product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of the retail products’ individual prices where more than one product is supported by a single offering by Eircom for a current generation retail broadband product(s) which does not allow another operator, relying on current generation Bitstream to provide the same or similar retail product at sufficient margin by reference to the sheet entitled “Control Sheet” in the DCF Model;

“Retail Product” for the purposes of this Decision Instrument means any Eircom current generation retail broadband product on offer or on sale which uses Eircom’s network equipment to transmit data signals and shall include existing current generation retail products and new current generation retail products.

“Similarly Efficient Operator cost base” or **“SEO cost base”** is a cost base which means the costs of a hypothetical efficient operator which shares the same basic cost function as Eircom but which does not enjoy the same economies of scale and scope as Eircom;

“SMP” means Significant Market Power;

“SMP obligations” are those obligations set out in Regulation 9 to 14 of the Access Regulations;

“Standalone Broadband” means ADSL/ADSL2plus service delivered over a 2-wire copper pair without a PSTN voice telephony service;

“Undertaking” has the meaning set out in Regulation 2 of the Framework Regulations;

“Usage Charge” means the price which Eircom charges another Undertaking for capacity which that Undertaking uses in relation to Bitstream Managed Backhaul

which is over and above the capacity provided for under the terms and conditions of the WBARO;

“WBA” means wholesale broadband access comprising non-physical or virtual network access including Bitstream access at a fixed location. It includes Current Generation WBA and Next Generation WBA and is synonymous with the Market;

“Wholesale Broadband Access Reference Offer” or “WBARO” is the offer of contract by Eircom to OAOs in relation to Current Generation WBA (currently the WBARO version 7.21). For the avoidance of doubt the WBARO includes the documents which are expressly referred to as being part of the WBARO. For the avoidance of doubt, however, to the extent that there is any conflict between the WBARO and Eircom’s obligations now set out herein, it is the latter which shall prevail;

“(Current Generation) WBA” means WBA provided over Eircom’s current generation copper access network infrastructure and its Associated Facilities (including self-supply by Eircom for the purpose of serving its downstream markets) that is copper based;

“(Next Generation) WBA (NGA)” means WBA provided over next generation access network infrastructure and its Associated Facilities (including self-supply by Eircom for the purpose of serving its downstream markets) that is based on new or upgraded infrastructure, including (but not limited to) fibre and/or a combination of copper and fibre access technology, capable of supporting broadband access services with enhanced characteristics compared to current generation access infrastructure; and

“Wholesale Product” means any offering in the WBA market.

3. SCOPE AND APPLICATION

- 3.1. This Decision Instrument applies to Eircom in respect to activities falling within the scope of the Market.
- 3.2. This Decision Instrument is binding upon Eircom and Eircom shall comply with it in all respects.

PART II – SMP OBLIGATIONS (SECTIONS 4 TO 7 OF THE DECISION INSTRUMENT)

4. COST ORIENTATION PRICE CONTROL OBLIGATION

- 4.1. Pursuant to Regulations 8 and 13(1) of the Access Regulations, Eircom is subject to a cost orientation obligation with regard to the monthly rental charges for Bitstream and Bitstream Managed Backhaul products and services which are provided within the Market.
- 4.2. Without prejudice to the generality of Section 4.1 and pursuant to Regulation 13 of the Access Regulations, Eircom shall ensure that it recovers no more than its

total actual incurred cost adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream and Bitstream Managed Backhaul within the Market, in line with the Bitstream Cost Model. Such costs are derived from Eircom's Historical Costs Accounts, forecasted forward over the Price Control Period.

- 4.3. Without prejudice to the generality of Sections 4.1 and 4.2 and pursuant to Regulations 8 and 13 of the Access Regulations, Eircom shall ensure that it recovers no more than its actual incurred cost, adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream and Bitstream Managed Backhaul provided outside the LEA. Costs shall be assessed in line with the costing methodology contained in the Bitstream Cost Model.
- 4.4. Pursuant to Regulations 8 and 13 of the Access Regulations and in accordance with the timelines contained in the transparency obligations set out in Section 10.3 of the Decision Instrument annexed to ComReg Decision D06/11 (as amended by Section 5.1 of this Decision Instrument) Eircom shall notify ComReg, in writing by email, no later than four (4) months before it increases the monthly rental charge(s) for Bitstream and Bitstream Managed Backhaul outside the LEA and three (3) months before it introduces a price for a new monthly rental charge(s) for Bitstream and Bitstream Managed Backhaul outside the LEA. At notification, Eircom shall furnish to ComReg with a detailed written submission demonstrating that the proposed new or increased charge(s) comply with the obligation contained in Sections 4.1 and 4.3 of this Decision Instrument. The submission shall make full and true disclosure of all material facts for the purpose of demonstrating that the proposed new or increased charge(s) comply with Sections 4.1 and 4.3 herein. Upon receipt of the submission, ComReg shall review the submission and within one (1) month, communicate to Eircom its decision whether to give or withhold approval to implement the proposed new or increased charge(s). Such approval shall not be unreasonably withheld by ComReg. Eircom shall not implement any new or increased charge(s) for Bitstream and Bitstream Managed Backhaul outside the LEA without having received such approval from ComReg. Prior to the expiry of the one (1) month period, ComReg may seek further information from Eircom to inform its decision as to whether approval to implement the new or increased charge(s) should be given or withheld. If such further information is not provided by Eircom within ComReg's timeline or to the standard required by ComReg, approval to implement the proposed new or increased charge(s) shall be withheld pending the required information being made available to ComReg for review and consideration. Upon receipt of the requested information, ComReg will proceed to make a decision as to whether approval for implementation of the new or increased charge(s) should be granted or withheld. The periods referred to in this Section 4.4 may be varied with the agreement of ComReg or at ComReg's discretion.
- 4.5. Pursuant to Regulations 8 and 13 of the Access Regulations and without prejudice to Sections 4.1, 4.2 and 4.3 of this Decision Instrument and its obligations contained in the Decision Instrument attached to ComReg Decision D08/10, Eircom shall submit annually to ComReg a written statement

reconciling the costs it actually incurs in the provision of Bitstream and Bitstream Managed Backhaul for the preceding financial year with the forecasted costs and revenues contained in the Bitstream Cost Model. Eircom shall provide a written statement explaining the extent, if any, of any such discrepancy between the actual costs and revenues and the forecasted costs and revenues in the Bitstream Cost Model over the price control period. The written statement referred to in this Section 4.5 shall be provided to ComReg in accordance with the procedure which governs the provision of Additional Financial Information contained in the Decision Instrument annexed to ComReg Decision D08/10 and shall be provided no later than seven months after the end of the financial year.

- 4.6. Pursuant to Regulation 13(1) of the Access Regulations, the price(s) charged by Eircom to any other Undertaking for Standalone Broadband provided outside the LEA shall be cost oriented.
- 4.7. Pursuant to Regulation 13(1) of the Access Regulations with regard to the Usage Charge provided outside the LEA, Eircom shall recover no more than the LRIC associated with the additional traffic used by a particular Undertaking which is over and above the average traffic assumed in the Bitstream Cost Model.

5. TRANSPARENCY OBLIGATIONS TO SUPPORT PRICE CONTROL OBLIGATIONS

- 5.1. Pursuant to Regulations 8, 9 of the Access Regulations Section 10.3 of the Decision Instrument annexed to ComReg Decision D06/11 is hereby amended by the insertion of the following:-

Eircom shall unless otherwise agreed by ComReg, make publically available and publish on Eircom's publically available wholesale website at least three (3) months in advance of coming into effect, any proposed amendments or changes to the WBARO, resulting from a price increase to an existing Current Generation WBA product, service or facility. Eircom shall notify ComReg in writing by email with the information to be published at least one (1) month in advance of any such publication taking place, that is, three (3) or four (4) months (as appropriate) prior to any amendments or changes coming into effect. The periods referred in this Section may be varied with the agreement of ComReg or at ComReg's discretion.

