



Response to Consultation & Consultation on Draft Decision

Market Analysis: Wholesale Broadband Access

(Response to Consultation Document 04/25 and Draft Decision)

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All responses to this draft decision should be clearly marked:-
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and sent by post, facsimile, e-mail or on-line at www.comreg.ie
(current consultations), to arrive on or before 5.30 pm on 27
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Ms Ruth Kenny
Commission for Communications Regulation
Irish Life Centre
Block DEF
Lr. Abbey Street Freepost
Dublin 1
Ireland

Ph: +353-1-8049600 Fax: +353-1-804 9680 Email:
ruth.kenny@comreg.ie

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Response to Consultation, subject to the standard confidentiality
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1 Executive Summary

- 1.1 The new communications regulatory framework requires ComReg to define relevant markets appropriate to national circumstances, in particular relevant geographic markets within its territory, in accordance with the market definition procedure outlined in the *Framework Regulations*¹. In addition, ComReg is required to conduct an analysis of the relevant markets to decide whether or not they are effectively competitive.
- 1.2 The *Framework Regulations* further require that the market analysis procedure under Regulation 27 be carried out as soon as possible after ComReg defines a relevant market, which takes place as soon as possible after the adoption, or subsequent revision, of the Recommendation on relevant product and service markets (“the *Relevant Markets Recommendation*”) by the European Commission². In carrying out market definition and market analysis, ComReg must take the utmost account of the *Relevant Market Recommendation* and the European Commission’s *Guidelines on Market Analysis and Significant Market Power* (“*The Guidelines*”).
- 1.3 As part of this process, ComReg issued a consultation document (ComReg Document No. 04/25) outlining its preliminary views on the market for wholesale broadband access. The response to consultation summarises the issues raised in the consultation and provides ComReg’s conclusions.
- 1.4 Under Regulation 5 of the *Framework Regulations* and in order to promote further openness and transparency ComReg will publish the names of all respondents and make available for inspection, responses to the consultation at its Offices³.
- 1.5 The European Commission’s *Relevant Markets Recommendation* states that there is a market for the supply of **wholesale broadband access** services, a market which covers ‘bit stream’ access permitting the transmission of broadband data in both directions and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bit stream access.
- 1.6 Based on the types of wholesale services currently available and technologies in use in Ireland, ComReg’s market definition considered:
 - which downstream retail services are capable of being supported by the relevant wholesale services;
 - whether notional cable and FWA access (i.e., self-supply by the operator of cable or FWA network) should be included in the wholesale market analysis, given that some retail cable and FWA services compete with xDSL services at the retail level;

¹European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 (S.I. No. 307 of 2003).

²Framework Regulations 26 and 27.

³ComReg may publish submissions with the Response to Consultation, subject to confidentiality. 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. Respondents are requested to clearly identify confidential material and if possible to include it in a separate annex to the response. Such information will be treated as strictly confidential.

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- whether self supplied bit stream services should be included in the wholesale market analysis;
 - whether functional differences at the wholesale level suggest that LLU and bit stream services are not in the same relevant market, and;
 - whether price differences (including costs attributable to additional equipment) suggest that LLU and bit stream services are not in the same relevant market.
- 1.7 The market definition process was completed taking into account the market circumstances and the views of respondents. ComReg concludes that the market for wholesale broadband access should include the provision of bit stream services through self-supply and supply to third parties; and the self-supply by cable operators and Fixed Wireless Access (FWA) operators. Furthermore, ComReg concurs with the views expressed by the European Commission in the *Explanatory Memorandum* to the *Relevant Markets Recommendation* that an operator purchasing wholesale broadband access will not consider unbundled local loops to be a substitute.
- 1.8 The market definition process found that the geographic market for wholesale broadband access is national in scope, which is the territory of Ireland.
- 1.9 The market analysis of the wholesale broadband access market concludes that eircom should be designated as having significant market power (SMP) in the relevant market. Its market share represents in excess of 50% of the wholesale broadband access market. Within the period of this review, there is nothing to suggest to ComReg that the SMP enjoyed by eircom will be diluted in any meaningful way in the absence of appropriate and proportionate *ex ante* regulatory measures.
- 1.10 *The Guidelines*⁴, outline that ComReg can only impose *ex-ante* regulation “in markets where there are one or more undertakings with significant market power and where national and Community competition law remedies are not sufficient”⁵.
- 1.11 The Guidelines clearly state that the mere designation of an undertaking as having SMP on a given market, without imposing any appropriate regulatory obligations, is inconsistent with the provisions of the new regulatory framework, notably Article 16 (4) of the Framework Directive⁶. Indeed, NRAs must impose at least one regulatory obligation on an undertaking that has been designated with SMP⁷.
- 1.12 ComReg is obliged to impose at least one obligation listed in Articles 9 to Article 13 inclusive of the Access Directive⁸ which are as follows:
- Obligation of transparency

⁴ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services at paragraph 16.

⁵ Recital 27 of the Framework Directive.

⁶ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services at paragraph 114.

⁷ *Ibid*, paragraphs 21 and 114.

⁸ Article 8(2) of Access Directive

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- Obligation of non-discrimination
- Obligation of accounting separation
- Obligation of access to, and use of, specific network facilities
- Price control and cost accounting obligations

1.13 ComReg is proposing to impose the following obligations on the SMP operator, eircom:

- Access based on a regime of reasonable requests for access as guided by the principles set out in Regulation 13 of the *Access Regulations*.
- Price control in the form of a retail minus mechanism. This obligation is appropriate to the conditions of an expanding market. It is considered that it will prevent eircom from leveraging its market power by way of a price/margin squeeze, while at the same time ensuring that investment incentives are maintained. A further consultation will be held on the detail of the implementation of the retail minus mechanism.
- An obligation of non-discrimination that should ensure that eircom does not discriminate in favour of its retail arm. It is considered that a non-discrimination obligation will prevent eircom from leveraging its market power, particularly through affecting non-price variables.
- An obligation of transparency which would be imposed with respect to all bit stream products and associated facilities and the terms and conditions under which they are supplied.
- An obligation of accounting separation would support the monitoring of the non-discrimination agreement. This obligation would also assist in the application of a retail minus mechanism and the calculation of avoidable retail costs. A further consultation will be held on the detail of the implementation of the accounting separation mechanism.

1.14 ComReg is proposing to place obligations on eircom under all of the headings above. The nature of these remedies is set out in detail in section 6 below.

1.15 As noted earlier, this document is both a response to consultation document and a consultation on the draft decision attached in Annex F. ComReg welcomes all comments that were submitted by interested parties on the questions that were posed in this market review, and has considered all comments in coming to its conclusions on market definition, market analysis and remedies. As required by Regulation 20 of the Framework Regulations, the draft measure is now being made accessible to the European Commission and the national regulatory authorities in other member states of the European Community prior to taking a final decision.

1.16 ComReg appreciates that the issues raised in the Decision may result in respondents providing confidential information if their comments are to be meaningful. Under Article 5(2) of the Framework Directive the European Commission can require ComReg to provide it with responses to the consultation and other information, and the Commission may pass that information on to other NRAs in other Member States. In the limited circumstances of Regulation 17(6) of the Framework Regulations (namely where the information supplied by a party has been supplied to ComReg under an express power to request information) ComReg can make a reasoned request to the Commission that the information should not be passed on to other NRAs. This would not normally be the case with a response by an operator to

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a consultation document. In cases not covered by Regulation 17(6) the Commission, ComReg and the other NRAs are still bound to respect the confidential nature of such information. Respondents are asked to clearly identify confidential material and if possible include it in a separate annex to the response.

- 1.17 ComReg would also welcome comments from all interested parties on the draft decision attached in Annex F. Details of the consultation procedure are included in section 8.

2 Introduction

Objectives under the Communications Regulation Act, 2002

- 2.1 Section 12 of the Communications Regulation Act, 2002 outlines the objectives of ComReg in exercising its functions. In relation to the provision of electronic communications networks, electronic communications services and associated facilities these objectives are to:
- promote competition
 - contribute to the development of the internal market, and
 - promote the interests of users within the European Union.
- 2.2 This review is in line with the objectives set out in the Communications Regulation Act, 2002, in particular as ComReg seeks to promote competition amongst operators to ensure that end-users derive the maximum benefit in terms of price, choice and quality.

Regulatory Framework

- 2.3 Four sets of Regulations,⁹ which transpose into Irish law four European Community directives on electronic communications networks and services,¹⁰ entered into force in Ireland on 25 July 2003. The final element of the European electronic communications regulatory package, the *Privacy and Electronic Communications Directive*, was transposed into Irish law on 6 November 2003.
- 2.4 The new communications regulatory framework requires that ComReg define relevant markets appropriate to national circumstances, in particular relevant geographic markets within its territory, in accordance with the market definition procedure outlined in the *Framework Regulations*¹¹. In addition, ComReg is required to conduct an analysis of the relevant markets to decide whether or not they

⁹ Namely, the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 (S.I. No. 307 of 2003), ("the Framework Regulations"); the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations, 2003 (S.I. No. 306 of 2003), ("the Authorisation Regulations"); the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003 (S.I. No. 305 of 2003), ("the Access Regulations"); the European Communities (European Communications) (Universal Service and Users' Rights) Regulations 2003 (S.I. No. 308 of 2003), ("the Universal Service Regulations").

¹⁰ The new regulatory framework for electronic communications networks and services, comprising of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, ("*the Framework Directive*"), OJ 2002 L 108/33, and four other Directives (collectively referred to as "the Specific Directives"), namely: Directive 2002/20/EC of the European Parliament and of the Council on the authorisation of electronic communications networks and services, ("*the Authorisation Directive*"), OJ 2002 L 108/21; Directive 2002/19/EC of the European Parliament and of the Council on access to, and interconnection of, electronic communications networks and services, ("*the Access Directive*"), OJ 2002 L 108/7; Directive 2002/22/EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services, ("*the Universal Service Directive*"), OJ 2002 L 108/51; and the Directive 2002/58/EC of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector, ("*the Privacy and Electronic Communications Directive*"), OJ 2002 L 201/37.

¹¹ Framework Regulation 26.

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are effectively competitive¹². Where it concludes that the relevant market is not effectively competitive (*i.e.*, where there is one or more undertaking with significant market power (“SMP”)), the *Framework Regulations* provide that it must identify the undertakings with SMP on that market and impose on such undertakings such specific regulatory obligations as it considers appropriate¹³. Alternatively, where it concludes that the relevant market is effectively competitive, the *Framework Regulations* oblige ComReg not to impose any new regulatory obligations on any undertaking in that relevant market. If ComReg has previously imposed sector-specific regulatory obligations on undertakings in that relevant market, it must withdraw such obligations and may not impose new obligations on those undertaking(s)¹⁴.

- 2.5 The *Framework Regulations* further require that the market review procedure under Regulation 27 be carried out subsequent to ComReg defining a relevant market, which is to occur as soon as possible after the adoption, or subsequent revision, of the *Relevant Markets Recommendation* by the European Commission¹⁵. In carrying out market definition and market analysis, ComReg must take the utmost account of the *Relevant Market Recommendation* and the European Commission's *Guidelines*.

ComReg Procedure

- 2.6 ComReg has collected market data from a variety of internal and external sources, including users and providers of electronic communications networks and services (‘ECNs’ and ‘ECSs’), in order to thoroughly carry out its respective market definition and market analysis procedures based on established economic and legal principles, and taking the utmost account of the *Recommendation* and the *Guidelines*.
- 2.7 On 5 March 2004, ComReg issued a national consultation on its market analysis for wholesale broadband access (ComReg Document 04/25). Interested parties were asked to submit comments by 21 April 2004 on a number of questions pertaining to the preliminary findings of the analysis. ComReg received detailed submissions from the eight respondents listed below by the close of the consultation period. Additionally, there were twenty individual respondents who provided general comments on the market whose views were also taken into consideration.
- 2.8 The eight detailed submissions to the consultation were:
1. ALTO
 2. Bitbuzz
 3. Chorus
 4. eircom
 5. EsatBT
 6. Netsource
 7. Perlico
 8. Snoopdos
- 2.9 ComReg thanks all respondents for their submissions. Having considered the views of all respondents, ComReg sets out in this document its conclusions regarding the market analysis process. Comments relevant to each consultation question are addressed in the following sections. All responses received are available for

¹² Framework Regulation 27.

¹³ Framework Regulation 27(4).

¹⁴ Framework Regulation 27(3).

¹⁵ Framework Regulations 26 and 27.

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inspection (with the exception of material supplied on a confidential basis) at ComReg's office.

- 2.10 As required by Regulation 20 of the Framework Regulations, any draft measure which ComReg proposes to adopt will be made accessible to the European Commission and the national regulatory authorities in other member states of the European Community prior to adopting the measure

Liaison with Competition Authority

- 2.11 There is a requirement on ComReg under Regulation 27 of the *Framework Regulations* to carry out an analysis of a relevant market that has been defined. This analysis must be carried out in accordance, where appropriate, with an agreement with the National Competition Authorities (NCAs) under Section 34 of the Competition Act 2002. In December 2002, ComReg signed a co-operation agreement with the Competition Authority for a period of three years.¹⁶ To facilitate market review decision-making, a Steering Group, which included a representative from the Competition Authority, was established by ComReg. Through this forum, the Competition Authority has been informed and involved throughout the market review decision-making process. Annex G includes the Competition Authority's response to ComReg's conclusion on this market.

Structure of Consultation Document

- 2.12 The remainder of this consultation document is structured as follows:

- **Section 3** presents ComReg's conclusions on the definition of the market for "wholesale broadband access". This section consists of a review of the market definition procedure and its scope, as well as demand side and supply side assessments at the wholesale and retail level;
- **Section 4** presents ComReg's market analysis for the market listed above and presents ComReg's view on whether this market is effectively competitive;
- **Section 5** presents ComReg's view on those undertakings with significant market power in the wholesale broadband access market;
- **Section 6** provides a discussion of the general principles associated with remedies and outlines a range of possible, as well as our, remedies under the new regulatory framework; and
- **Section 7** outlines the regulatory impact assessment conducted in relation to the proposed regulatory intervention regarding these markets;
- **Section 8** provides details with regard to the submission of comments on the Draft Decision in Annex F.