- 5.2. In accordance with Section 10.1 of the Decision Instrument annexed to ComReg Decision D06/11 Eircom shall have an obligation of transparency as provided for by Regulation 9 of the Access Regulations in respect for Access. Without prejudice to the generality of Section 10.1 and Section 10.3 of the Decision Instrument annexed to ComReg Decision D06/11 pursuant to Regulation 13 of the Access Regulations Eircom shall unless otherwise agreed by ComReg, make publically available and publish on Eircom's publically available wholesale website at least three (3) months in advance of coming into effect, any proposed amendments or changes to the WBARO, resulting from a price increase to an existing Current Generation WBA product, service or

facility. Eircom shall notify ComReg in writing by email with the information to be published at least one (1) month in advance of any such publication taking place, that is, three (3) or four (4) months (as appropriate) prior to any amendments or changes coming into effect. The periods referred in this Section may be varied with the agreement of ComReg or at ComReg's discretion. For the avoidance of doubt, except as expressly varied in this Decision Instrument, Section 10.3 of the Decision Instrument of ComReg Decision D06/11 shall otherwise be unaffected and shall continue to remain in force.

6. RETAIL MARGIN SQUEEZE PRICE CONTROL OBLIGATION

- 6.1. The Direction in this Section is issued pursuant to Regulations 13 and 18 of the Access Regulations, for the purpose of further specifying requirements to be complied with by Eircom relating to the obligation not to cause a margin / price squeeze pursuant to Regulation 13 of the Access Regulations and Section 12.4 of the Decision Instrument annexed to ComReg Decision D06/11.
- 6.2. Eircom is directed not to cause a Retail Margin Squeeze in the Larger Exchange Area between: (i) the retail price of a single Retail Product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of Retail Products' individual prices where more than one Retail Product is supported by a single offering; and (ii) the price charged by Eircom for wholesale Bitstream. The assessment of the Retail Margin Squeeze in the Larger Exchange Area shall be conducted on a portfolio basis with reference to the DCF Model.
- 6.3. Eircom is directed not to cause a Retail Margin Squeeze outside the Larger Exchange Area between:- (i) the retail price of a single Retail Product which is supported by a single wholesale offering or, the weighted average (by number of subscribers) of Retail Products' individual prices where more than one Retail Product is supported by a single offering; and (ii) the price charged by Eircom for wholesale Bitstream. The assessment of the Retail Margin Squeeze outside the Larger Exchange Area shall be conducted on a product-by-product basis by reference to the DCF Model.
- 6.4. Eircom shall notify ComReg (by email) of all retail prices for new Retail Products and for retail price amendments to existing Retail Products no later than 5 working days prior to the date that the new or revised price is to become operative (for the avoidance of doubt the timelines set out at Section 5.1 of this Decision Instrument and Section 10 of the Decision Instrument annexed to D06/11 shall not apply in this respect, where no wholesale price amendment is required).
- 6.5. For the purposes of new Retail Products and for amendments to existing Retail Products, Eircom shall furnish to ComReg, at the same time as it notifies ComReg in accordance with Section 6.4 of this Decision Instrument, a detailed written statement of compliance demonstrating Eircom's compliance and proposed compliance with the price control obligation, as more specifically referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument. The statement of compliance shall include the following:

- (i) A full and true disclosure of all material facts for the purpose of demonstrating compliance with the price control and the obligation referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument, which is based on the Retail Margin Squeeze test in the DCF Model;
- (ii) All relevant supporting documentation for the purpose of demonstrating compliance with the price control and the obligation referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument and which is based on the Retail Margin Squeeze test in the DCF Model; and
- (iii) Demonstration of how any amendments to the price of the equivalent wholesale offering of an existing product are and will be in compliance with the price control and the obligations referred to in this Decision Instrument, based on the DCF Model.

6.6. Upon receipt of the statement of compliance referred to in Section 6.5, ComReg shall review the statement of compliance. Within the 5 working day period referred to in Section 6.4, ComReg may do one or more of the following things:

- (i) Provide Eircom with both (a) an appropriate written view, insofar as possible based on the available information provided by Eircom at that point in time, in relation to the statement of compliance referred to in Section 6.5; and (b) written confirmation that the making available or offering for sale of the new or existing Retail Product appears to be in compliance with Eircom's obligations at Section 6.2 and / or Section 6.3 of this Decision Instrument. However, any such written view or confirmation provided by ComReg is a prima facie view and does not fetter ComReg's future discretion in relation to its statutory powers;
- (ii) Request any further information from Eircom and set a deadline by which such information shall be provided. Eircom shall provide the requested information by the deadline and in such format and to the level of detail as stipulated by ComReg. Upon receipt of the requested information from Eircom and within the 5 working day period referred to in Section 6.4, ComReg may do one or more of the things referred to in sub-sections (i), (iii), (iv) or (v) of this Section 6.6;

- (iii) Inform Eircom in writing that the amendment(s) to either the new or existing Retail Product would in ComReg's view, not be in compliance with the price control obligation and the obligation referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument, giving reasons therefor and also more specifically inform Eircom that the amendment or change if made operative will or could result in the issuing of a notification of non-compliance under Regulation 19(1) of the Access Regulations;
- (iv) For the purpose of further specifying requirements to be complied with by Eircom relating to the price control and the obligation referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument, issue a direction or directions to Eircom under Regulation 18 of the Access Regulations, to refrain from making operative the corresponding amendment(s) to the equivalent wholesale offering of any existing or new product, service or facility; or
- (v) For the purpose of further specifying requirements to be complied with by Eircom relating to the price control and the obligation referred to in Section 6.2 and / or Section 6.3 of this Decision Instrument, issue a direction or directions to Eircom under Regulation 18 of the Access Regulations, to refrain from making available or offering for sale, the equivalent wholesale offering of any new product, service or facility.

6.7. For the purposes of Promotions and Discounts and Bundles, the obligations contained in this Section 6 shall apply in respect to new and existing Retail Product(s) and any equivalent Wholesale Product(s).

7. MISCELLANEOUS PRICE CONTROL OBLIGATIONS

- 7.1. Eircom shall review the usage rates (based on Kbps peak hour usage) for Current Generation WBA products and services on a quarterly basis. In the event of a discrepancy between the usage rates specified in DCF Model and the Bitstream Cost Model and the actual usage rates Eircom shall update the DCF Model and the Bitstream Cost Model for any amendments as a result of its review, as appropriate.
- 7.2. Pursuant to Regulation 8 and Regulation 13 of the Access Regulations, Section 4.2 of the Decision Instrument annexed to ComReg Decision D03/13 amended Section 12.6 of the Decision Instrument annexed to D06/11 by the insertion of the additional subsection as contained in that Section 4.2. For the avoidance of doubt, the reference to "ancillary services" in the new Section 12.6 includes Backhaul, In-building handover and In-span handover which are referred to in Section 7.2 of the Decision Instrument annexed to ComReg Decision D06/11 and defined in Section 2.1 of the Decision Instrument annexed to ComReg Decision D06/11.

PART III – OBLIGATIONS AND EFFECTIVE DATE (SECTIONS 8 TO 11 OF THE DECISION INSTRUMENT)**8. STATUTORY POWERS NOT AFFECTED**

- 8.1. 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) from time to time.

9. MAINTENANCE OF OBLIGATIONS

- 9.1. 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, are continued in force by this Decision Instrument and Eircom shall comply with same.
- 9.2. If any Section, clause or provision or portion thereof contained in this Decision Instrument is 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 Section, clause or provision or portion 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 thereof of this Decision Instrument, and shall not in any way affect the validity or enforcement of this Decision Instrument or other Decision Instruments.

10. AMENDMENT AND WITHDRAWAL OF EXISTING OBLIGATIONS

- 10.1. Pursuant to Regulations 8 of the Access Regulations, ComReg Decision No. D01/06 is hereby withdrawn.
- 10.2. Pursuant to Regulation 8 and Regulation 13 of the Access Regulations, Sections 10.3 and 12.3 of ComReg Decision No. D06/11 are hereby amended by this Decision Instrument.

11. EFFECTIVE DATE

- 11.1. This decision instrument shall be effective from the date of the decision and it shall remain in force until the expiry of the Price Control Period or further notice by ComReg.

Kevin O'Brien

Commissioner

The Commission for Communications Regulation

THE X DAY OF X 2013

Chapter 12

12 Regulatory Impact Assessment

12.1 Introduction

- 12.1 A Regulatory Impact Assessment (“RIA”) is an analysis of the likely effect of proposed new regulation or regulatory change. The RIA should help identify regulatory options, and should establish whether proposed regulation is likely to have the desired impact. The RIA is a structured approach to the development of policy, and analyses the impact of regulatory options on different stakeholders.
- 12.2 ComReg’s approach to the RIA is set out in the Guidelines published in August 2007 in ComReg Document Nos. 07/56 & 07/56a. In conducting the RIA, ComReg takes into account the RIA Guidelines⁵⁵, issued by the Department of An Taoiseach in June 2009 under the Government’s Better Regulation programme. Section 13(1) of the Communications Regulation Act 2002 requires ComReg to comply with Ministerial Policy Directions. The Policy Direction issued in February 2003⁵⁶ requires that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and international best practice and otherwise in accordance with measures that may be adopted under the Government’s “Better Regulation” programme.
- 12.3 In conducting the RIA, ComReg has regard to the RIA Guidelines, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation. Our ultimate aim in conducting a RIA is to ensure that all measures are appropriate, proportionate and justified. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards a RIA. As decisions are likely to 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 respect of those decisions.

⁵⁵ See “Revised RIA Guidelines How to Conduct a Regulatory Impact Analysis”, June 2009. http://www.betterregulation.ie/eng/Developments_in_Better_Regulation_Policy/Revised_RIA_Guidelines.pdf.

⁵⁶ Ministerial Policy Direction made by the Minister of Communications, Marine and Natural Resources on 21 February 2003.

12.2 Steps for assessing regulatory options

12.4 In assessing the available regulatory options, ComReg's approach to the RIA followed five steps as follows:

Step 1: describe the policy issue and identify the objectives

Step 2: identify and describe the regulatory options

Step 3: determine the likely impacts on stakeholders

Step 4: determine the likely impacts on competition

Step 5: assess the likely impacts and choose the best option.

12.5 The principles applied when assessing and selecting remedies are:

- Does current regulation achieve objectives as effectively as possible?
- Are changes to regulation required to improve regulation in these markets?
- The impact of the proposed changes
- Assessing the impacts and choosing the best option.

12.6 In choosing remedies we have taken account of Regulation 8(6) of the Access Regulations, Section 12 of the Communications Regulation Act, Regulation 13 of the Access Regulations and Regulation 16 of the Framework Regulations. Set out below is a discussion on how each of the relevant objectives from the Access and Framework Regulations and the Communications Regulations Act are addressed in the context of the proposed pricing approach set out in this consultation and draft decision.

12.3 Describe the policy issue and identify the objectives

- 12.7 An important consideration for this RIA is the scope of the further specification of the margin squeeze obligation and the imposition, amendment and withdrawal of the price control and the transparency obligations contained in the WBA Market Decision.
- 12.8 In setting out its draft decision, ComReg has had regard to its relevant statutory functions, objectives and obligations, as set out in section 12 of the Communications Regulation Acts, Regulation 16 of the Framework Regulations and in Regulations 8 and 13 of the Access Regulations. These are discussed in some detail below.

12.3.1 Regulation 8 of the Access Regulations

- 12.9 Regulation 8(6) of the Access Regulations provides that: *Any obligations imposed in accordance with this Regulation shall –*
- (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 Act of 2002 and Regulation 16 of the Framework Regulations, and*
 - (c) Only be imposed following consultation in accordance with Regulation 12 and 13 of the Framework Regulations.*

Based on the nature of the problem identified:

- 12.10 In the WBA Market Review, in ComReg Document No 10/81, ComReg identified the competition problems associated with the WBA market. The competition problems identified by ComReg as part of the WBA market review included excessive pricing, exclusionary / predatory behaviour and as well as concerns around vertical leverage. Please refer to ComReg Document 10/81 and the WBA Market Decision for a discussion on the competition problems associated with the WBA market. ComReg considers that the proposed pricing approach set out in subsection 5.2 of this document should address the specific competition problems noted in the WBA market review.

Proportionate and justified:

- 12.11 ComReg considers that the proposed pricing approach set out in this consultation is proportionate. The proposed retail margin squeeze test is similar to the current “retail minus” pricing approach already in place, except the retail margin squeeze test now takes account of the prospective varying structural and competitive conditions between the LEA and Outside the LEA which were set out in the Bundles Decision. The proposed retail margin squeeze approach also ensures consistency with the retail margin squeeze approach already in place in the NGA Decision and the Bundles Decision as well as ensuring technological neutrality between current generation and next generation services in the WBA market. Please refer to subsection 5.2 of this document for further justification on why the retail margin squeeze approach is proportionate in the context of the current pricing review.
- 12.12 The proposed national cost orientation obligation should not be overly burdensome on Eircom and it ensures that Eircom can recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the provision of Bitstream and BMB services nationally. The national cost orientation obligation is deemed to be proportionate given that the actual costing information by specific area (LEA versus Outside the LEA) is currently not available. The Bitstream cost model reflects the projected actual Bitstream costs adjusted for efficiency (plus a reasonable rate of return) and volumes for the three year price control which currently suggests that Eircom’s Bitstream monthly rental prices in the WBA marketplace are in line with the model. We are proposing that on an annual basis Eircom should reconcile the Bitstream cost model with their Regulated Accounts to ensure that there is no material over / under recovery of efficient costs. This should not be an overly burdensome exercise given that Eircom provide Bitstream costing information to ComReg annually as part of its AFIs in line with the Accounting Separation requirements as set out in ComReg Decision D08/10. This is discussed in more detail in subsection 5.4.

- 12.13 We are also proposing that Outside the LEA Eircom should recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that specific area for its Bitstream and BMB monthly rental prices. Currently, this information is not available i.e., actual costs for Outside the LEA. In addition, Eircom would have to seek ComReg's prior approval to increase its Bitstream and BMB monthly rental prices Outside the LEA and / or launch a new current generation Bitstream monthly rental price in accordance with the notification and approvals process set out in subsection 5.5 (Chapter 5) and to demonstrate that the increased / new Bitstream monthly rental prices are consistent with the obligation of local cost recovery as set out in subsection 5.2 (Chapter 5) outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation.

While it may take Eircom some time to gather such information for the specific area Outside the LEA we consider that given the materiality of Bitstream revenues earned by Eircom (as per their published Regulated Accounts), the benefit to other operators and ultimately consumers should outweigh any cost and militate against the risk of excessive pricing at the wholesale and retail levels where Eircom could charge in excess of the actual cost adjusted for efficiency (plus a reasonable rate of return) of providing broadband in those areas. Please refer to subsection 5.2 (Chapter 5) for further details.

- 12.14 We consider that the notification and approval procedure for Bitstream price increases and / or new current generation Bitstream products introduced by Eircom Outside the LEA is proportionate and reasonable. This allows ComReg sufficient time to understand the proposed price increases and / or proposed new prices and to assess whether the prices increases / new prices comply with Eircom's obligation with regard to the recovery of no more than local efficient costs (plus a reasonable rate of return) in the area Outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation. It also allows OAOs to assess the likely impact of the changes in terms of its business case and to allow the OAOs time to notify its customers of a price increase, where appropriate.
- 12.15 ComReg also considers that the proposed pricing approach is justified based on the detail, reasoning and information provided in this consultation which demonstrates how we have reached our preliminary view on the appropriate price control for current generation Bitstream services. Please refer to subsection 5.2 (Chapter 5) in particular with regard to the justification for our proposed pricing approach. However, in line with Regulation 8(6)(c) of the Access Regulations we will review and consider responses to this consultation and, based on those responses, we may make decision(s) different to the preliminary views expressed in this consultation.