¹⁶ ComReg Document No. 03/06

3 Relevant Market Definition

Background

- 3.1 The *Framework Regulations* require ComReg to define relevant markets appropriate to national circumstances, in particular the relevant geographic markets within Ireland, in accordance with the market definition procedure outlined in the *Framework Regulations*. This obligation applies to both the relevant markets identified in the *Relevant Markets Recommendation* and to additional relevant markets that ComReg may consider to merit investigation. In accordance with the *Framework Regulations*, the market definition exercise must be carried out in accordance with the principles of competition rules and must take “utmost account” of the *Relevant Markets Recommendation*, as well as the *SMP Guidelines*^{17 18}.
- 3.2 The purpose of the market definition procedure is to identify in a systematic way the competitive constraints that providers of ECNs encounter, thereby also facilitating the subsequent market analysis procedure. According to the European Court of Justice,¹⁹ a relevant product market comprises all products or services that are sufficiently interchangeable or substitutable with its products, not only in terms of the objective characteristics of those products, their prices or their intended use, but also in terms of the conditions of competition and/or the structure of supply and demand for the product in question.
- 3.3 The definition of the relevant market concentrates on identifying constraints on the price-setting behaviour of operators. These constraints comprise demand substitution and supply substitution. For the purpose of defining the relevant market, ComReg will take into account a range of measures in assessing demand and supply substitution, including the SSNIP test where practicable²⁰. Under that test, a particular service or set of services constitutes a separate relevant product market if a hypothetical monopoly supplier could impose a small but significant²¹ non-transitory increase in price above the competitive level, without losing sales to the extent that such a rise in prices would prove to be unprofitable²². The market definition exercise is concerned with the likely competitive response of a body of customers, that is, not necessarily the majority of customers²³.

¹⁷ Framework Regulation 27.

¹⁸ Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic networks and services, OJ 2002 C 165/3, (“the Guidelines”).

¹⁹ See, for example, Case 322/81, *Michelin v. Commission* [1983] ECR 3461, as well as the Commission Notice on the definition of relevant markets for the purposes of Community competition law (“the Commission Notice on Market Definition”), OJ 1997 C 372/3, and the Guidelines.

²⁰ See the Commission Notice on Market Definition, the Guidelines and ComReg’s Market Data Information Notice for additional guidance.

²¹ Usually calculated at between 5% and 10%, depending on the particular product and the market circumstances.

²² See the Commission Notice on Market Definition, the SMP Guidelines and ComReg’s Market Data Information Notice (Document No. 02/11) for additional guidance.

²³ See, for example, Case 85/76, *Hoffman-La Roche & Co. A. G. v. Commission*, [1979] ECR 461, as well as Case 66/ 86, *Ahmed Saeed Flugreisen v. Zentrale zur Bekämpfung unlauteren Wettbewerbs*, [1989] ECR 803.

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- 3.4 A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.

Scope of Review

Summary of consultation issue

- 3.5 ComReg's review adopted the European Commission's views on the wholesale broadband access market expressed in the *Relevant Markets Recommendation* as a starting point.
- 3.6 This states that there is a market for the supply of wholesale broadband access services, a market which covers '*bitstream*' access permitting the transmission of broadband data in both directions and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bitstream access.
- 3.7 The European Commission also expresses the view, in the *Explanatory Memorandum* to the *Relevant Markets Recommendation*, that wholesale broadband access is not considered to be in the same market for unbundled local loops (LLU). Additionally it is stated that there is very limited demand and supply side substitution between resale of end-to-end wholesale products and access products.

Consultation Question 1

Q. 1. Do you agree with the scope of ComReg's review of wholesale broadband access? Please elaborate on your response.

Responses to question 1

- 3.8 All respondents agreed with the scope adopted by ComReg as a starting point to the review of wholesale broadband access as a market which includes 'bitstream' access permitting the transmission of broadband data in both directions. The scope also included other wholesale access provided over alternative infrastructures (e.g. cable), if and when they offer facilities equivalent to bitstream access. LLU and bitstream were not considered to be substitutes from the demand and supply side and are thus not in the same market.

ComReg's Position

- 3.9 As a starting point for defining the wholesale broadband access market, ComReg supports the view of the European Commission in that it does not consider that unbundled loops fall within the scope of the relevant market. This is discussed in further detail in the analysis of whether bitstream and LLU are demand and supply side substitutes in the chapter on market definition.

The Relevant Product Market

Summary of consultation issue

- 3.10 ComReg took the view that despite there being a number of technologies available for the purpose of broadband delivery, the current review will focus primarily on

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xDSL²⁴, cable and FWA services as these are the most widely used and actively utilised services in Ireland. A discussion of alternative technologies (e.g. Fibre To The Home (FTTH), satellite, mobile access) is contained in Annex D. The take up of these alternative broadband services is less than one percent of the total market for wholesale broadband access. ComReg therefore concluded that even in aggregate these technologies do not impose a competitive constraint at the moment and are not expected to do so within the timeframe of the review. Thus they are not considered further.

- 3.11 In defining the relevant market, ComReg considered two scenarios, one which included self supply of broadband services which leads to a broad definition, and an alternative scenario which only considered direct provision of services resulting in a narrow definition.

Consultation Question 2

Q. 2. Do you agree with the approach to market definition outlined above?

Please elaborate on your response.

Responses to question 2

- 3.12 There was agreement among respondents on the approach taken by ComReg. One respondent noted further that although there are a variety of technologies available or potentially available, these “do not represent more than a minimal use to date”. The respondent agreed that the consultation should concentrate on bitstream, cable and FWA.
- 3.13 Another respondent however stated that ComReg had not paid due attention to the timeframe of the analysis. It was their view that ComReg considers a *current* undertaking rather than a *prospective* one, the latter which has been explicitly stated in *The Guidelines* of the European Commission. This respondent was of the belief that in the Irish market for wholesale broadband access, the evolution and pace of growth means that historical trends are not a good predictor for the future and thus the appropriate approach is one that is forward-looking. It was suggested to include technologies other than DSL, cable and FWA technologies such as satellite and 3G technologies.

ComReg’s position

- 3.14 ComReg agrees with the respondent that the appropriate approach to take in carrying out the market definition should be forward-looking. However, ComReg concludes that the technologies outlined in Annex D do not have sufficient penetration in the market to pose a competitive threat in the relevant market. ComReg also concludes that these services will not have a competitive impact in the medium term, and thus should be considered in the context of potential competition rather than supply-side substitutes. This point is further considered in section six under the heading ‘Potential competition and barriers to entry and expansion’.

Conclusion on relevant product market

- 3.15 The review focused primarily on xDSL, cable and FWA services while alternative technologies are considered in Section 4 under analysis of potential competition.

²⁴ There are a number of variants of xDSL technologies, however this review will examine asymmetric DSL (ADSL) as this is the most common class currently used for broadband access in Ireland.

What downstream retail services are capable of being supported by the relevant wholesale services?

3.16 Based on the types of wholesale services currently available and technologies in use in Ireland, ComReg's market definition first considers what downstream retail services are capable of being supported by the relevant wholesale services and what ComReg considers broadband services to be. In this review ComReg has not defined a retail market for the purposes of ex-ante regulation, but in the event that wholesale remedies are not sufficient to address actual and potential competition problems at the retail level, ComReg will reconsider whether it is appropriate to define a market to address specific retail issues.

Summary of consultation issue

Retail demand-side substitution

3.17 To examine what downstream retail services are capable of being supported by the relevant wholesale services it is necessary to analyse the equivalent retail market as a starting point for the wholesale market definition, as demand for wholesale services is directly derived from the retail level. ComReg carried out the analysis by examining the functionality and pricing of broadband services and the development of the market to date.

3.18 *The European Commission's Explanatory Memorandum to the Recommendation* differentiates between narrowband (or 'dial-up') and broadband access. It refers to a number of differentiating factors between the two types of access, including bandwidth, technical characteristics that render some applications not viable on narrowband connections, the distinction between 'dial-up' and 'always on', and price differentials. ComReg considered the range of retail access services available in Ireland with a view to identifying whether and how any such distinction might be drawn in Ireland. In doing so, it has adopted the European Commission's criteria.

Functional characteristics

3.19 The evidence available to ComReg suggests that there is a clear distinction in terms of bandwidth, between access services *up to* 128 kbps and access services *above* 128 kbps. Surveys conducted on ComReg's behalf²⁵ found that when consumers were asked what they thought to be the main advantages, if any, of having broadband versus narrowband, 77% cited that the additional bandwidth provided increased speed for Internet functions (access, e-mail, data transfer and video conference). This is supported by an additional survey which identified that when respondents were asked what are the most appealing benefits, if any, of broadband over narrowband, the primary benefits were found to be unlimited Internet access for the same fee, higher speed Internet access and an always-on connection.

3.20 Cable, FWA and ADSL broadband services have bandwidth ranges that include the packages outlined in table 3.1. As evidenced in the table all services available on these platforms have downstream and upstream data speeds in excess of 128 kbps.

²⁵ TNS MRBI Broadband & Data Communications Survey, May 2003 (ComReg 03/67d); MRBI Broadband Internet Survey – Residential, August 2002

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3.21 FWA connections, cable connections and ADSL access lines are ‘always on’, in that they allow the subscriber to maintain a permanent connection to the network (facilitating real-time delivery of content, including email).

3.22 As such, cable and FWA broadband services have the same functional characteristics as ADSL products currently available in Ireland.

Pricing

3.23 As highlighted in table 3.1 below, it can be seen that cable, FWA and ADSL broadband access are interchangeable in terms of price for comparable products. There are quite distinct charging models adopted for broadband access and narrowband services, which incorporate both connection and service components²⁶.

3.24 In Ireland, the predominant access technology for narrowband internet connection is via copper loops on the PSTN, accounting for 83% of Irish Internet access as of March 2004²⁷. The monthly rental charge for an eircom telephone line is €24.18 per month and for internet access there are additional per minute call costs²⁸. Alternatively, for an extra monthly charge of €13.30 (in total €37.50)²⁹ eircom’s ISDN basic rate access provides a narrowband connection up to 128 kbps and the ability to use voice and data simultaneously. Equivalent dial-up per minute call costs are also charged for an ISDN connection. ISDN currently accounts for 8% of Internet subscribers in Ireland³⁰.

²⁶ All prices are inclusive of VAT at 21%.

²⁷ Key Data for Irish Communications Market – March 2004. ComReg Document Number 04/30b

²⁸ eircom calls are based on a local rate. Other packages are available which offer bundled minutes and range in price from €9.99 for 25 hrs to €29.99 for 150 hrs as of February 2004

²⁹ And a connection charge of €119.99

³⁰ Key Data for Irish Communications Market – March 2004. ComReg Document Number 04/30b

Platform	Product name	Down Stream	Upstream	Price ³¹ per month	Connection Fee
Cable	Cablesurf	2 Mb/s	2 Mb/s	€40.00	n/a
	Chorus	512 kbps	128 kbps	€35.00	€50.00
	Cross@n	1 Mb/s	300 kbps	€40.00	€45.00
	ntl always on 600	512 kbps	128 kbps	€40.00	€65.00
FWA	Amocom (home)	512 kbps	512 kbps	€60.00	€265.00
	Digiweb Wireless	512 kbps	128 kbps	€39.00	€79.00
	Ice Wireless (home)	512 kbps	256 kbps	€39.00	€199.00
	Irish Broadband (breeze home)	512 kbps	512 kbps	€35.00	€149.00
ADSL³²	eircom home starter	512 kbps	128 kbps	€40.00	€99.00
	eircom bb business plus	1 Mb/s	256 kbps	€108.00	€99.00
	iol broadband	512 kbps	128 kbps	€39.00	€90.00 ³³
	UTV click silver	512 kbps	128 kbps	€30.00	€99.00
	Netsource – Origin	512 kbps	128 kbps	€40.00	€99.00
	Netsource – Enterprise	1 Mb/s	256 kbps	€103.00	€99.00

Table 3.1: Broadband Speeds and Prices/Platform

3.25 ComReg considers that in the event of a price increase a FWA subscriber may switch to an ADSL or a cable product. This is supported by survey³⁴ findings that 4% of SMEs and 6% of corporate customers had switched from an ADSL supplier of broadband services to an alternative provider (on an ADSL, cable or FWA platform) in the past twelve months.

Development of subscriber numbers

3.26 There is growing retail demand in Ireland for broadband access services. The total number of broadband subscribers up to the end of March 2004 is detailed in table 3.2

³¹ Prices collated from operators' website

³² A monthly rental charge of €24.18 will also apply for access to an exchange line for all DSL services

³³ Connection charge includes engineering fee for IOL. All other connection charges are self-installed.

³⁴ TNS mrbi ComReg Broadband & Data Communications Survey/May 2004

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below. These figures provide an overview of the developments in the market for broadband services in Ireland over the past year.

Platform	Subscriber numbers (end of Q4 2003)	Subscriber numbers (end of Q1 2004)
Cable	4,900	5,200 (↑ <i>by 6%</i>)
FWA	1,350	1,400 ³⁵ (↑ <i>by 4%</i>)
ADSL ³⁶	25,300	38,600 (↑ <i>by 34%</i>)
Total	31,550	45,200 (↑ <i>by 30%</i>)

Table 3.2: Broadband Subscriber Numbers

Conclusion

- 3.27 It appears to ComReg that, from the demand-side, cable broadband access services, FWA access services and ADSL services are supplied on the same relevant retail service market and are differentiated from narrowband services.

Consultation question 3

Q. 3. Do you consider that cable broadband access services, FWA access services and ADSL services are supplied on the same relevant retail service market? Please elaborate on your response.