12.3.2 Section 12 of the Communications Regulations Act

12.16 Our objectives as set out in Section 12 of the Communications Regulations Act aim to:

- (i) *To promote competition*
- (ii) *Encourage efficient investment in infrastructure and promoting innovation*
- (iii) *Promote the interests of users within the Community, and*
- (iv) *Encourage access to the internet at a reasonable cost to end-users.*

Promote competition:

12.17 The proposed pricing approach in the LEA means that Eircom would not be forced to reduce its Bitstream prices to the costs of providing Bitstream in that specific area. The proposed retail margin squeeze approach will allow Eircom to meet competition at the retail level within the LEA. Currently, where Eircom has the flexibility to reduce retail prices but has not done so to the extent it could have (to the WBA price floors), the regulatory clarity surrounding the de-averaging of wholesale prices may remove an incremental barrier to competition. There is evidence to suggest that Eircom might reflect the competition it faces inside the LEA increasingly in its wholesale prices going forward. Therefore, the risk of wholesale prices being too high inside the LEA may be reduced and for operators reliant on Bitstream as an input, the proposed pricing approach allows for lower wholesale charges which can therefore improve the OAOs ability to compete in the retail broadband market. This view is supported by our consultants, Oxera, as set out in ComReg Document No 13/90a.

- 12.18 In addition, the proposed retail margin squeeze test in the LEA should protect operators that rely on LLU and line share wholesale inputs. This is particularly important in the LEA where most unbundling activity takes place. The WBA Price Floors Decision on the Bitstream price floors prevents Eircom from setting prices too low in the LEA, given that it may discourage the emergence of infrastructure-based competition which could result in competition in downstream markets based solely on Eircom's network inputs such as Bitstream. Insofar as ComReg aims to promote LLU-based broadband competition, it is necessary to ensure a sufficient economic space between Bitstream and LLU, which can be achieved through the Bitstream price floors. The proposed retail margin squeeze principles to be applied in the LEA for current generation Bitstream are compatible with the recent NGA Decision, where competitive conditions also differed between LEA and Outside the LEA. In that context, competition is protected by ensuring sufficient economic space between VUA and Bitstream plus, the NGA equivalents of LLU and Bitstream respectively.
- 12.19 Outside the LEA, Eircom may be allowed to increase Bitstream prices depending on overall cost recovery, which ComReg would have to approve based on actual costs adjusted for efficiency for that specific, while also ensuring compliance with the overriding national cost orientation obligation. So long as wholesale Bitstream prices Outside the LEA do not exceed local efficient costs (plus a reasonable rate of return), we are of the preliminary view that competition Outside the LEA should not be immediately threatened. Without regulation, the prospects for increased competition in current generation services Outside the LEA are limited, and therefore the impact on competition may be minimal. Under the current retail minus regime, Eircom had the flexibility to increase prices Outside the LEA but had chosen not to do so. In addition, consumers' willingness to pay for broadband may limit the extent to which Eircom can raise prices. ComReg considers that the proposed pricing approach Outside the LEA should protect consumers from excessive pricing and preserve Bitstream as a form of broadband competition in these areas. The form of price control should permit Eircom to recover its investment where this is economically rational, and hence provide regulatory certainty to current and potential entrants as well as the Incumbent.
- 12.20 In addition, the proposed retail margin squeeze test protects a number of smaller operators Outside the LEA that make up about 3% (of the 3% retail broadband market in that area) but who have low market penetration (3% or less) and who are vulnerable to exclusionary behaviour given that they do not share Eircom's economies of scale and that they have no realistic alternative means of provision.

Encouraging efficient investment in infrastructure and promoting innovation:

- 12.21 New investment in current generation networks in the LEA are likely to be limited, given the nature of competition from competing platforms and Eircom's focus on NGA products in this area. The proposed retail margin squeeze approach implies that the Incumbent may not recover all of its investment if competition pushes prices below the (historic) costs actually incurred. This may not have an impact on additional investment, as cost recovery does not need to be guaranteed where competitive pressures exist. This view is shared by our consultants, Oxera, as set out in the Oxera report at ComReg Document No 13/90a.
- 12.22 ComReg considers that consistency of regulation across wholesale products is also important to investment decisions. The proposed retail margin squeeze test for current generation Bitstream is consistent with the retail margin squeeze test in place in the recent NGA decision which should provide signals for efficient investment in both types of infrastructure. If the approach was inconsistent between current generation WBA and NGA WBA services it may create distortions in investment.
- 12.23 Given that the proposed cost orientation approach is flexible to accommodate changes in price and cost across the two areas at a national level, and allows for *total* network costs to be recovered, Eircom's investments incentives are unlikely to be significantly affected. In addition, Outside the LEA and subject to ComReg's prior approval Eircom may recover its actual incurred investments adjusted for efficiency (plus a reasonable rate of return) Outside the LEA therefore the investment incentives Outside the LEA should not be affected.

Promoting the interests of users within the Community:

- 12.24 Safeguarding efficient competitors from possible below cost selling by the SMP operator in respect of current generation Bitstream services should help to facilitate greater regulatory certainty for longer-term competitive entry and expansion, with positive implications for the price, choice and quality of services ultimately delivered to end-users. In addition, this draft decision also provides regulatory certainty to the industry and to consumers that if Eircom was to increase Bitstream prices Outside the LEA (subject to ComReg's prior approval) and / or launch new current generation Bitstream products that the prices for Bitstream and BMB monthly rentals could not exceed the actual incurred costs adjusted for efficiency plus a reasonable rate of return.

Encourage access to the internet at a reasonable cost to end-users:

- 12.25 ComReg is required to take all reasonable measures to encourage access to the internet at reasonable cost to users. The proposed national cost

orientation obligation ensures that Eircom's level of recovery of costs is restricted to no more than the actual incurred cost adjusted for efficiency plus a reasonable rate of return which should ensure that Bitstream prices are reasonable nationally. In addition, any pre-approved changes to Bitstream prices Outside the LEA should not exceed actual incurred costs adjusted for efficiency (plus a reasonable rate of return), while also ensuring compliance with the overriding national cost orientation obligation gives assurances that Bitstream prices Outside the LEA should not be excessive. The proposed retail margin squeeze tests should also provide a sufficient margin to those operators that do not currently have the same economies of scale / scope as Eircom, especially those smaller operators Outside the LEA who have low retail broadband market penetration. Our proposed approach should ensure that these smaller operators Outside the LEA can continue to serve its customers in the more rural areas at a reasonable price. The retail margin squeeze test should also protect operators that rely on LLU and line share wholesale inputs. This is particularly important in the LEA where most unbundling activity takes place.

12.3.3 Regulation 13 of the Access Regulations

12.26 Regulation 13(1) of the Access Regulations provides that ComReg may:

impose on an operator obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of access or interconnection in situations where a market analysis indicates that a lack of effective competition means that the operator concerned may sustain prices at an excessively high level or may apply a price squeeze to the detriment of end-users.

12.27 The requirements set out in Regulation 13(1) of the Access Regulations have been addressed above at paragraph 12.10.

12.28 Regulation 13(2) of the Access Regulations provides that:

To encourage investments by the operator, including in next generation networks, the Regulation shall, when considering the imposition of obligations under paragraph (1), take into account the investment made by the operator which the Regulator considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project.

12.29 As set out in subsection 5.2 (Chapter 5) and in Chapter 6, the national cost orientation obligation allows Eircom to recover its actual incurred costs adjusted for efficiency plus a reasonable rate of return.

12.30 The objective of the national Bitstream cost model, unlike the Bitstream price floors model, is not to stimulate alternative operator investment where it is clear no commercial operator might invest, but to ensure Eircom do not materially over or under recover their actual costs adjusted for efficiency (including a reasonable rate of return⁵⁷) nationally. Our proposed costing methodology, as discussed in detail in Chapter 6, is based on a historic fully allocated costs (FAC) basis.

⁵⁷ Eircom's WACC of 10.21% is used as a proxy for determining the reasonable rate of return for Eircom's investment in Bitstream services.

12.31 The historical cost approach (HCA) uses the Incumbents costs, which reduces the chance of under recovery of costs as the value is linked to the actual investment made. Some of the Incumbents assets may be fully depreciated but still in use and the HCA approach should ensure that Eircom is not over recovering the costs for these assets. The HCA approach may be more pragmatic and practical especially where there are limited prospects of investment by alternative infrastructure, especially Outside the LEA. In the FAC approach the whole set of costs incurred by the regulated operator are typically allocated to products following allocation rules determined by the direct or indirect causality of costs with products. This approach includes “fixed” and common costs. The FAC approach results in a price signal which has the advantage of being relatively consistent with the recorded investments incurred by the Incumbent.