Responses to question 3

- 3.28 All but one respondent were of the view that cable, FWA and ADSL access services are supplied in the same relevant retail service market. One respondent highlighted that, based on the limited evidence from the Irish market and experience in other countries it is clear that broadband service provided via cable networks can offer a significant competitive threat to retail DSL services.
- 3.29 A number of respondents, who agreed that cable, FWA and ADSL services are all supplied in the same relevant market, also noted that the relative penetration and impact of the other technologies remains low compared with ADSL, due to their limited availability. One respondent highlighted that consumers are more aware of DSL services than other platforms, which is driving up demand for DSL and reducing the benefits of substitution from other platforms.
- 3.30 Another respondent suggested that the market for broadband products forms a much wider market than that proposed by ComReg and should include narrowband products and access to information such as the use of travel brochures. The respondent noted that consumer perceptions of how trade-offs are made in terms of expenditure on other goods and services are the primary factors to be considered when defining the market. There was support from the same respondent that consumers regard the various retail products as close substitutes, given the similarities in the nature and pricing of these products.

³⁵ Revised FWA subscriber data was not provided by some operators

³⁶ ADSL subscribers include both eircom's subscribers and other licensed operator ISPs. A number of bitstream lines are resold for the delivery of broadband services to end users

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ComReg's Position

- 3.31 ComReg has considered the suggestion that the market definition should be widened to include narrowband services. However from analysis of functional and pricing data as well as consumer surveys (as outlined above) ComReg maintains that, on the whole, there are distinct characteristics which differentiate broadband services. This conclusion is further supported by the analysis below.
- 3.32 In a recent consumer survey, commissioned by ComReg, 74% of respondents submitted that the main advantage of additional bandwidth is increased speed of Internet functions such as access, e-mail, data transfer and video conferencing³⁷. It can be seen from consumer trends that when users have access to broadband services they are more likely to utilise different applications than those used with narrowband access, such as streaming video and playing games³⁸. ComReg is of the view that this is quite logical, although, for example, it is possible for narrowband users to download music at lower data speeds.
- 3.33 However, the experience is more time consuming and of a lower quality, as a result. From ComReg's consumer surveys it can be seen that 100% of respondents who had Internet connectivity (of any type) used e-mail services on a regular basis³⁹, however as can be seen by the graph below usage patterns for high capacity applications differ depending on whether the user has access to a broadband connection. Those with high capacity connections are more likely to use high-speed applications such as streaming audio at least once a week. There appears to be no reason why this analysis should not apply equally to the Irish market. Thus it can be concluded that broadband connectivity provides distinct services, for which narrowband connection is not a close substitute.

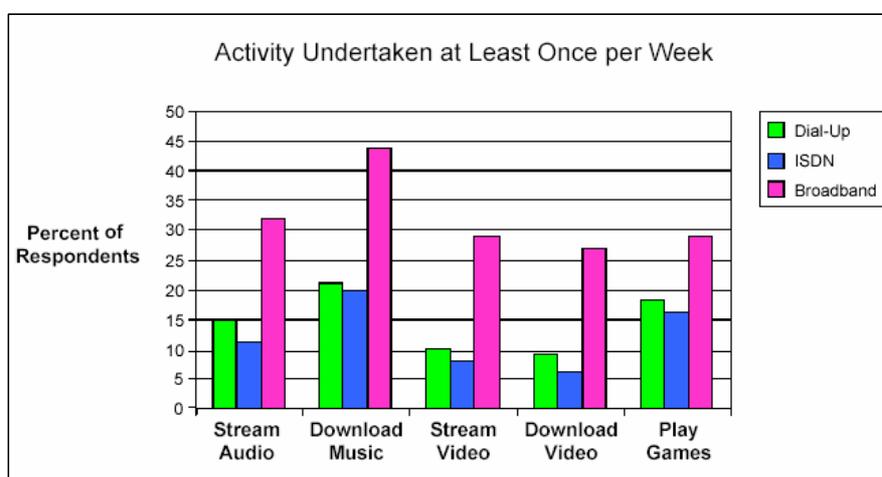


Figure 3.1: Activity Undertaken per week/type of connection⁴⁰

- 3.34 There is also a clear distinction between the payment patterns for narrowband and broadband services. Despite the availability of flat-rate narrowband packages, only 7% of all users use a 'dial up flat rate'⁴¹, in that they pay a fixed amount each month for a specific amount of time spent online using regular dial-up. The vast majority of

³⁷ TNS mrbi ComReg Broadband & Data Communications Survey/May 2004

³⁸ Europe's Connected Consumers – Broadband and Media Europe Yankee Group Nov 2003 – slide 13 Broadband and Dial Up Usage Patterns

³⁹ TNS mrbi ComReg Broadband & Data Communications Survey/May 2004 TNS

⁴⁰ "Europe's Connected Consumers", the Yankee Group (Nov 2003) – slide 13 Broadband and Dial Up Usage Patterns

⁴¹ Amarach Consulting – ComReg Trends Report Q2 2004

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narrowband users 'pay as they go' in that they only pay for the time spent on-line. This would indicate that users do not consider that they spend enough time online to make it cost efficient to switch to a broadband package. This is supported by the survey finding that 82% of narrowband subscribers stated that they had not considered subscribing to broadband services. The main reasons were that they had sufficient bandwidth with their current connection followed by broadband being too expensive and their infrequent use of the Internet⁴².

3.35 PSTN and ISDN lines (or narrowband) connections are dial-up connections, in that the subscriber is not provided with an access connection that is 'always on' or active at all times. In contrast, cable connections and ADSL access lines are 'always on', in that they allow the subscriber to maintain a permanent connection to the network. The advantages associated with a permanent connection include real-time delivery of content including email, ease of use, transparent billing, and reduced dropped connections. Despite the availability of autodiallers which minimize the difficulties with 'dial-up' connections, it is ComReg's view is that there is a qualitative difference between dial-up and always-on connectivity. The distinction between dial-up and always-on is a key difference between narrowband and broadband access technologies.

3.36 ComReg considers that the possibility to use both voice and data services simultaneously is an additional factor that distinguishes broadband services. This is in line with Ofcom's findings, in their review of the wholesale broadband access market⁴³, where they concluded that the ability to simultaneously use both voice and data is one of three distinguishing functionalities which are not available in practice using narrowband internet access; the other two features being an 'always-on' connection and a faster downstream speed. It should be noted that ISDN services provide simultaneous use of voice and data; however ISDN products do not deliver high bandwidth (above 128 kbps) or an 'always-on' connection and thus they are not considered a close substitute.

3.37 Thus, it can be determined that narrowband services are not considered close substitutes for broadband services and, in line with the Commission's recommendations, are not included in the relevant market.

Conclusion

3.38 ComReg concludes that from the demand side, cable broadband, FWA and ADSL access services are supplied in the same relevant retail broadband service market. These services are distinct from narrowband services in terms of functionality, pricing and consumer perception.

Wholesale demand-side substitution

3.39 In Ireland, there is, in effect, a hierarchy of broadband access services that allow new entrants to acquire services that move them closer to end users and also allow them to develop differentiated and, perhaps, innovative services. This is illustrated by the price list for wholesale access services, which is contained in Annex B. Not all acquirers of access will seek to go so far as to acquire fully unbundled local loops.

⁴² Amarach Consulting 2004 – ComReg Trends Report Q2 2004

⁴³ Wholesale Broadband Access – Explanatory Statement and Notification – December 2003 paragraph 2.32

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Operators will seek to acquire access at different points in the network hierarchy, taking into account both the technical and economic implications of such decisions. In this review, ComReg is seeking to identify the extent to which such different forms of wholesale access exert competitive pressure on each other and, accordingly, fall into the same relevant markets.

The following analysis assesses:

- whether cable and FWA access should be included in the wholesale market analysis, given that some retail cable and FWA services compete with ADSL services at the retail level;
- whether self-supplied bitstream services should be included in the wholesale market analysis; and;
- whether functional and pricing differences at the wholesale level suggest that LLU and bitstream services are not in the same relevant market.

Are wholesale cable and FWA connections included in the relevant market?

Summary of consultation issue

3.40 There is currently no provision in Ireland of wholesale capacity on cable and FWA networks to third parties. Technical limitations of existing cable and FWA networks prohibit operators from offering a wholesale broadband product. Significant investment is required to upgrade existing networks to facilitate the delivery of such services. This is unlikely to happen within the timeframe of this review. However, there is provision, albeit limited, of retail broadband access on cable and FWA networks. At the retail level, ADSL, cable and FWA broadband services are in the same retail relevant product market as the above analysis demonstrates. Demand at the wholesale level is derived from the retail level. As a result, ComReg has considered whether to include capacity available on cable and FWA networks, that is not made available to third parties, in its analysis.

3.41 ComReg notes that the recent decision of the Court of First Instance in *Schneider Electric SA v Commission of the European Communities*⁴⁴ rejected the European Commission's view that vertically integrated channel sales were not 'sold' in the wholesale market (and, therefore, would not constrain the conduct of the merged entity).⁴⁵ As a result of the case, it is now necessary to conduct a market-by-market analysis to determine whether the 'captive' capacity concept should be taken into consideration in the context of the particular circumstances of each market. It appears to ComReg that there is derived demand for both self-supplied products (on

44 [2002] ECR II-4201

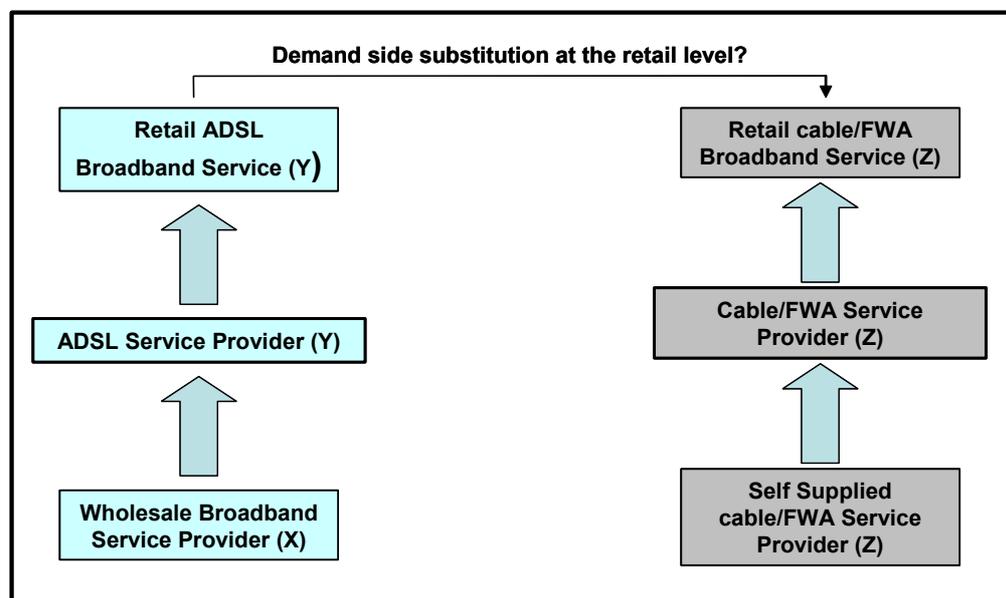
45 Prior Commission administrative practice has shown a mixed approach to the treatment of captive sales. In BASF/ Eurodiol/ Pantochim Case No. COMP/M.2314, the Commission excluded captive sales from its market analysis. In Cargill/ Agribrands Case No. COMP/M.2271, the Commission included captive sales, finding that the self-supplied products effectively constrained prices. Finally, in Shell/ DEA Case No. COMP/M.2389, the Commission applied the 'net' merchant rule (i.e., calculating the total merchant market supply of each firm and subtracting merchant market purchases made by each firm (or its affiliates), to calculate net merchant market shares of each entity). In addition, the Commission's attitude to self-supply in the context of distribution agreements, on the one hand, and technology transfer, on the other, also appear to be not wholly consistent in approach.

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cable, FWA and xDSL-enabled networks) and wholesale inputs (over xDSL-enabled networks).

3.42 ComReg makes the following analysis in this light. Even if cable or FWA capacity is all self-supplied, ComReg considers that the issue is whether such self-supply constrains wholesale behaviour through its impact at the retail level. For example, an increase in the price of bitstream access is highly likely to induce demand-side substitution at the retail level. Such an increase will probably lead to ADSL operators that buy bitstream from eircom increasing their retail ADSL prices, thereby providing cable and FWA operators with the opportunity to increase their share of the retail market (assuming that they do not merely follow the retail ADSL price increase). Such cable and FWA operators would be effectively increasing their self-supplied wholesale broadband access. ComReg concludes that the indirect pricing constraint exercised by cable and FWA based services at the retail level has a sufficiently significant impact at the wholesale level to justify its inclusion in the wholesale broadband access market.

3.43 This is illustrated as follows:



Source: ComReg

Figure 3.2 – Self supply of Cable/FWA Broadband Services

X = hypothetical monopolist

Y = third party ADSL providers

Z = vertically integrated retail cable/FWA broadband service provider

3.44 It could be considered that in these circumstances, self-supply by cable and FWA operators occurs in the same relevant market as the provision of bitstream access. ComReg posed the question in the initial consultation whether the competitive constraint imposed through self-supply on cable and FWA platforms is significant enough to justify their inclusion in the relevant market.

3.45 Additionally, ComReg was mindful of the European Commission's comments pursuant to Article 7 (3) of the *Framework Directive* to Ofcom⁴⁶ on its market review of Asymmetric Broadband Origination and Broadband Conveyance in the UK. The

⁴⁶ Ofcom, previously known as Oftel.

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Commission recognises that Oftel's approach to defining a wholesale market on the basis of competitive conditions in the corresponding retail market is not in principle inconsistent with the methodology set out in the *Recommendation* and in the Commission's Guidelines on market analysis and the assessment of SMP. However greater consideration should have been given to the technical, practical and economic feasibility for cable operators to facilitate the provision of wholesale services equivalent to bitstream access. As a result ComReg makes an assessment of the potential direct (rather than self-supplied) constraint of wholesale cable and FWA operators on (PSTN) bitstream providers in the market for wholesale broadband access.

- 3.46 While it is *technically* possible for cable operators of the small number of Irish cable networks that are bi-directional and digitised to provide a wholesale broadband service to third parties equivalent to bitstream, there are a number of practical and economic difficulties preventing them from doing so. Where the cable network is bi-directional, investment at the headend is necessitated to enable the provision of services to third parties such as additional equipment (routing and switching kit), the provision of collocation space with a robust power supply and adequate air conditioning. Other practical considerations include compatibility of incoming signals from the third party provider, allocation of sufficient spectrum space in the bandplan for additional traffic, standardisation of the set-top box modulation technique and billing integration. Each of these issues in themselves can be addressed; however in combination they would require significant time and investment (in terms of sunk costs).
- 3.47 On the FWA platform there are also restrictions associated with the provision of a wholesale product to third parties. For licence-exempt networks, the limited capacity carried on these networks and the level of potential revenue that could be earned makes it unlikely that operators will provide a wholesale service to third parties. Indeed, since there is no restriction on the third party providing these services itself, and no barriers to entry, it is unlikely that demand would arise for such a service. Additionally, significant investment is required which would preclude any existing FWA operators from offering such services. Despite it being technically possible for FWA operators to offer services equivalent to bitstream, in practical terms ComReg is unaware of any existing operators planning to offer wholesale services within the timeframe of this review.
- 3.48 ComReg is aware that the operators of cable and FWA networks do not intend to make such investments (at least within the timeframe of this review). Thus it is not feasible for cable or FWA operators to provide a wholesale service within the timeframe of this review.
- 3.49 It is important to remember that market definition is just the first stage of a market review, and in this case it does not determine the outcome of the assessment of market power. When defining the market for wholesale broadband access ComReg applied the hypothetical monopolist test as outlined in the *SMP Guidelines* and concluded that self supply by cable and FWA operators is included in the market on the basis that they are substitutes at the retail level. The *actual* impact of self supplied cable and FWA broadband services is considered in the market analysis chapter.

Q. 4. Do you consider that self-supply by cable operators occurs in the same relevant market as the provision of bitstream access? Please provide a reasoned response.

Q. 5. Do you consider that self-supply by cable operators does not occur in the same relevant market as the provision of bitstream access? Please provide a reasoned response.

Q. 6. Do you consider that self-supply by FWA operators occurs in the same relevant market as the provision of bitstream access? Please provide a reasoned response.

Q. 7. Do you consider that self-supply by FWA operators does not occur in the same relevant market as the provision of bitstream access? Please provide a reasoned response.

Responses to questions 4-7

- 3.50 There was support among respondents that theoretically, self-supply by cable and FWA operators occurs in the same relevant market as the provision of bitstream access.
- 3.51 However, it was also noted by one respondent that a particular combination of factors in the Irish context prohibits self supply cable and FWA services being in the same market as bitstream. A number of reasons were provided in support of these views, notably the limited availability of services at the retail level and the inability of cable and FWA operators to increase supply in response to a price increase at the wholesale level for broadband access.
- 3.52 It was noted by a number of operators that the key issue indicating the exclusion of self supplied cable and FWA services is that the state of technical development of cable and FWA networks at this time does not allow operators to provide additional wholesale broadband services equivalent to bitstream, either self-supplied or provided to third parties. A number of respondents reiterated that it is unlikely that the required investment in cable and FWA networks will occur within the timeframe of the review.
- 3.53 There was a common view among respondents that at the retail level, ADSL cable and FWA services are in the same product market. Respondents were not willing to conceive that at the wholesale level cable and FWA will provide an alternative to PSTN bitstream services. However, there is no evidence available to ComReg to indicate that cable and FWA services are not functional equivalents to PSTN bitstream services. This is substantiated by the availability of a wholesale cable

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product to third parties in other jurisdictions. This is examined in further detail below.

- 3.54 In addition a respondent stated that to date the uptake of broadband services of FWA technology is limited. A number of practical issues have contributed to this; for example the topology of Ireland is such that it is very challenging to find sites with the appropriate line of sight, additionally the demography in Ireland is such that there are small numbers of people concentrated in a handful of urban centres that are already heavily dominated by broadband delivered via copper pairs. Additionally, it was pointed out by the same respondent that there have also been issues with the suppliers of the relevant equipment for the provision of FWA services. Thus it was argued that it would not be feasible for FWA self-supply providers to offer services to third parties, but even if it were available, there would be little demand for the wholesale product due to limited demand from end users for FWA services.
- 3.55 It was also suggested that the relative price of FWA services does not accommodate the potential for widespread deployment of this technology. It was suggested that FWA is not a viable alternative for mass market penetration of broadband.
- 3.56 However one respondent did state that FWA services should be included in the same relevant market as the provision of bitstream services. It was held that in order to stimulate the market for broadband services in Ireland, that a wide variety of last mile solutions be made available to enhance competition.
- 3.57 Another respondent agreed with ComReg's demand side analysis which showed that the impact of a price increase at the wholesale level would flow directly through to the retail market. It was suggested that at this point, a market definition would stop here as supply analysis would only be undertaken with the view of widening the market definition. However the same respondent supported a conclusion that cable and FWA do not provide supply-side substitutes to DSL because of practical and economic difficulties involved in enabling these networks to provide a service equivalent to bitstream access.

ComReg's position

- 3.58 ComReg holds the view that a definition of the wholesale market to include self-supply of cable and self supply of FWA services is appropriate in the context of Irish circumstances. ComReg starts its definition of the wholesale market by examining the retail markets, as the demand for wholesale access services is derived directly from the retail level. In the review of the retail market it was established that, cable, FWA and ADSL access services are supplied in the same relevant retail service market. Thus the inclusion of cable and FWA services in the same retail market definition as ADSL services is apt; moreover there was consensus among respondents that this approach is correct.
- 3.59 By analogous reasoning, cable, FWA and ADSL wholesale broadband access products, whether self supplied or not, should fall within the same relevant product market. This arises because of the substitution effects transmitted via the retail market. Thus, if FWA were not in the same wholesale market as cable, then a FWA hypothetical monopolist could profitably increase its price by 5-10%. ComReg believes such a hypothetical monopolist of FWA wholesale services could not profitably increase its price, because the corresponding increase of retail prices (less than 5-10%, as wholesale access services are only one part of overall costs) would cause a switch in demand rendering unprofitable the price increase. There will also

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be a direct substitution effect, which ComReg believes will be stronger over the time frame of this review. A direct effect occurs when an increase in the wholesale price results in buyers (retail affiliates) switching to alternative wholesale broadband access products.

- 3.60 There was support from one respondent that it was correct to analyse (from the demand side) the likely impact of a price increase at the wholesale level. The assumption that a price increase will flow directly through to the retail market as the products are considered functional substitutes, was also supported fully. It was argued that “typically a market definition analysis would stop here as supply analysis would only be undertaken with a view to widening the market”. ComReg agrees with the respondent that it would not be appropriate to narrow the market definition at this point; however ComReg was also minded of the comment from the European Commission in response to Ofcom’s market review.
- 3.61 It has been noted by a number of respondents that the limited take-up of cable and FWA services does not justify their inclusion in the relevant market. However, ComReg is also of the view that within the timeframe of the review take-up of retail cable and FWA broadband services is likely to increase. For example ComReg is cognisant of the recent announcement by one cable operator that it is to spend €100 million upgrading its network to enable delivery of broadband services to over 100,000 homes in Dublin, Waterford and Galway by the end of 2004⁴⁷. Additionally, at the end of August 2004, fifty six new licences had been issued to eight operators for the provision of fixed wireless access local area services using spectrum in the 3.5 GHz and 10.5 GHz frequency bands. Under these schemes, additional licences may be offered in the future in the 3.5 GHz, 10.5 GHz and 26 GHz bands, on a first come first served basis. Whilst the spectrum is available throughout Ireland, it is not clear that all areas will be licensed. It is expected that services will begin to become available by year-end 2004. This scheme may also provide possibilities for the development of a wholesale product available to third parties, but no operator has so far announced plans for such a product.
- 3.62 It was suggested by one respondent that FWA is not a viable alternative for mass market penetration of broadband however, as examined in the review of the retail market FWA is a substitute for cable and ADSL in terms of pricing and functionality. ComReg believes that the take-up of FWA is likely to increase with the roll-out of additional network infrastructure.
- 3.63 However in defining the relevant product market for wholesale broadband access, ComReg must assess whether different broadband products are substitutes for each other from the demand and the supply side in terms of pricing and functionality. Thus the relative take-up of broadband services is less important to the market definition and is more pertinent to the assessment of market power which is contained in section 4.
- 3.64 In response to the European Commission’s comments to Ofcom, ComReg also assessed the feasibility of whether a cable and FWA operator could provide an equivalent bitstream product to third parties. As noted in the initial consultation (which was supported by all respondents), while it is technically possible for cable and FWA platforms to offer service equivalent to bitstream, ComReg believes that due to practical and economic reasons it is unlikely that an operator of a cable or

⁴⁷<http://www.rte.ie/business/2004/0603/ntl.html?ST=qbjvatc@bqge.vrRTEMAIL>

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FWA network is likely to introduce a wholesale broadband access product within the timeframe of this review.

3.65 The European Regulators' Group (ERG) has reached a common position on bitstream access, which outlined the regulators' understanding of bitstream access and the regulatory approach⁴⁸. The ERG identified certain key elements defining bitstream access which included;

- a high-speed access link to customer premises provided by the incumbent
- transmission capacity for broadband data in both directions enabling new entrants to offer their own, value-added services to end users;
- new entrants have the possibility to differentiate their services by altering (directly or indirectly) technical characteristics and /or use of their own network;
- bitstream access is a wholesale product consisting of the access link and "backhaul" services of the (data) backbone network

3.66 ComReg believes that based on the above criteria, from a functional point of view, services over a cable or FWA network could provide all the key elements of bitstream access functionality. The recent conclusion of commercial access agreements in at least two Member States supports the view that cable access is technologically feasible and provides a commercially attractive alternative to PSTN access. Additionally, open access is currently available in Canada, Netherlands and the US⁴⁹. In Ireland ComReg is of the view that there are a number of economic and practical considerations which reduce the likelihood of any cable or FWA operator providing a wholesale product. A number of these factors are considered above such as the allocation of sufficient spectrum space in the bandplan for additional traffic, standardisation of the set-top box modulation technique and billing integration. ComReg is of the view that these impediments are relatively manageable in comparison to network build e.g. ducting, site acquisition etc. Thus ComReg believes that each of these issues in themselves can be addressed; however in combination it is unlikely that they will be overcome within the timeframe of this review.

Conclusion

3.67 ComReg concludes that the indirect pricing constraint exercised by cable and FWA based services at the retail level has a sufficiently significant impact at the wholesale level to justify their inclusion in the wholesale broadband access market.

3.68 In defining the market ComReg also considered the feasibility of cable or FWA operators facilitating equivalents to bitstream access and the potential *direct* constraint in the market for wholesale broadband access. It was concluded that, while it is technically possible for cable and FWA operators to provide services to third parties, for economic and practical reasons this was unlikely to happen within the timeframe of the review.

3.69 Thus from the above analysis ComReg believes that cable and FWA services exert a competitive constraint on the market for wholesale broadband access on the basis of

⁴⁸ http://erg.eu.int/documents/index_en.htm#ergdocuments

⁴⁹ The Development of Broadband Access in OECD Countries (OECD) DSTI/ICCP/TISP(2001)2/FINAL 29 Oct 2001

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self-supply. It is on this premise that cable and FWA service are included in the relevant market definition.

- 3.70 The market definition process should not be confused with the determination of market power that assesses the competitive constraint in actual terms imposed by cable and FWA platforms.

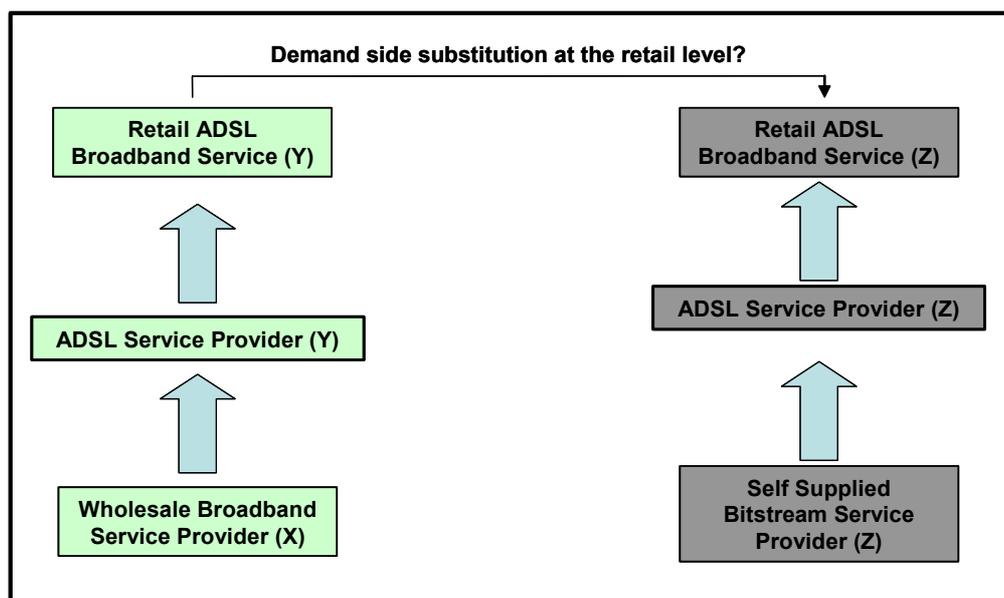
Are bitstream services (self supply) included in the relevant market?

Summary of consultation issue

- 3.71 In considering whether eircom's self-supplied bitstream service imposes a competitive constraint on its wholesale bitstream product (supplied to third parties), analysis was made on the basis that self-supplied bitstream and wholesale bitstream are supplied by different parties. Put another way, the issue is whether, if one operator monopolised externally-supplied bitstream and another operator supplied a vertically-integrated retail broadband service, the ability of the first operator to raise prices would be constrained. ComReg considers that the ability to raise prices would be constrained. This analysis will also be relevant to any vertically-integrated Other Authorised Operator (OAO) that self-supplies bitstream to its customers via unbundled local loops.