12.32 The risk of using the BU-LRAIC+ approach is that it could calculate the cost of a new network being built today and not the actual costs incurred by Eircom and therefore, could reward Eircom for investments that did not / may not take place, especially Outside the LEA. It could also send out the wrong build / buy investment signals to operators (including Eircom) and lead to inefficient investment. This is discussed in detail in Chapter 6.

12.33 In addition, our proposed approach in Chapter 5 (subsection 5.4) also allows Eircom the opportunity annually to demonstrate if there is a material over / under recovery of its actual Bitstream costs adjusted for efficiency. This provision should also ensure consistency with the requirements of Regulation 13(2) of the Access Regulations.

12.34 Regulation 13(3) of the Access Regulations provides that:

The Regulator shall ensure that any cost recovery mechanism or pricing methodology that ComReg imposes under this Regulation serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard, the Regulator may also take account of prices available in comparable competitive markets.

12.35 Each of these key objectives outlined in Regulation 13(3) are discussed briefly below.

Promote efficiency:

12.36 A cost oriented price control aims to ensure that prices do not exceed an appropriate level of efficient costs where there is a risk that competitive pressure alone will not achieve this outcome.

12.37 Efficiency can be thought of in a number of ways including:

- Allocative efficiency: Where prices of different products result in an optimum allocation of resources to consumers;
- Productive efficiency: The cost of producing the products is minimised; and
- Dynamic efficiency: The efficiency of investor and customer behaviour over time.

12.38 ComReg believes that any price control imposed needs to strike a balance between these forms of efficiency. Productive and allocative efficiency are essentially static concepts taking into account the level of costs to deliver products at a single point in time. In terms of productive efficiency, ComReg believes that the sequential nature of investment decisions, when assessing whether the level of costs reported is efficiently incurred, needs to be considered in the price control. This has been reflected in Chapter 6 of this document where ComReg has made some efficiency adjustments to Eircom's actual Bitstream costs.

12.39 Investment decisions are not made with perfect foresight and may be constrained by previous decisions (for example, the location / site of existing network equipment). Furthermore, ComReg considers that a price control also needs to take account of dynamic effects. In particular, it is important that regulated operators have an expectation that they can make a reasonable return on investments over time and that efficient entry and ongoing efficient investment are encouraged. The proposed cost orientation obligation allows Eircom to recover a reasonable rate of return based on Eircom's current WACC at 10.21%, on top of its actual incurred costs adjusted for efficiency.

12.40 In the future, Eircom may consider investing further in ADSL / ADSL2+ in those exchanges Outside the LEA that are currently not broadband enabled if the expected return on its investment is sufficient. This could enable customers in those areas to enjoy the higher download speeds already available to other customers. As set out above and in Chapter 6, the proposed pricing approach and the annual reviews of the Bitstream cost model ensures that any actual investments made by Eircom may be recovered by Eircom where it provides the actual costing information to ComReg.

Promote sustainable competition:

12.41 Please refer to paragraphs 12.17 to 12.20 above for a detailed discussion on the impacts on competition.

Maximise consumer benefits:

12.42 Please refer to paragraphs 12.24 and 12.25 above with regard to the benefits to end-users.

12.43 Regulation 13(4) of the Access Regulations provides that:

“Where an operator has an obligation under this Regulation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs, including a reasonable rate of return on investment shall lie with the operator concerned.....”

12.44 As already set out in Chapter 5 (subsection 5.2) we propose that Eircom should be subject to a national cost orientation obligation insofar as it should ensure that it recovers no more than its actual incurred costs adjusted for efficiency plus a reasonable rate of return, nationally. Currently, Eircom has some flexibility to cross subsidise from the LEA to Outside the LEA while ensuring that overall it recovers no more than its actual national costs adjusted for efficiency (plus a reasonable rate of return) in the provision of Bitstream and BMB products and services, nationally. Annually, we propose that Eircom should review its actual Bitstream costs and revenues from its Regulated Accounts and reconcile these to the Bitstream cost model to ensure that there is no material over / under recovery of its national Bitstream costs. This mechanism should ensure that Eircom can flag any potential material over / under recovery to ComReg during the price control period so that its national Bitstream and BMB monthly rental are reflective of efficient costs (including a rate of return). In the event that Eircom proposes to increase its Bitstream and BMB monthly rental prices Outside the LEA or introduce a new Bitstream product in that area, we propose that it must seek prior approval from ComReg and demonstrate to ComReg that the increased / new price(s) recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area while also ensuring that it complies with the overriding national cost orientation obligation. Therefore, ComReg considers that at any point Eircom can make a case to ComReg where it believes that there is a material over / under recovery of its national Bitstream costs adjusted for efficiency and this ensures that the onus lies with Eircom in line with Regulation 13(4) of the Access Regulations.

12.3.4 Regulation 16 of the Framework Regulations

12.45 While some of the main requirements / objectives of Regulation 16 of the Framework Regulations have already been addressed above as part of the discussion on Regulation 8 of the Access Regulations, Section 12 of the Communications Regulation Act and / or Regulation 13 of the Access Regulations, set out below is some other key requirements associated with Regulation 16 which have not been addressed so far as part of the discussions above.

Contributing to the development of the internal market (BEREC and European Union):

- 12.46 As part of our assessment of the appropriate price control relevant to Bitstream services in the WBA market we have taken into account recent Recommendations from the European Commission regarding the appropriate costing methodologies for setting broadband prices, especially the recent Recommendation on the appropriate costing methodologies to promote competition and enhance the broadband investment environment. We have also considered the points raised by the European Commission in their Phase II investigations with a number of European Regulators regarding their costing approach for setting broadband prices in the WPNIA market and the WBA market as well as the Opinion of BEREC in relation to these investigations.
- 12.47 As part of this consultation process the draft measures contained in this document and the reasoning which the measures are based on will be provided to the European Commission, once we receive responses to the consultation and we have considered our position in that regard. ComReg will take utmost account of any comments from the European Commission.
- 12.48 Further to Regulations 13 and 14 of the Framework Regulations, the draft measures will also be made accessible to the Body of European Regulators for Electronic Communications ("BEREC") as well as other national regulatory authorities ("NRAs") in other EU Member States.

Promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods:

- 12.49 The proposed retail margin squeeze approach for current generation Bitstream is consistent with the pricing approach for NGA and Bundles. This should ensure regulatory consistency and predictability over the next three years.
- 12.50 The Bitstream cost model used in the context of the proposed national cost orientation obligation projects Eircom's costs and volumes over the next three years and suggests that there should be no material over / under recovery of national efficient Bitstream costs adjusted for efficiency (plus a reasonable rate of return) based on Eircom's current national Bitstream prices. This should provide some degree of predictability with regard to Eircom's Bitstream prices over the next three years. In addition and in the event that Eircom decides to increase or launch a new Bitstream price Outside the LEA, it must seek ComReg's approval and it must justify that these increased / new Bitstream monthly rental prices are based on no more than the actual incurred costs adjusted for efficiency plus a reasonable rate of return associated with that area, while also ensuring compliance with the overriding national cost

orientation obligation. Therefore, this provides some certainty / predictability that if there are any prices increases by Eircom in the future Outside the LEA, that these prices cannot exceed local costs adjusted for efficiency (plus a reasonable rate of return).

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

- 12.51 As set out in detail in Chapter 4 of this document, we recognise that there may be varying structural and competitive conditions prospectively between the LEA (Urban areas) and Outside the LEA (rural areas). This was established in the Bundles Decision. Our proposed approach for current generation Bitstream takes into account a differentiation of the price control between the LEA and Outside the LEA in order to address the relevant competition problem(s) in the particular areas. Please refer to Chapter 4 for details on the varying conditions between the LEA and Outside the LEA.

12.4 Identify and describe the regulatory options

12.52 In the context of determining the most appropriate price control to adopt in relation to current generation Bitstream services ComReg has considered a number of options under the following headings:

- Options on the form of price control
- Options for determining appropriate costing methodology
- Options for determining the appropriate principles for the retail margin squeeze tests
- Options for determining Eircom's usage / throughput charge Outside the LEA.