- 3.72 As such, self-supplied bitstream and bitstream supplied to third parties are the same product and fall within the same relevant product market.

- 3.73 This is illustrated in the following scenario



Source: ComReg

Figure: 3.3 – Self supply of bitstream services

X = hypothetical monopolist

Y = third party ADSL providers

Z = vertically integrated retail broadband service provider

- 3.74 The above diagram suggests that hypothetical monopolist (X) supplying a wholesale bitstream product to third party ADSL providers (Y) would face a competitive constraint from a vertically-integrated retail broadband service provider (Z) on the retail level.

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- 3.75 An increase in the price for wholesale bitstream product would, in turn, translate into an increase in the retail price of ADSL services that incorporate the wholesale product, assuming that the increase at the wholesale level is passed on to the retail level.
- 3.76 As a result, third-party ADSL providers (Y) are likely to lose customers to the integrated provider of retail broadband service (Z). Accordingly, the hypothetical monopolist supplier of wholesale bitstream product (X) would lose sales, while the vertically-integrated retail broadband service provider (Z) would increase sales.
- 3.77 The competitive constraint on the hypothetical monopoly supplier, should it be found to exist, would come from demand substitution at the retail level. As demand substitution at the retail level is likely to be strong, the self-supplied bitstream service provider should be included in the relevant wholesale market.
- 3.78 eircom currently provides bitstream access both internally to its retail arm and externally to third parties. The dynamics of this relationship are dealt with in further detail within the market analysis section.
- 3.79 Bitstream services have developed recently from a low base and at the end of the first quarter of 2004, eircom was self-supplying the bitstream services required to provide retail ADSL services to approximately 31,100 end users, and was supplying bitstream access to third parties in the region of 7,500 lines.

Consultation question 8

Q. 8. Do you consider that bitstream services (self-supply) should be included in the relevant market? Please provide a reasoned response.

Responses to question 8

- 3.80 All respondents agreed that bitstream self supply should be included in the market for wholesale broadband access. It was highlighted that at the time of the national consultation the percentage split between wholesale bitstream as opposed to self-supply was approximately 30%: 70%⁵⁰, and that it was imperative that self-supply bitstream fall into the relevant market to ensure that competition is fostered in the market. This was further supported by another operator who held that vertical integration supplies a strong competitive advantage as outlined by ComReg in the consultation paper.
- 3.81 All respondents supported the conclusion that bitstream self supplied and bitstream provided externally fall within the same relevant market on the basis that the products are functionally equivalent.

ComReg's position

- 3.82 ComReg concludes that self-supplied bitstream and bitstream supplied to third parties are functionally the same product and therefore fall within the same product market. Currently in Ireland approximately 80% of all PSTN bitstream is self supplied.

⁵⁰ The percentage split was approximately 22:78 as of March 2004

Are LLU and bitstream services in the same relevant market?

Summary of consultation issue

3.83 In the initial consultation ComReg considered whether LLU and bitstream are in the same relevant market. As a starting point ComReg considered the European Commission view, in the *Recommendation* that an operator providing wholesale broadband access will not consider unbundled local loops to be a substitute, even if the same services could be provided over the unbundled loops (LLU). ComReg analysed functional substitutability, pricing comparisons and development of subscriber numbers in coming to its conclusions.

Functional substitutability

3.84 Unbundled local loops and bitstream services are functionally different products for acquiring entities. An overview of bitstream services is contained in Annex A. Bitstream services limit the extent to which the purchaser can produce innovative services for retail supply or, for that matter, depart significantly from the retail services made available by eircom. The provider of bitstream controls both the bandwidth (or speed) and geographic coverage of retail services developed and supplied using the bitstream service.

3.85 Fully unbundled local loops give control to the purchasing operator of the local loop connection to the end user. As such, the purchasing operator has almost complete discretion in relation to the bandwidth of services offered. In addition, the purchasing operator, by installing its own DSLAM and related equipment, has a greater degree of control over geographic coverage and roll-out of new retail services.

3.86 Consequently, ComReg takes the view that there are clear and distinct functional differences between bitstream services and (fully and shared) unbundled loops which preclude their inclusion in the same relevant product market.

Price comparisons

3.87 The current standard charges for the unbundled local loops and bitstream services are outlined in Annex B.

3.88 ComReg notes a number of key difficulties in both setting and assessing prices for broadband access services, including:

- identifying the range of services across which the costs of broadband investments should be allocated;
- the appropriate method of apportioning such costs;
- the period over which costs should be depreciated, and;
- the appropriate methods for allowing for the fact that IP and ATM networks are dimensioned for anticipated demand not demand at the time of service launch (impacting significantly on unit costs).

3.89 Noting this however, ComReg believes that the significant differences between the pricing of bitstream and LLU services (both fully unbundled and line sharing),

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reflect the functional differences between the services. In addition to granting access to the local loop, the bitstream price will also include the cost of DSLAMs, ATM and transmission from a point of aggregation to the point of handover.

- 3.90 In effect, the services operate at entirely different functional layers. The bitstream acquirer must make significant investment to enable delivery of services to end users; however these are not as great as those to the LLU acquirer. The provision of LLU necessitates significant investment for a provider in its exchange equipment and they must also play a much greater role in managing their services (in that they bears responsibility for identifying faults). As such, these differences suggest that bitstream services are not in the same relevant market as LLU services.

Development of customer numbers

- 3.91 The number of unbundled lines and bitstream access lines provided by eircom to other operators at the end of the last quarter of 2003 and first quarter of 2004 are as follows :

	Number of lines Q4 2003	Number of contracts Q4 2003	Number of lines Q1 2004	Number of contracts Q1 2004
Fully unbundled lines	300	2	300	3
Shared access lines	1,100	2	1,150	3
Bitstream access	4,400	3	7,500	5

Table 3.3 – Number of unbundled and bitstream lines

- 3.92 Accordingly, there were approximately 1,400 unbundled lines and 4,400 bitstream access lines at the end of Q4 2003 and 1,450 unbundled lines and 7,500 bitstream access lines at Q1 2004 (of eircom's 1.6 million fixed access lines)⁵¹.
- 3.93 While these figures indicate that the supply of such services to third parties is in the early stages of development, ComReg notes that eircom's retail ADSL subscriber growth patterns indicate that self-supply by eircom is somewhat more mature (e.g. 31,100 ADSL subscribers).

Conclusions

- 3.94 ComReg took the preliminary view that considering the demand-side factors, wholesale broadband access services fall into one relevant market, while unbundled local loops, offered both on a fully unbundled and shared line basis; do not fall into the same relevant market.

51 Currently over 1 million lines are served from DSL-enabled exchanges.

Consultation question 9

Q. 9. Do you consider that wholesale broadband services are not in the same relevant market as unbundled local loops? Please provide a reasoned response.

Responses to questions 9

- 3.95 There was support among all respondents that there are clear and distinct functional differences between bitstream services and LLU which preclude their inclusion in the same relevant product market. It was noted by one respondent that the two types of services differ in terms of; pricing structures, investment requirements for a new entrant operator and the product structure and specification. The reasoning provided by ComReg that bitstream and LLU services operate at entirely different functional layers was endorsed by a number of respondents.
- 3.96 However, it was noted by one respondent that ComReg's analysis as to whether LLU and wholesale broadband access are in different markets on the grounds of functionality or pricing is largely academic. The respondent makes the point that at this stage it is clear that LLU will not contribute to broadband services and that the minimal take-up of services in Ireland (mirroring the situation in other EU countries) has declined since eircom accelerated bitstream availability.
- 3.97 The respondent supported ComReg's point that from the supply side it would be unlikely that an LLU provider would respond to a price increase for bitstream services, due to the high level of investment and thus they are in separate markets.
- 3.98 The respondent then went on to point out that this view undermines the concept of the investment ladder whereby ISPs move from bitstream to LLU services once they have a sufficient market to justify the investment. It was stated that no evidence was provided from ComReg to support the viewpoint that new entrants will revise their policy of minimum investment in infrastructure.
- 3.99 One respondent noted that it is unlikely that an entity using wholesale broadband access is likely to switch to LLU to provide an equivalent retail service, due to the requirements for large sunk cost in terms of capital expenditure for the roll-out of an ULL network. Another respondent highlighted that bitstream is likely to continue to be the most significant means by which OAOs can supply broadband services across Ireland.
- 3.100 In contrast another respondent submitted that in Ireland over the long term as operators build up a critical mass of market share, there is more likely to be an incentive to invest in infrastructure with the possibility of migrating to LLU.

ComReg's position

- 3.101 In line with the European Commission⁵² and the European Regulators Group,⁵³ ComReg believes that bitstream and LLU services are not substitutes, and the existence of one should not preclude the need for any other access obligation.

⁵² Communication on Local Loop Unbundling 2000/C 272/10.

⁵³ ERG Common Position on Bitstream Access

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- 3.102 ComReg supports its preliminary view that bitstream and LLU are in separate markets and are not substitutes for each other. The higher investment costs required for the provision of LLU rather than bitstream services (as outlined above) do not preclude an operator from switching from bitstream to LLU. As noted in the consultation paper, fully unbundled local loops give control to the purchasing operator in terms of bandwidth of services offered and geographic coverage and roll-out of new services. Thus it can be seen that a higher value return can be gained on the higher investment associated with switching to LLU. As evidenced in other member states from the demand side, customers are choosing LLU over bitstream⁵⁴. ComReg is of the view that this supports the concept of a ladder of investment.
- 3.103 In ComReg's view, the high level of investment required is precisely the difficulty which a renter of unbundled loops would have in replicating the full bitstream service which places them in the different markets over the period of the review, on the basis that from the demand side they are not close substitutes. This does not, of course, preclude entrants from making further investment in infrastructure at a later stage. As can be seen from table 3.3, the number of unbundled local loops has increased (albeit marginally).
- 3.104 From the supply side ComReg maintains that within the timeframe of the review (two years), LLU does not provide supply side substitution to bitstream, due to the high level of investment required. This is not to say that it will not happen at all. It can be seen that currently in Ireland the take-up of LLU is low in comparison to the take-up of bitstream products. As noted in the '*ERG Common Position on the approach to Appropriate Remedies in the New Regulatory Framework*' investment on fixed networks creates the opportunity for competitors to invest in assets which take them progressively closer to the customer. However it should be noted that not all operators will wish to ascend to the top of the ladder; depending on their business plans they will stop at various places.
- 3.105 It is on this basis that ComReg concludes, in support of the European Commission, that LLU and bitstream services operate at entirely different functional layers and are thus not in the same relevant market. This is further supported by ComReg's findings in the review of the wholesale unbundled access to metallic loops and sub-loops⁵⁵

Wholesale supply-side substitution

Summary of consultation issue

- 3.106 ComReg has taken the view that there is limited scope for network operators that are not already providing services (via self supply or to third parties) in Ireland to offer effective supply-side substitution for wholesale broadband access (in response to a 5 to 10% increase in price by a hypothetical monopolist supplier). Operators of existing networks capable of supporting uni-directional or narrowband access services will be required to make significant investments in upgrading their networks to support broadband access. ComReg is unaware of any such operators intending to

⁵⁴ ERG Common Position on the approach to Appropriate remedies in the new regulatory framework (ERG (03) 30rev1) – page 88

⁵⁵ ComReg Document No. 04/40: Market Analysis: Wholesale unbundled access to metallic loops and subloops

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make such investments in "brownfield"⁵⁶ networks during the timeframe of this review.

- 3.107 Additionally, there are high sunk costs associated with building "greenfield"⁵⁷ access networks, which are typically characterised by high economies of scale and density. These costs significantly increase the barriers to entry for entities considering constructing new local access networks capable of supporting the provision of broadband access. The difference between potential competition and supply-side substitution lies in the fact that supply-side substitution responds promptly to a price increase whereas potential competition may need more time before starting to supply the market.
- 3.108 As such, ComReg takes the view that any potential competitive constraint imposed by the possibility of market entry (e.g. high bandwidth mobile wireless or power line platforms) or significant roll-out (e.g. Wi Fi hotspots or FTTH) using alternative platforms is most appropriately considered in the context of market analysis.

Consultation question 10

Q. 10. Do you consider that there are no effective supply-side substitutes for wholesale broadband access within the timeframe of this review?

Responses to question 10

- 3.109 All respondents agreed with ComReg's preliminary conclusion that there are no effective supply-side substitutes presently available in the market for wholesale broadband access. One respondent was of the view that this is likely to be the case for the foreseeable future. It was argued that cable operators would need to significantly upgrade their services in order for there to be any consideration of provision to third-party suppliers. In relation to FWA it was argued that it would also be impractical for such operators to provide third-party access and this would promote little or no additional competition. Moreover, it would not be feasible, economically or practically, for construction of new local access networks. The respondent concluded that there is very little room for competitive substitutes except for very limited sets of customer premises in very tightly defined geographic areas.
- 3.110 It was also stated that by the same respondent that currently there is limited scope for network operators currently operating in Ireland. However it was also suggested that the situation is likely to change in the near future. A more prospective analysis by ComReg would have to take into account the government-funded Metropolitan Area Networks (MANs).

56 A "brownfield" network describes a telecommunications network that is abandoned or underused and is considered to have potential for redevelopment.

57 A "Greenfield" network is one that is being designed or built from nothing, with no need to accommodate legacy equipment or architectures.

ComReg's position

- 3.111 ComReg notes that within the timeframe of this review, from the supply side LLU and bitstream are not in the same market, due to the high switching costs as outlined above in the analysis of whether bitstream and LLU are in the same market.
- 3.112 ComReg has considered the respondent's view in relation to the MANs and includes an analysis of their relevance to the wholesale broadband market in the market analysis section in Section Four of this document. It is felt that it is more appropriate to review the technology in terms of potential competition rather than supply-side substitution as they are more likely to make an impact on the relevant market in the long run.