12.4.1 Options on the form of price control

12.53 According to Regulation 13(1) of the Access Regulations, ComReg may impose obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems for the provision of specific types of access or interconnection.

12.54 The main forms of price control considered in relation to current generation Bitstream products and services were:

- Regulatory Forbearance
- Cost orientation
- Retail minus / retail margin squeeze test.

12.55 Please refer to Chapter 5 for consideration of the above options as well as a further discussion below.

12.4.2 Options for determining appropriate costing methodology

12.56 The following two options were considered in terms of the appropriate costing methodology for the Bitstream cost model:

- BU-LRAIC+
- TD-HCA but dimensioned based on engineering and capacity rules.

12.57 Please refer to Chapter 6 for a detailed discussion on the costing methodology options.

12.4.3 Options for determining appropriate principles for the retail margin squeeze test

12.58 The following are the main options for determining the appropriate principles for the margin squeeze tests:

- (i) **Cost base:** The retail margin squeeze tests (in the LEA and Outside the LEA) should be based on either:
 - A SEO (or REO) cost base, which assumes that entrants are currently not likely to be as efficient as Eircom given that they cannot achieve the same scale
 - An entire EEO approach once the OAOs have achieved sufficient scale to encourage efficient entry or
 - A combination of SEO and EEO costs.
- (ii) **Cost standard:** The retail margin squeeze tests (in the LEA and Outside the LEA) should take account of either:
 - The LRAIC+ costs
 - The ATC costs.
- (iii) **Assessment basis:** The retail margin squeeze tests (in the LEA and Outside the LEA) should take account of either:
 - The portfolio level of aggregation to allow the Incumbent the flexibility to efficiently price discriminate on individual products so long as Eircom recovers the overall costs across the portfolio of current generation retail broadband products.
 - The product-by-product assessment.

12.59 Please refer to Chapter 7 for a detailed discussion on the principles for margin squeeze test.

12.4.4 Options for determining Eircom usage / throughput charges Outside the LEA

12.60 The main options considered by ComReg for determining the appropriate usage / throughput charge Outside the LEA are as follows:

12.61 Option 1: Eircom's current charging mechanism for usage would remain in place.

- 12.62 Option 2: Eircom could charge no more than the long run incremental costs associated with the usage of a particular OAO which is over and above the average usage allowed for in the Bitstream cost model.
- 12.63 Please refer to Chapter 6 for a detailed discussion on the proposed usage charging mechanism.

12.4.5 Determine the likely impact on stakeholders

12.64 This section summarises the impact of the options above on the various stakeholders. We consider the potential impact that could be incurred by Eircom in complying with the set of obligations as well as the potential benefits that would accrue to Eircom, its wholesale customers, and end users.

12.65 The likely impact on stakeholders is discussed under the following headings:

- Form of Price Control
- Appropriate Costing Methodology
- Principles for the margin squeeze test
- Determine the appropriate usage / throughput charge Outside the LEA.

A. Form of price control:

Option 1: Regulatory Forbearance

12.66 Impact on Incumbent:

- Eircom would have complete flexibility in terms of its pricing approach for WBA products and services.

12.67 Impact on OAOs:

- OAOs could be subject to excessive prices and / or subject to a price squeeze between wholesale and retail broadband prices given that no price controls are in place.

12.68 Impact on consumers:

- This could mean less choice for consumers as some operators may be forced out of the retail broadband market (by excessive wholesale prices and / or no margins between retail and wholesale prices) especially in more rural areas of the country.

Option 2: Cost Orientation

12.69 Impact on Incumbent:

- This approach ensures that Eircom recovers no more than its actual national Bitstream costs adjusted for efficiency and a reasonable rate of return.
- The national cost orientation obligation allows Eircom to cross subsidise from the LEA into the area Outside the LEA.
- This option means that Eircom has to demonstrate to ComReg that any prices increases Outside the LEA or new products introduced in that area do not exceed local costs adjusted for efficiency plus a rate of return outside the LEA, while also ensuring compliance with the overriding national cost orientation obligation.
- This option allows Eircom to recover local costs Outside the LEA subject to pre-approval by Eircom and demonstration to ComReg that the prices are reflective of actual local costs adjusted for efficiency outside the LEA,

while also ensuring compliance with the overriding national cost orientation obligation.

12.70 Impact on OAOs:

- This approach gives OAOs certainty about price levels for Bitstream services.
- The national Bitstream cost model seems to suggest that there is cross subsidisation from the LEA into the areas Outside the LEA which means that it is likely that the prices Outside the LEA are currently below the actual local costs adjusted for efficiency in that area which means that OAOs Outside the LEA are benefitting from potential lower wholesale Bitstream costs.
- Outside the LEA, OAOs have certainty that prices cannot exceed local efficient costs (plus a rate of return) where Eircom justifies such a price increase or introduces a new current generation Bitstream product in that area.

12.71 Impact on consumers:

- This approach should ensure that consumers are not subject to excessive prices.

Option 3: Retail margin squeeze test

12.72 Impact on Incumbent:

- This approach allows Eircom pricing flexibility, especially in the LEA. The retail margin squeeze test sets a wholesale price, above which Eircom cannot charge other operators without causing a margin squeeze.
- This approach should ensure that Eircom does not set its retail prices in such a way that it could squeeze other smaller operators especially Outside the LEA.

12.73 Impact on OAOs:

- The retail margin squeeze test should be sufficient to ensure that entry is possible at prices that are consistent with the outcome of a competitive process.

- Where Eircom reduces the wholesale price in order to comply with the margin squeeze test, then the OAOs should benefit from lower wholesale prices.
- The retail margin squeeze test should protect operators that rely on LLU and line share as wholesale inputs, especially in the LEA.

12.74 Impact on consumers:

- This option should encourage broadband competition to the benefit of consumers. However, a retail margin squeeze on its own would not prevent excessive pricing from Eircom.

B. Appropriate costing methodology

Option 1: A BU-LRAIC+ approach

12.75 Impact on Incumbent:

- This approach may allow Eircom to recover the cost of Bitstream investments that have not taken place / are not likely to take place.
- This approach could prevent Eircom from recovering investments that it efficiently incurred in the past but which would be needed for a new entrant today.
- This approach sends the correct investment signals to the marketplace.

12.76 Impact on OAOs:

- This approach could mean that the OAOs would be paying for the cost of investments in Bitstream that Eircom has not made or not likely to make.
- This approach may not be appropriate given that in the medium term there is limited prospect for entry in certain areas of the country (i.e., Outside the LEA) as OAOs are predominantly acting as resellers and more dependent on using Eircom's infrastructure.
- This approach sends the correct investment signals to the marketplace.

12.77 Impact on consumers:

- This approach may mean that retail prices may reflect Bitstream investments that have not taken place or likely to take place.

Option 2: A TD-HCA approach dimensioned based on engineering and capacity rules

12.78 Impact on Incumbent:

- This approach should ensure that the Incumbent does not materially under / over recover its costs as the value is linked to the actual investment made adjusted for efficiency.
- This approach should ensure that Eircom does not price excessively.
- This approach ensures consistency with the dimensioning of Eircom actual network.

12.79 Impact on OAOs:

- This approach should ensure that OAOs are only paying for the actual Bitstream investments made by Eircom.
- This approach seems reasonable given that in the medium term there is limited prospect for entry, especially Outside the LEA.

12.80 Impact on consumers:

- This approach should ensure that retail prices only reflect actual Bitstream investments that have taken place.

C. Principles for the margin squeeze tests

Cost base:

Option 1: Retail margin squeeze test is based on an EEO cost base

12.81 Impact on Incumbent:

- In general, an entire EEO assumption for the retail margin squeeze test would imply that entrants could achieve similar economies of scale as Eircom. EEO is likely to assume lower retail costs for Eircom thereby allowing a higher wholesale access charge to be set by Eircom.
- For Eircom the EEO assumption (compared to SEO) is likely to reduce competition in the retail broadband market and/or increase its return from the supply of WBA services.
- EEO approach is more consistent with cost orientation and ensures overall cost recovery for the Incumbent.