Conclusion

- 3.113 ComReg concludes that there are no effective supply-side substitutes for wholesale broadband access within the timeframe of this review.

Conclusion for relevant product market

Summary of consultation issue

- 3.114 ComReg has concluded that the market for wholesale broadband access includes
- self-supply by cable operators,
 - self-supply by FWA operators,
 - externally-supplied bitstream services and;
 - self-supplied bitstream services.

Consultation question 11

Q. 11. Do you consider that the relevant market for wholesale broadband access should be defined to include self-supply by cable, self-supply by FWA operators, externally-supplied bitstream services and self-supplied bitstream services? Alternatively, do you consider that the relevant market should be defined only to include externally supplied bitstream services and self-supplied bitstream services? Please provide a reasoned response.

Responses to question 11

- 3.115 It was suggested by a number of respondents that the market should only include bitstream services externally or self-supplied. The conclusion is based on the view that at present there is effectively no other wholesale alternative available in Ireland.
- 3.116 One respondent submitted that either approach could be valid in the Irish environment at present because of the severe lack of competition and penetration in the broadband market. The respondent was of the view that once the market is more developed this should possibly be re-examined and that in practical terms an

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approach which excludes self-supply of cable and FWA, is most pertinent for the market within Ireland.

ComReg's position

- 3.117 ComReg has considered one respondent's proposal that the relevant market should be defined to exclude self-supply by cable and FWA operators. ComReg however maintains that there is a distinct relevant market in Ireland for wholesale broadband access, currently including externally-supplied bitstream services and self-supplied bitstream, cable and FWA services. A number of steps were taken in defining the relevant product market and these are outlined below in figure 3.4.
- 3.118 In summary, ComReg determined that at the retail level cable, FWA and ADSL are functional equivalent in terms of pricing and functionality. It was also concluded that an indirect pricing constraint from the retail level is exerted at the wholesale level. Additionally as can be seen in a number of other jurisdictions a bitstream access product is technically possible on cable networks. ComReg is of the view that this is also feasible on a FWA network. However, due to economic and practical considerations no Irish cable or FWA operator currently offers a product to third parties. ComReg is of the view that these issues are relatively manageable in comparison to network build e.g. ducting, site acquisition etc and can be addressed individually. However, ComReg does not believe that a wholesale cable or FWA is likely to be introduced within the timeframe of the review.
- 3.119 There was full support from all respondents that that self-supplied bitstream and bitstream provided to third parties are functionally the same product and therefore fall within the same product market. ComReg considers that the same logic should be applied in terms of cable and FWA service. As noted above product equivalence to bitstream can feasibly be provided on cable and FWA markets and thus they are considered substitutes, justifying their inclusion in the relevant wholesale market.
- 3.120 ComReg has also concluded that presently there are no supply side substitutes to wholesale broadband access which have a constraining effect on the market.
- 3.121 If the market dynamics change within the timeframe of the review to have a sufficiently significant impact on the market, ComReg will revisit its analysis of the market to consider a narrow definition. ComReg will also consider comments from other NRAs and the European Commission notified under the Article 7 procedures before taking its final decision.

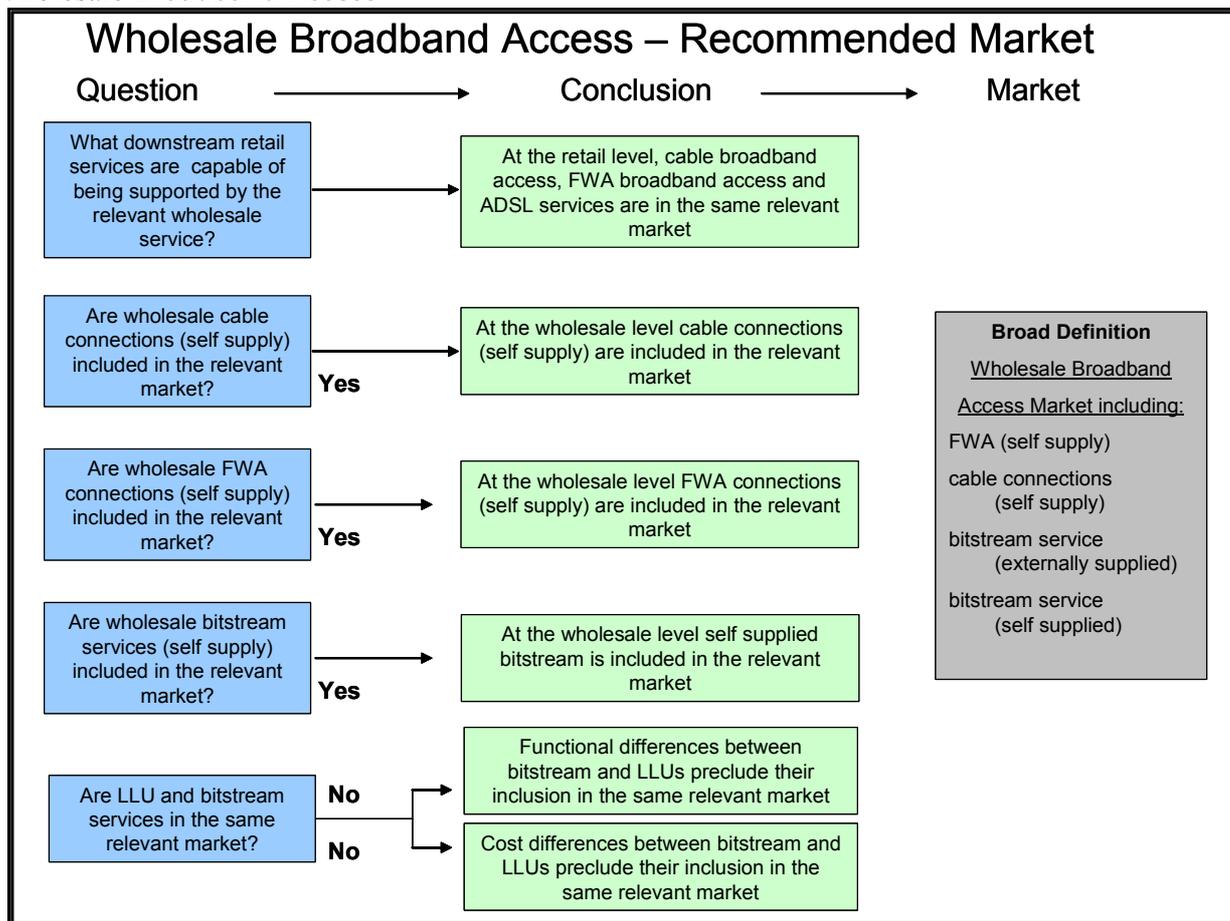


Figure 3.4: Wholesale Broadband Access Market Definition

The relevant geographic market

Summary of consultation issue

3.122 A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of services, in relation to which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those in those areas.

3.123 On this basis, ComReg takes the view that the relevant geographic market for the provision of wholesale broadband access is national in scope and is the state of Ireland. This view is based primarily on the fact that eircom offers its services within these relevant market on a national basis, under the same terms and conditions. Where other services are or might be offered by other operators on a less than national basis, such services will compete with eircom's national services.

Consultation question 12

Q. 12. Do you agree that the relevant geographic market for wholesale broadband access is Ireland? Please expand on your response.

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Responses to question 12

- 3.124 All but one respondent held the view that the relevant geographic market for wholesale broadband access is national in scope. It was suggested by one respondent that there is no logic for defining market as anything other than the entire country of Ireland. eircom the only wholesale provider of a wholesale bitstream product as it provides its services on the same basis nationally.
- 3.125 It was argued that the retail business xDSL market consists, in part, of large companies with geographically-widespread subsidiaries or offices, e.g. bank branches, retail stores. Whilst the service may have to be differentiated/customised customer-by customer, the large customers require an identical service in all locations, across the entire national territory. Consequently, OAOs need to have the ability to purchase wholesale bitstream services which allow them to produce homogeneous retail services across the entire national territory. This is not possible by mixing and matching different solutions. These elements support a national dimension of the relevant market for Wholesale Broadband Access.
- 3.126 It was also suggested that the retail residential market is a mass market. OAOs/ISPs need to be able to compete on this mass market in its entirety, and cannot be an effective competitor if they are restricted to operating in geographical pockets of activity, or if they have to offer different products in different geographies. Therefore OAOs/ISPs need to have the ability to purchase wholesale bitstream services which allow them to produce homogeneous retail services across the entire national territory. This is not possible by mixing and matching different solutions. These elements support a national dimension for the relevant market for wholesale broadband access.
- 3.127 With geographically-distinct relevant markets for wholesale broadband access, neither type of new entrant operator will be able to achieve the necessary critical mass of customers to be a viable market participant (and achieve economies of scale approaching those of the incumbent competitor): the residential-focused operator needs to be able to market its services in all locations where the incumbent offers service, or it would otherwise suffer an enormous commercial handicap; the business-focused operator needs to be able to win large bids for geographically-dispersed customers.
- 3.128 These views were in contrast to another respondent who submitted that the present conditions of competition differ to a significant extent across Ireland, as competitive provision is found in the main urban areas (i.e. where there are cable systems) compared to rural areas. It was submitted that the main urban markets could be characterised by quite different competitive conditions than the rest of the country. This suggests that the relevant geographic market for wholesale broadband access in Ireland should be segmented based on the level of competition (that currently exists and is likely within the timeframe of the review) in urban versus rural areas.

ComReg's position

- 3.129 ComReg considered the suggestion by one respondent that the market should be segmented based on the level of competition in urban versus rural areas. It is recognised that presently there is infrastructure competition in isolated areas where cable networks have been upgraded, typically urban areas. However at the end of June 2003, over half of Irish TV households were passed by cable platforms⁵⁸ for the

⁵⁸ ComReg Document No. 03/126 - Wholesale Broadcasting Transmission Services Consultation

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transmission of broadcasting services. These networks can be upgraded to provide services equivalent to bitstream services to offer a national service. Additionally, ComReg is of the view that the FWA broadband market covers the country as a whole as there is sufficient spectrum to provide national coverage for FWA services, under the local scheme for which licences have been recently offered.

3.130 Furthermore the relevant products for bitstream services and broadband services equivalent to bitstream services currently provided over cable and FWA networks throughout Ireland are homogeneous in terms of product characteristics and price.

Conclusion

3.131 ComReg therefore maintains that the market for wholesale broadband access is national in scope, which is the territory of Ireland.

Conclusion

3.132 Upon review of the responses to consultation ComReg concludes that there is a distinct relevant market which is national in scope for wholesale broadband access, currently including externally-supplied bitstream services and self-supplied bitstream, cable and FWA services.

4 Relevant Market Analysis

Background

4.1 Having first identified a relevant market relating to wholesale broadband access in Ireland, ComReg is required to conduct an analysis of whether the market is effectively competitive by reference to whether any given undertaking or undertakings is/are deemed to hold SMP in that market. Recital 27 of the *Framework Directive* states that a relevant market will not be effectively competitive “*where there are one or more undertakings with significant market power*”. Regulation 25(1) of the *Framework Regulations* states that:

“A reference in these Regulations ... to an undertaking with significant market power is to an ... undertaking (whether individually or jointly with others) [which] enjoys a position which is equivalent to dominance of that market, that is to say a position of economic strength affording it the power to behave to an appreciable extent, independently of competitors, customers, and, ultimately, consumers”.

4.2 Accordingly, an undertaking may be deemed to have SMP either individually or jointly with other undertakings in a relevant market. In addition, where an undertaking has SMP on a relevant market, it may also be deemed to have SMP on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.⁵⁹

4.3 ComReg is obliged under the *Framework Regulations* to assess SMP in accordance with European Community law and to take the “utmost account” of the *SMP Guidelines*⁶⁰. Those criteria are considered fundamental to the determination of SMP are discussed below.

Assessment of Significant Market Power

Summary of consultation issue

4.4 In the assessment of market power, ComReg has considered a number of factors including market share, potential competition, barriers to entry and expansion and countervailing bargaining power. The impact of these factors was then examined in the context of pricing and profitability advantages possibly enjoyed by an SMP operator.

4.5 In the market defined for wholesale broadband access, eircom have a market share of 85%, with a number of OAOs sharing the remaining 15%.

⁵⁹ Framework Regulations, Regulation 25(3).

⁶⁰ Framework Regulation 25(2)

Wholesale Market shares (derived from retail market)

Platform	No of Access Lines Q4 2003	Market Share Q4 2003	No. of Access Lines Q1 2004	Market Share Q1 2004
Cable	4,900	16%	5,200	12%
FWA	1,350	4%	1,400	3%
ADSL	25,300	80%	38,600	85%
Total	31,550	100%	45,200	100%

Table 4.1: Broadband Access Lines

- 4.6 Currently, a small number of wholesale broadband access lines are acquired from eircom and are resold. However, ComReg takes the view that the provision of these lines exerts limited competitive pressure on eircom, given the extent to which eircom is vertically integrated. Resellers are effectively required to acquire from eircom at its wholesale price and must set their resale price at a level that permits their customers (e.g., ISPs) to compete with eircom's retail services. As such, ComReg believes that the impact of such resellers is less than even the *de minimis* market shares⁶¹ suggest they have. eircom currently provide 31,100 ADSL connections at the retail level, representing 80% of all ADSL connections at the retail level.
- 4.7 Cable operators currently self-supply a small amount of wholesale broadband access services of around 5,200 lines, which would account for approximately 12% market share. However, as discussed below, there are significant barriers to expansion for cable operators currently self-supplying such services, and significant barriers to entry for those not currently supplying.
- 4.8 FWA operators currently self-supply wholesale broadband access services to nearly 1,400 subscribers, which is equivalent to approximately 3% of the wholesale broadband access market share. However, as discussed below Fixed Wireless Access (FWA) using licence-exempt spectrum has limited roll-out and is primarily available in urban areas of the country.