12.82 Impact on OAOs:

- An entire EEO cost base would make entry more difficult for new entrants, as the resulting gap between wholesale prices and retail prices would be lower, but may incentivise them to invest in their own infrastructure.

12.83 Impact on consumers:

- An entire EEO test is likely to result in (marginally) higher retail prices and less choice in the long run, as it could discourage OAOs to enter the retail broadband market, due to the higher resulting wholesale input prices. It could also result in a duopoly of operators in certain geographic areas as

no OAO could compete using wholesale products provided over Eircom's network.

Option 2: Retail margin squeeze test is based on a SEO cost base

12.84 Impact on Incumbent:

- The SEO assumes higher costs (compared to EEO) for the Incumbent so allowing a lower wholesale access charge to be set by Eircom.
- The SEO should promote competition from OAOs, who would face lower wholesale products from Eircom. This could increase the willingness of OAOs to enter the retail broadband market using Eircom wholesale inputs.

12.85 Impact on OAOs:

- The SEO assumes that entrants have not yet gained sufficient economies of scale as the Incumbent. By using the SEO cost standard in the margin squeeze test, the resulting wholesale prices would be lower, compared to a margin squeeze based on the EEO cost standard. This approach may be more appropriate Outside the LEA.
- The SEO test may be more appropriate Outside the LEA given that there are a large number of smaller operators Outside the LEA that only have a $\times\%$ or lower retail broadband market penetration.
- This approach should encourages entry to the retail broadband market and allow existing smaller operators to grow their customer base, by giving rise to a higher space between retail prices and wholesale prices that enable OAOs to supply wholesale and retail services more competitively based on Eircom wholesale inputs.

12.86 Impact on consumers:

- Likely to result in (marginally) lower retail prices and more choice, due to higher levels of competition from OAOs, compared to EEO. As competition at the retail level becomes more entrenched it may be possible to move to EEO which may see more price benefits for consumers.

Option 3: The retail margin squeeze test is based on a combination of SEO and EEO costs

12.87 Impact on Incumbent:

- The SEO / EEO assumes higher costs (compared to an entire EEO) for the Incumbent so allowing a lower wholesale access charge to be set by Eircom.
- The SEO / EEO should promote competition from OAOs, who would face lower wholesale products from Eircom. This could increase the willingness of OAOs to enter the retail broadband market using Eircom wholesale inputs.
- This approach takes account of the fact that there are large operators in certain parts of the country i.e. the LEA, with an international presence who can take advantage of economies of scale and scope between their operations in Ireland and other countries in which they operate. Therefore, this approach takes account of the fact that there are certain retail costs which are more susceptible to such scale / scope advantages especially in the context of bundle offers (with fixed voice, mobile voice, broadband, IPTV, etc.) which are more often sold in the retail broadband market, for example, advertising costs.

12.88 Impact on OAOs:

- The SEO / EEO take account of the fact that entrants in general have not yet gained sufficient economies of scale as the Incumbent.
- This approach would mean that smaller operators, especially Outside the LEA, would have less margins to compete with Eircom (the dominant operator in that area) and therefore these smaller operators may find it difficult to grow their customer base and compete with Eircom.

12.89 Impact on consumers:

- A combination of SEO and EEO costs provides a higher gap between retail and wholesale prices than an EEO test which provides lower prices and more choice, due to higher levels of competition from OAOs.

Cost standard:

Option 1: Retail margin squeeze test is based on 'LRAIC plus'

12.90 Impact on Incumbent:

- This approach should allow Eircom to recover all of its average efficiently incurred directly attributable variable and fixed costs and an apportionment of joint and common costs.

12.91 Impact on OAOs:

- This approach should allow the recovery of the relevant common costs, as well as fixed and variable costs. This is the calculus faced by an operator when deciding whether to enter or expand a market. This should also ensure efficient entry, compared with the ATC cost standard.

12.92 Impact on consumers:

- This approach should allow the promotion of sustainable competition by OAOs to the benefit of consumers.

Option 2: Retail margin squeeze test is based on ATC

12.93 Impact on Incumbent:

- This approach means a larger margin between products is likely to mean easier entry potentially by an inefficient operator. If retail prices are constrained, the low wholesale charges could undermine the recovery of investment. Changes to assumptions that limit the Incumbent's pricing flexibility are likely to harm Eircom's ability to match retail prices of alternate platform providers.
- ATC has been used to date for current generation Bitstream products under the 2006 Retail Minus Decision and it is also used for NGA pricing.

12.94 Impact on OAOs:

- This approach may promote further entry given that it includes the costs of 'LRAIC plus' and some additional common costs. However, the ATC may encourage inefficient entry.

12.95 Impact on consumers:

- This approach may mean additional competition could reduce prices or improve choice.

Portfolio or product-by-product:

Option 1: Portfolio

12.96 Impact on Incumbent:

- This approach allows the Incumbent flexibility in its retail pricing, enabling Eircom to price some products above and others below ATC. This is likely to imply discounting on products where the competition is most intense, provided that other products are priced higher, such that the overall average revenue matches ATC. This flexibility may mean that the Incumbent can experiment with price discrimination for different product offerings which may improve efficiency, and under certain conditions, can be welfare maximising.
- This approach is very relevant in the LEA where Eircom faces a retail pricing constraint from alternative infrastructures.

12.97 Impact on OAOs:

- This approach should encourage efficiency and promote competition between operators in the LEA.

12.98 Impact on consumers:

- This approach may mean that some consumers in the LEA may be subject to lower retail prices and improved efficiencies.

Option 2: Product-by-product

12.99 Impact on Incumbent:

- This approach should ensure sufficient margin for each Bitstream offer, but would restrict the ability of the Incumbent to price products as flexibly as they would under the portfolio approach. Each product would need to be priced at a retail level to meet the ATC requirement, which would limit the ability of Eircom to adjust pricing in response to market knowledge, in particular during the early stage of take up of next generation products.
- This approach is more relevant Outside the LEA where Eircom is not constrained at a wholesale or retail level and where Eircom may be more likely to adjust prices for certain customers and / or in certain areas.

12.100 Impact on OAOs:

- This approach may enhance entry and competition, particularly for entrants that may lack economies of scope.

12.101 Impact on consumers:

- There may be some gains from improved competition of a product-by-product approach, but these may be offset by a reduction of efficiency.

D. Determine appropriate usage / throughput charge Outside the LEA:

Option 1: Eircom's current charging mechanism would remain in place

12.102 Impact on Incumbent:

- Eircom may over recover the cost of carrying additional operator traffic on its core network.

12.103 Impact on OAOs:

- OAOs have to monitor and manage their high usage customer base.
- Given the significant additional cost to OAOs of the current charging mechanism, OAOs may have to pass on these costs to their high bandwidth customers which act as a disincentive to consumers to use high bandwidth services.
- Given the current high wholesale charge for usage from Eircom, this may impact on smaller operators' margins where these operators do not pass on the additional usage cost to its customers. Lower margins mean low profits for these smaller operators with high bandwidth customers.

12.104 Impact on consumers:

- High bandwidth users may be penalised with high charges for excess usage which acts as a disincentive to consumers to use high bandwidth services.

Option 2: Eircom could only charge operators for the long run incremental cost of usage / throughput above the average usage

12.105 Impact on Incumbent:

- This approach would ensure that Eircom only recovers the incremental costs associated with carrying traffic on its core network, above the average usage already accounted for in the Bitstream cost model.

12.106 Impact on OAOs:

- This approach should ensure that OAOs with high usage customers are not penalised by higher costs from Eircom.

- This approach should mean a lower wholesale usage cost which should allow OAOs who do not pass on the usage cost to its customers more margin to compete at a retail level.

12.107 Impact on consumers:

- This approach should not penalise those consumers that use high bandwidth services.

12.4.6 Assess the likely impact on competition:

12.108 This is discussed at paragraphs 12.17 to 12.20 above.

12.4.7 Assessment of the likely impacts and ComReg's preliminary views on the best option:

12.109 In light of the reasoning and justification set out throughout this document we consider that a single price control approach applied across the LEA and Outside the LEA may be ineffective in ensuring cost recovery, where competitive and structural conditions may vary. Therefore, the proposed approach set out in this draft decision ensures that the price control in each area is tailored to the specific market conditions encountered but the two areas are not completely independent.