Potential competition and barriers to entry and expansion

- 4.9 The threat of market entry, either on a long-term or 'hit and run' basis, is one of the main potential competitive constraints on incumbent firms, where such entry is probably (rather than hypothetically) timely and appreciable. The threat of entry will be reduced by the existence of barriers to entry.
- 4.10 ComReg does not anticipate medium-term market entry from high bandwidth mobile access or power line platforms as both technologies are currently at an experimental stage and are not being offered to broadband end-users in Ireland.
- 4.11 Additionally, the take-up of satellite broadband services and FTTH to date has been low, mainly due to limitations in functionality and pricing structures, and a lack of fit with consumers' existing requirements. ComReg does not foresee any significant dynamic within the market that will considerably accelerate the take-up of broadband via satellite or FTTH within the timeframe of this review. While there is

⁶¹ Resellers account for approximately 1% of total number of ADSL access lines.

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likely to be some expansion in the medium term in the roll-out of these platforms, the extent of such expansion is very uncertain and cannot at this point be relied upon to provide effective competition in the market for wholesale broadband access.

- 4.12 The incumbent is likely to have cost advantages over new entrants in the wholesale broadband access market (even where the same investments are being made), and the incumbent is likely to have economy of scope opportunities that flow from its investments in broadband equipment which need not necessarily accrue to new entrants. In addition, the incumbent has better access to potential retail customers for the new downstream services. These and other differences in risk and return might conceivably lead to a higher required rate of return on investment for new entrants. As such, they might, collectively (as well as individually), constitute another barrier to entry.
- 4.13 In response to industry questionnaires circulated by ComReg, operators other than eircom referred to the economies of scale and scope enjoyed by eircom in relation to local access networks and services and eircom's ability to make use of existing network elements and personnel to further reduce its costs of providing new services, including broadband access.
- 4.14 ComReg takes the view that eircom is likely to continue to provide the significant majority of wholesale broadband access services during the timeframe of this review, because it does not believe that any new entrant is intending to, or would be able to, successfully build a new access network (capable of supplying such services) replicating all or part of eircom's network, or that sufficient investment will be made in existing infrastructure to upgrade it to the point at which it is able to support the provision of broadband access.

Countervailing buying power

- 4.15 If an operator engages in practices that are potentially exploitative, customers might be able to exert countervailing buyer power against such practices. Where buyers are large and powerful, they can effectively respond to any attempt to increase prices by sellers. ComReg has considered the likelihood and/or existence of such countervailing power, given that countervailing power is often a relevant factor in wholesale markets.
- 4.16 However, countervailing buyer power can only exist where large customers have the ability (within a reasonable timeframe) to resort to credible alternatives (*e.g.* not to purchase or to switch supplier) in response to a price increase or threatened price increase. ComReg does not believe that any purchaser of wholesale broadband access has credible alternatives to eircom. As such, ComReg does not believe that any purchaser has countervailing market power that would offset eircom's overwhelming market power in this market.

Pricing and Profitability

- 4.17 European Community case-law supports the view that SMP can best be identified through an entity's ability to engage successfully in behaviour that cannot be constrained by the independent actions of competitors, customers or consumers.⁶² The structure of the market for wholesale broadband access is conducive to eircom's

⁶² Hoffmann-La Roche v. Commission [1979] ECR 461, United Brands v. Commission [1978] ECR 207.

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charging rates above the competitive level, if unregulated. As noted above, there is no means by which customers (who are also competitors on the related downstream markets) can respond to price increases, given that the only alternative source of supply is currently self-supply. The issues associated with economies of scale and scope, leverage of facilities (both historic and new), ubiquity, and access to customers limit the feasibility of self-supply by new entrants.

Conclusions

- 4.18 eircom currently has a market share of 85% in the relevant market for wholesale broadband access.
- 4.19 ComReg does not believe that the operators of cable and FWA networks are able to exert significant competitive pressure in order to reduce eircom's market power within the timeframe of this review.
- 4.20 ComReg does not believe that any purchaser of wholesale broadband access has credible alternatives to eircom. As such, ComReg does not believe that any purchaser has countervailing market power that would offset eircom's overwhelming market power in these markets
- 4.21 The structure of the markets for wholesale broadband access is conducive to eircom charging rates above the competitive level, if unregulated. As noted above, there is no means by which customers (who are also competitors on the related downstream markets) can respond to price increases, given that the only alternative source of supply is currently self-supply. The issues associated with economies of scale and scope, leverage of facilities (both historic and new), ubiquity and access to customers limit the feasibility of self-supply by new entrants.

Consultation Question 13

Q. 13. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response.

Responses to question 13

- 4.22 There was consensus among respondents that ComReg's assessment of the current state of play in the wholesale broadband market is correct. It was reiterated by a number of respondents that there is no significant potential for greater competition in the short or medium term. Given the technical complexities and the massive investment required, other delivery platforms (particularly cable and FWA) are not in the position to exert competitive pressure on eircom on the timeframe of this review.
- 4.23 It was highlighted by one respondent that in essence, the market is heavily reliant on eircom providing bitstream services, as there are no credible alternatives at wholesale level. The respondent continued to state that cable operators do not provide third party access and are unlikely to upgrade their networks sufficiently to make third party access feasible in the short, medium or long term. Moreover, FWA and other forms of technology also do not provide a credible alternative in the short, medium or long term. In conclusion, the operator agreed that eircom should be designated as having SMP in the market for wholesale broadband access. There was also agreement with ComReg that the structure of the wholesale broadband access market is such that it is conducive to anti-competitive charging by eircom.

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- 4.24 One respondent did note that ComReg should consider the impact of government-funded MANs in the market for wholesale broadband access.

ComReg's position

- 4.25 The Department of Marine, Communications and Natural Resources has invested in carrier-neutral, open-access metropolitan area networks for 19 towns throughout the country. The network will consist of metropolitan fibre optic cable and ducts. It is expected that the current MAN projects will be complete by the second half of 2005. ComReg considered (upon the request of one respondent) whether these MANs pose potential competitive threat to the wholesale bistream services in the medium term. The MANs aim is to deliver broadband services to high density clusters of users (such as business parks) and to provide basic infrastructure for deploying other technologies such as DSL⁶³. The fibre rings will provide the link to the central facility where copper connections are located (wholesale broadband backhaul); the fibre circuit will then be broken down into smaller segments for termination at the customer premises via copper connections for the provision of DSL services. ComReg considers that such services are more appropriately dealt with in the market review of leased line markets and in particular that of wholesale trunk segments⁶⁴.
- 4.26 ComReg concludes that with a market share well in excess of 50%, little or no potential competition, significant barriers to market entry and expansion and a lack of countervailing bargaining power suggest that eircom can not be constrained by the independent actions of competitors, customers or consumers. Thus the structure of the market is conducive to eircom's charging rates above the competitive level, if unregulated.
- 4.27 It should be noted that, regardless of whether a broader market definition (to include self-supplied cable and FWA services) or a narrower market definition, as discussed in section 3, is adopted, eircom will either have a market share of 85% or 100% respectively. Therefore considerations as to whether self-supplied services are included or not, do not impact on the conclusion of the market analysis. However for completeness ComReg is of the view that it is appropriate, for reasons outlined in Section 3 above, to include self-provided cable and FWA services in the market definition for wholesale broadband access.

Conclusion

- 4.28 ComReg's analysis of the effectiveness of competition in relation to the provision of wholesale broadband access has led to the conclusion that the market is not effectively competitive and that eircom has significant market power.

⁶³ For further details see DCMNR document "The National Development Plan – Fibre Optic MANs – what they are and how they work" on www.dcmnr.gov.ie

⁶⁴ ComReg Document No: 04/59 - Market Analysis: Wholesale Terminating and Trunk Segments of Leased Lines and Retail Leased Lines (National)

5 Designation Of Undertakings With Significant Market Power

- 5.1 Having regard to the sections above, particularly sections three and four, ComReg is of the view that, in accordance with the *Framework Regulations*:

eircom Ltd should be designated as having SMP on the market for wholesale broadband access.

- 5.2 A reference in this section to any given undertaking shall be deemed to include that undertaking and any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, the undertaking in question and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities falling within the scope of the relevant markets defined in section.

6 Proposed Market Remedies

What are the competition problems?

Summary of consultation issue

- 6.1 ComReg set out the type of competition problems that it considered may arise due to the presence of a vertically integrated operator having SMP in this market. The most obvious problems identified related to vertical foreclosure. Principal among these are refusal to deal, denial of access and the possible application of a price squeeze.

Consultation question 14

Q. 14. Do you agree with this analysis of competition problems? Are there any further competition problems which you believe ComReg should consider? Please elaborate your response.

Responses to question 14

- 6.2 In the consultation paper, ComReg identified a number of competition problems. These included:
- a. Refusal to deal and denial of access
 - b. Non Price Problems
 - i. Withholding of information
 - ii. Low quality
 - iii. Delaying Tactics
 - iv. Undue requirements
 - v. Strategic Design of Product
 - vi. Discriminatory Use of Information
 - c. Price Problems
 - i. Excessive Prices
 - ii. Cross Subsidisation
 - iii. Price Discrimination
 - iv. Predatory Pricing/Margin Squeeze
- 6.3 Six respondents provided comments in respect of this question. Five of these agreed with ComReg in its analysis of competition problems and agree that ComReg has identified the competition problems in the wholesale broadband access market. Respondents add that the existence of these problems indicates that strict regulatory controls are necessary in the market.
- 6.4 One respondent states that ComReg's approach to the development of broadband in Ireland is in contrast to the requirements of the market and Government, and envisages a high degree of regulation with an inherent bias against future investment by either eircom or other operators, evolving from a theoretical and unrealistic assessment of eircom's role in the development of broadband in Ireland.

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- 6.5 This respondent characterises the list of competition problems set out in the consultation paper as a ‘textbook’ list of probable problems, presented without any evidence that the respondent has or intends to engage in these practices. Instead this respondent states that it has led industry fora and indeed has developed wholesale products in consultation with OAOs and continues to engage with OAOs on a commercial basis with respect to the take up of the service. This respondent alleges that ComReg has not complied with the obligations arising from Article 7 of the Framework Directive or Section 4 of the SMP Guidelines. In addition this respondent states it does not provide any insight into the proportionality and justification of the remedies subsequently proposed in Section 6. In particular this respondent states that ex ante regulation should not deter necessary investment and allege that the obligations proposed by ComReg specifically in terms of “reasonable access” conflict with this statement.
- 6.6 This respondent is also concerned with ComReg’s understanding of the difference between structural and behavioural problems. While ex ante regulation can help remedy structural barriers to competition, behavioural problems are best dealt with in an ex post fashion, particularly where there is no evidence of such behaviour in the past from SMP operators. This respondent concludes by stating that the discussion with respect to competition problems is biased, unbalanced and misleading, and challenges ComReg to present evidence that any of these practices have in fact been instigated by it.
- 6.7 In relation to **refusal to deal and denial of access**, another respondent states that it has first hand experience of delay and non-price related matters with respect to access to the wholesale broadband products. This respondent stated that it has endured long negotiations to make any progress with the provision of products on reasonable grounds (process, pricing, contractual issues etc) and considers that such problems represent severe barriers to entry into the broadband market. This respondent adds that these issues had a very negative effect on the success of the product. One respondent also states that these competition problems have meant that internationally active broadband suppliers are not entering the market.
- 6.8 Most of the competition problems identified by respondents related to alleged preferential treatment of eircom’s retail affiliate by their wholesale division. One respondent stated that current DSL products are provided in a technical fashion favouring eircom’s retail affiliate. Three respondents identified **strategic design of product** as a key competition problem. One respondent states that its experience is such that eircom specifies the standards and protocol of the product without any input from OAOs. Evidence of this is that it took some 12 months following agreement that a port transfer would be put in place for eircom to implement this design feature. This was only achieved following ComReg’s intervention.
- 6.9 In respect of **undue requirements**, one respondent alleges that they have direct experience of this alleging that an overly onerous non-disclosure agreement was required. Another respondent alleged that eircom attempt to review contract terms for all existing products when introducing new products.
- 6.10 In relation to **low quality and discriminatory quality**, respondents state that they have suffered disadvantages as eircom has refused and continue to refuse to provide Service Level Agreements for either the provision or fault management of the bitstream service which has affected this respondent’s ability to provide to the end-user market. This respondent alleges that such SLAs must be internally available between eircom’s wholesale and retail arms and believes that eircom in this instance is using vertical leveraging and deterring the onset of competition to end users as

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OAOs can not provide the equivalent service on the same terms. Respondents state with regard to these problems and that of **withholding of information** that it is not transparent to them as to what is available to eircom retail and so is impossible to measure whether service levels etc. are equivalent.

- 6.11 Respondents allege that there is potential for **discriminatory use of information**. One respondent states that eircom has access to information about retailers competing against eircom's downstream retail affiliate, registered as agents of OAOs on the automated gateways. The respondent was of the view that this information could potentially be used by eircom to recruit these agents for its own purposes. Another respondent believes that eircom may well be passing customer information between wholesale and retail with respect to orders placed for wholesale bitstream from OAOs and targeting customers to purchase the eircom retail product instead.
- 6.12 One respondent alleges that eircom engage in **delaying tactics**. They state that this is one of the most effective tools that eircom use with respect to negotiation and provision of bitstream services, providing eircom with a first mover advantage in the retail broadband market. This respondent alleges that eircom does not deliver on actions and miss deadlines. Completed actions can be of low quality or are misunderstood. This requires extra resources to be deployed by the OAO.
- 6.13 On the specific area of **price problems**, respondents agree with the list set out by ComReg. One respondent states that its major concern relates to margin squeeze. This, it states, prevents other operators from entering the market. This respondent provides details of its concerns over recent price changes.