12.110 We are proposing that Eircom would be subject to a national cost orientation obligation insofar as Eircom could not recover any more than the national average efficiently incurred costs (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB, nationally. The objective of the national Bitstream cost model is to ensure that on a national basis Eircom does not materially over / under recover its national costs adjusted for efficiency (plus a reasonable rate of return) associated with wholesale Bitstream. The national cost orientation obligation was considered appropriate for the reasons set out in subsection 5.2 of this document and also for the reasons set out above at subsection 12.3 of this RIA.

12.111 Outside the LEA, ComReg is of the preliminary view that Eircom should recover no more than the actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with the monthly rentals for Bitstream and BMB in that specific area i.e., Outside the LEA. Accordingly, we propose that Eircom should not increase its current Bitstream and BMB monthly rental prices and / or launch any new current generation Bitstream products Outside the LEA without ComReg's prior approval. We also propose that Eircom, as part of the notification and approvals process, should be required to demonstrate to ComReg that its increased / new Bitstream and BMB monthly rental prices Outside the LEA should recover no more than its actual incurred costs adjusted for efficiency (plus a reasonable rate of return) associated with that area i.e., Outside the LEA while also ensuring that it complies with the overriding national cost orientation obligation. The obligation regarding the recovery of no more than local efficient costs Outside the LEA was considered appropriate for the reasons set out in subsection 5.2 (Chapter 5) of this document and also for the reasons set out above at subsection 12.3.

12.112 In addition to the obligation of cost orientation we also consider that a retail margin squeeze test is required to guard against concerns around predatory / exclusionary behaviour as well as vertical leverage. The key reasons for imposing a retail margin squeeze test in the LEA and Outside the LEA are set out in subsection 5.2 (Chapter 5) of this document as well as the reasons set out in subsection 12.3 above. In addition, the details of the proposed inputs to the retail tests are set out in Chapter 7.

12.113 ComReg is also proposing that for throughput / usage charges Outside the LEA that Eircom should recover no more than the long run incremental cost for usage based on the cost of the traffic for that particular operator which is over and above the average cost for usage in the Bitstream cost model. This proposal is discussed in more detail in Chapter 6. This proposal should benefit those operators who have niche customers with high usage profiles while ensuring that Eircom recovers its usage costs on its core network.

12.114 To conclude, ComReg is of the preliminary view that the aim of the revised price control would be to maintain prices at an efficient level to the benefit of consumers and at a level which encourages ongoing efficient entry and investment decisions by other operators while also ensuring that the SMP operator makes a reasonable return on its efficient investment.

Q. 10 Do you have any views on the Regulatory Impact Assessment above and is there other factors (if any) that ComReg should consider in completing its Regulatory Impact Assessment? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual or other evidence supporting your position.

Chapter 13

13 Submitting comments

- 13.1 All comments are welcome to the consultation however it would make the task of analysing responses easier if comments were referenced to the relevant question numbers from this document.
- 13.2 The consultation period will run from 19 September 2013 to 1 November 2013 during which the Commission welcomes written comments on any of the issues raised in this paper.
- 13.3 Having analysed and considered the comments received, ComReg will review the main proposals set out in the consultation, amend if necessary in light of representations received and will then notify the draft measure to the European Commission, the NRAs and BEREC, pursuant to Regulation 13 of the Framework Regulations. ComReg will take utmost account of any comments received from the European Commission and will adopt and publish the final decision.
- 13.4 In order to promote further openness and transparency ComReg will publish all respondents' submissions to this consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information in ComReg Document No. 05/24. We would request that electronic submissions be submitted in an-unprotected format so that they can be appended into the ComReg submissions document for publishing electronically.

Please note:

- 13.5 ComReg appreciates that many of the issues raised in this paper may require respondents to provide confidential information if their comments are to be meaningful.
- 13.6 As it is ComReg's policy to make all responses available on its website and for inspection generally, respondents to consultations are requested to clearly identify confidential material and place confidential material in a separate annex to their response.
- 13.7 Such Information will be treated subject to the provisions of ComReg's guidelines on the treatment of confidential information as set out in ComReg Document No. 05/24.

Annex: 1 Legal Basis

Obligations relating to the market for Wholesale Broadband Access:

- A 1.1 By ComReg Decision No. D06/11⁵⁸, and pursuant to Regulations 25 and 26 of the 2011 Framework Regulations⁵⁹, ComReg designated Eircom as having significant market power (“SMP”) on the market for wholesale broadband access (the “WBA” market).
- A 1.2 Pursuant to Regulation 8 of the 2011 Access Regulations⁶⁰ where an operator has been designated as having a significant market power on a relevant market as a result of a market analysis carried out in accordance with Regulation 27 of the 2011 Framework Regulations, the Regulator shall impose on such operator such obligations set out in Regulation 9 to 13 of the Access Regulations as appropriate.
- A 1.3 Among other obligations under Sections 10 and 12 of the Decision Instrument annexed to Decision D06/11, and pursuant to Regulation 9 and 13 of the 2011 Access Regulations ComReg imposed obligations on Eircom in respect of Current Generation Wholesale Broadband Access. Among others, the following obligations were imposed: (i) obligations of transparency pursuant to Regulation 9 of the 2011 Access Regulations; and (ii) obligations of relating to price control and cost accounting pursuant to Regulation 13 of the 2011 Access Regulations.
- A 1.4 The amendment, imposition, withdrawal and further specification of SMP obligations in relation WBA Market is more particularly set out in the Decision Instrument contained in Chapter 11 of this draft Decision.

⁵⁸ Document No 11/49 entitled “Response to Consultation and Decision; Market Review: Wholesale Broadband Access” dated 8 July 2011.

⁵⁹ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011) (the “2011 Framework Regulations”).

⁶⁰ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the “2011 Access Regulations”).

Consultation Requirements:

- A 1.5 Regulation 12(3) of the 2011 Framework Regulations provides that, except in cases falling within Regulation 13(8) (i.e. exceptional cases involving urgency), before taking a measure which has a significant impact on a relevant market, ComReg must publish the text of the proposed measure, give the reasons for it, including information as to which of ComReg's statutory powers gives rise to the measure, and specify the period within which submissions relating to the proposal may be made by interested parties. Regulation 12(4) states that ComReg, having considered any representations received under Regulation 12(3), may take the measure with or without amendment. Regulation 12 implements Article 6 of the Framework Directive.
- A 1.6 Regulation 13(3) of the 2011 Framework Regulations provides that, upon completion of the consultation provided for in Regulation 12, where ComReg intends to take a measure which falls within the scope of Regulation 26 or 27 of the Framework Regulations, or Regulation 6 or 8 of the Access Regulations, and which would affect trade between Member States, it shall make the draft measure accessible to the European Commission, BEREC and the NRAs in other Member States at the same time, together with the reasoning on which the measure is based. Regulation 13 implements Article 7 of the Framework Directive.

Annex: 2 Extract from Eircom Accounts – Additional Financial Information (“AFIs”)

<u>Wholesale Broadband Cost Details</u>	
INCOME STATEMENT	Total
For the year ended 30 June 2012	€'000
Revenue	
External revenue	x
Internal revenue - Inter	x
Internal revenue - Intra	x
Total revenue	x
<u>Costs - Network Element Allocations</u>	
Tranmission	x
Repair & Maintenance	x
Installation & Provisioning	x
Carrier Billing	x
Carrier Administration	x
Data ATM	x
Data BIP	x
Data Platforms	x
DSLAM	x
Broadband Access Server	x
DSL Equipment	x
Total Costs	x
Return	x
<u>Mean capital employed</u>	
Tranmission	x
Repair & Maintenance	x
Installation & Provisioning	x
Carrier Billing	x
Carrier Administration	x
Data ATM	x
Data BIP	x
Data Platforms	x
DSLAM	x
Broadband Access Server	x
DSL Equipment	x
Total Capital	x
ROCE	x

Source: Eircom's 2011/12 Historical Cost Additional Financial Information to the Separated Accounts

Annex: 3 Questions

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