ComReg's position

- 6.14 ComReg does not agree with the assertion that the competition problems identified are purely theoretical; instead ComReg has used the evidence gathered through market analysis and also its own experience in regular meetings with both eircom and OAOs, as well as its regulatory interventions over recent years to identify these competition problems. For example, ComReg intervened in D1/04 'Bitstream Port Transfer'⁶⁵ to require eircom to put in place a port transfer feature that had been requested by OAOs but which eircom had failed to provide. In common with other NRAs, ComReg also participated in a 'stock taking' exercise to feed these into the ERG Common Position on Remedies⁶⁶.
- 6.15 ComReg considers that, in line with other NRAs, when imposing *ex ante* remedies it may not actually be possible to observe a certain type of anti-competitive behaviour and ComReg will instead have to anticipate the appearance of a particular competition problem based on the incentives of an SMP undertaking to engage in such behaviour, which in turn will be based on the results of the market analysis. In line with the *SMP Guidelines*, ComReg has conducted its market analysis on a forward-looking basis, similar to that carried out in a merger analysis, rather than *ex post*, as would be carried out under Article 82 of the EC Treaty or Section 5 of the Competition Act 2002. While evidence of past market behaviour can contribute to this analysis, account must also be taken of the fact that this market is already regulated. Thus, firms cannot behave as they would if their behaviour were unconstrained by regulation.

⁶⁵ ComReg Document Number 04/02

⁶⁶ ERG Common Positioning on the approach to Appropriate remedies in the new regulatory framework (ERG (03) 30rev1) – page 88
http://erg.eu.int/documents/index_en.htm#ergdocuments

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- 6.16 ComReg also notes that respondents from the OAO community have stated that the competition problems identified by ComReg are entirely reflective of the issues in this area and have provided evidence to support the existence of these problems. ComReg has provided analysis of the proportionality and justification of remedies when setting out the detailed remedies and in the accompanying Regulatory Impact Assessment.

Principles to be applied when selecting remedies

Summary of consultation issue

- 6.17 ComReg set out the remedies that may be applied from Regulations 10-14 (inclusive) of the Access Regulations.
- 6.18 When selecting appropriate remedies to address the competition problems identified ComReg has an obligation to consider the objectives of Section 12 of the Communications (Regulation) Act 2002 (to promote competition, to contribute to the development of the internal market, and to promote the interests of users) and of Regulation 6 of the Access Regulations (to promote efficiency, promote sustainable competition, and give maximum benefit to end users). Furthermore, Regulation 9 of the Access Regulations requires that any obligations imposed by ComReg must be based on the nature of the problem identified, and be proportionate and justified in the light of the objectives laid down in Section 12 of the Communications Act, 2002.
- 6.19 ComReg stated that it has previously identified a number of actual or potential competition problems arising from eircom's dominance in the market for wholesale broadband access. Added to this, ComReg believes that it is most unlikely that within the period of this review that there is any possibility of the development of effective competition either in this market or across alternative access infrastructures. Therefore ComReg proposed that the remedies imposed must facilitate competitors at least as efficient in scale and scope as eircom in entering their chosen retail markets by providing access to *eircom's* network infrastructure on terms and conditions that promote efficiency and sustainable competition, allowing such operators to share the benefits of economies of scale and scope to enable them to gain critical mass and move towards efficient investment in infrastructure and promotion of innovation. It was noted that the remedies proposed must strike a balance between the desire to promote entry in downstream retail markets, and the need to maintain desirable investment incentives in upstream wholesale broadband access facilities.

Consultation question 15

Q. 15. Do you agree with the principles which ComReg believes should be used when selecting remedies? Do you think there are other principles that ComReg should consider when selecting appropriate remedies?

Responses to question 15

- 6.20 Three respondents agreed with ComReg on the principles to be used when selecting remedies. One respondent stated that ComReg had identified the crucial problem – that there is little prospect of any effective competition in this market within the period of the review and so remedies imposed on SMP operators should reflect this. Another respondent agreed, stating that the remedies selected must facilitate competitors entering into their chosen markets by providing access to eircom's

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network infrastructure on terms and conditions that promote efficiency and sustainable competition. This respondent states that regulatory intervention is even more necessary, given the current status of penetration and competition in the retail broadband market in Ireland. A full range of remedies therefore needs to be imposed to foster competition for end users and greater penetration of broadband at the retail level.

- 6.21 Another respondent states that the ComReg approach bears no resemblance to the current functioning of this market in Ireland and is plainly at odds with Government policy. This respondent states that ComReg proposes to impose an extensive array of obligations on eircom and characterises as intrusive ComReg's proposal in relation to "reasonable access". This respondent states that reasonable access is currently provided to all OAOs on a non-discriminatory basis; that OAOs are demonstrably satisfied with the level of service and access provided by eircom; that this level of access has evolved as a result of the commercial interaction between eircom and the OAOs; and that an underlying feature of the New Regulatory Framework is to forbear regulation, particularly where the market mechanism is working.
- 6.22 This respondent alleges that there is a conflict between the principles to be applied in selecting remedies and the actual selection of remedies proposed by ComReg, representing a substantive mis-application of the principle of ex ante regulation by ComReg. This respondent states that the broadband access market in Ireland does not require any ex ante regulation, and argues that ComReg should exercise forbearance in this market.

ComReg's position

- 6.23 ComReg notes that the majority of respondents agree with the principles that ComReg proposes to use in selecting remedies. In response to the remaining respondent, ComReg accepts the reality of competition problems portrayed by OAOs and therefore does not accept the argument that these competition problems do not exist.
- 6.24 ComReg is obliged, where a designation of SMP has been proposed, to impose at least one obligation⁶⁷. Therefore some form of ex ante regulation is required. One respondent characterises as 'intrusive' ComReg's proposals with regard to its proposed access remedy. ComReg addresses this in the sections below when demonstrating the proportionality and justification of any such obligation.
- 6.25 In exercising its functions, ComReg is obliged to follow where appropriate the Policy Directions given by the Minister for Communications, the Marine and Natural Resources (21 February and 26 March 2004)⁶⁸. This requires ComReg to focus on the promotion of competition as a key objective by implementing remedies counteracting or removing barriers to market entry and supporting entry by new players to existing markets. In particular, ComReg is required to use regulatory and enforcement tools, where necessary and subject to relevant requirements under European and National law, to support initiatives to develop broadband and remove regulatory barriers, if any exist, to such initiatives.

⁶⁷ SMP Guidelines paras. 21 and 114.

⁶⁸ Directions by the Minister for Communications, Marine and Natural Resources to the Commission for Communications Regulation under Section 13 of the Communications (Regulation) Act, 2002

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- 6.26 ComReg notes its obligation, when considering the imposition of *ex ante* regulation to encourage efficient investment in infrastructure and promote innovation⁶⁹, and to take into account the risks involved⁷⁰. ComReg is cognisant of the investment that eircom must make in order to offer broadband products, and understands that eircom makes this investment without being certain of the returns that it will be able to achieve. *Ex ante* regulation should not deter necessary investment and therefore the application of remedies in this market should differ from the application of remedies in other markets where the investment risks are much lower.
- 6.27 While recognising the investment eircom is required to make, *ex ante* regulation must ensure that eircom is prevented from leveraging its dominance at a network level into the retail markets, foreclosing those markets and preventing the development of sustainable competition. Over the longer term the maximum advantage to end users, in terms of service innovation, quality of service and pricing, will ideally be delivered through effective competition. Over the period of this review there is little prospect of eircom's SMP status in the wholesale market being threatened and therefore *ex ante* regulation of the wholesale broadband access market will be required to ensure that eircom cannot use its market power at the wholesale level either to restrict or distort competition in this market, or to leverage such market power onto adjacent markets⁷¹.

Remedies proposed

Access to and use of specific network facilities

Summary of consultation issue

- 6.28 ComReg stated its view that the presence of a vertically integrated SMP operator in this market, such as eircom, would render it unlikely that access to the SMP operator's wholesale facilities would be granted speedily or reasonably in the absence of *ex ante* regulation. ComReg therefore considered mandated access to eircom's bitstream services as necessary, and argued that this is proportionate and can be justified in light of the competition problem identified.
- 6.29 ComReg added that the imposition of an access obligation would require an SMP operator in this market to answer reasonable requests for access products - gauged under Regulation 13 (4) - pursuant to Regulation 13 (1). This is a change from the current regime⁷². ComReg considers that this should facilitate OAOs in designing products to better suit their needs as this will both promote product differentiation and innovation and ensure that only products for which there is a requirement are developed. It was stated by one respondent that ComReg could mandate various additional wholesale products; however ComReg considered this too onerous a burden as OAOs are better placed to request additional products.
- 6.30 ComReg described the wholesale products supplied by eircom: six bitstream access products (four ATM and two IP products), which be handed off at (distant) the ATM

⁶⁹ Framework Directive Article 8(2).

⁷⁰ Access Regulation 14(2).

⁷¹ Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services – paragraph 16.

⁷² Currently eircom provides bit stream access pursuant to Decision D6/00 on 'non discriminatory, fair and reasonable terms'.

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level or IP level. ComReg considers that ATM and IP bitstream products are in the same relevant product market; this is outlined in further detail in Annex A. As well as maintenance of these products, ComReg put forward a number of alternative products that it considered may be of interest⁷³ ComReg also asked whether the current arrangements originating out of non-discrimination could be replaced by a regime based upon reasonable requests for access.

- 6.31 ComReg then set out its understanding of associated facilities⁷⁴. Currently eircom offer a service described as the Bitstream Connection Service, and ComReg proposed to maintain this obligation. In addition however, ComReg invited OAOs to express their level of interest in associated facilities not currently provided, such as a collocation product for bitstream or associated backhaul.
- 6.32 ComReg also considered it appropriate that eircom should also grant open access to technical interfaces, protocols, or other key technologies and provide such OSS or similar software necessary to ensure fair competition in the provision of services. ComReg also regarded it as appropriate for eircom to open up any DSL trials to interested access seekers. ComReg also stated that eircom should have an obligation to negotiate in good faith and proposed also to impose the obligation on eircom not to withdraw access to facilities already granted.
- 6.33 ComReg also stated that it may require the attachment of conditions covering fairness, reasonableness and timeliness to the obligations set out above. In this context, ComReg stated that Service Level Agreements (SLAs) should be required in respect of all products for all process points. ComReg considered imposing SLAs by using a non-discrimination obligation, but noted that SLAs would be needed under an access obligation to deal with situations where eircom retail were not to purchase some wholesale products offered by eircom wholesale. ComReg also stated that penalties should apply in SLAs where appropriate, and additionally an obligation of transparency may be required as a supporting remedy. Transparency would enable ComReg to assess the performance of the SMP operator.

⁷³ (i) revised handover points that may be more appropriate to OAOs' requirements; (ii) revised handover speeds for example a lower handover speed ATM interface; (iii) different DSL technologies such as, for example, g.hSDSL which eircom does not currently deploy; (iv) the ability to specify line test parameters and therefore offer products with either lower or higher confidence levels that eircom retail and; (v) DSL over ISDN

⁷⁴ The Framework Regulations define associated facilities as 'those facilities associated with an electronic communications network, an electronic communications service or both such network and service which enable, support, or both enable and support the provision of services via that network and service'.

- Q. 16. Do you agree that an access obligation should be imposed on eircom?**
- Q. 17. There are three ways access to ensure bitstream access; these are set out in sections 6.32-6.34. However ComReg believes that a reasonable request regime is most appropriate. Do you believe that eircom should be required to answer reasonable requests for access? Please provide details in support of your answer.**
- Q. 18. If you believe that eircom should be required to answer reasonable requests for access, do you require any further wholesale bit stream access products or features or additional associated facilities to be provided by eircom? Please provide details of such products.**
- Q. 19. Are there any further obligations which should be imposed on eircom with respect to technical interfaces, protocols or OSS? Please detail your views**
- Q. 20. Do you agree with the approach to Service Level Agreements set out above? Please detail any further comments**

Responses to questions 16 - 20

- 6.34 Six respondents agreed that ComReg's proposal of an access obligation on eircom was appropriate. It was stated that an access obligation is necessary as respondents believe eircom would be likely refuse to deal with competitors and deny access. In particular, it was argued that an access obligation is both proportionate and justified given the environment of low broadband penetration and the lack of effective competition in the wholesale broadband market. One respondent adds that mandated access would safeguard the development of competition and allow for new entrants to further climb the ladder of infrastructure investment.
- 6.35 Six respondents agreed with ComReg that imposing an obligation to meet reasonable requests is an appropriate form for the access obligation, as this allows for product differentiation and innovation and takes into account the requirements of the industry rather than just eircom retail. These respondents stated that the most appropriate remedy is to combine an obligation of access (via a reasonable request regime) with a non-discrimination obligation to ensure that eircom does not provide newer products only for its Retail arm. A simple obligation of non-discrimination, it is stated, may stifle innovation and reduce service differentiation, whereas combining it with an access obligation, one respondent stated, is the primary way for competing operators to be able to innovate and develop different offerings to gain new market share and better meet their customers' needs.
- 6.36 Three respondents state that even with an access obligation there is potential for abuse by eircom and as such specific regulation with active enforcement by ComReg is required to ensure that abuses do not occur. These respondents state that a

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transparent process needs to be developed for the submission of and treatment (including timescales) of, access requests. To ensure non-discrimination, this must include requests made by the incumbent's retail arm, so eircom's retail business is required to use the same process to make access requests when dealing with eircom wholesale. One respondent adds that there must be transparency in relation to exactly what is provided by eircom to its downstream retail affiliate, as it alleges that eircom Retail does not currently use the bitstream product

- 6.37 One respondent stated that ComReg's argument appears to be that without an access obligation OAOs cannot differentiate their service. They state that ComReg does not substantiate this claim, and instead state that it is eircom's commercial practice to assess the market demand of service providers and to develop commercial wholesale products that allow for product differentiation and innovation. They state all products developed are offered on a non-discriminatory basis to all market participants. The respondent refers to an industry event held in March 2004 organised by eircom to promote and engage with wholesale customers on its bitstream portfolio. It claims that OAO feedback regarding this event was positive. The respondent states that large carriers and smaller niche players can already offer differentiated services (examples are given of VPNs, back-up for wireless, teleworking) and differentiated pricing (free connection/modem/rental). It is pointed out by the respondent that a promotional package offered by another operator which bundles calls and broadband services has the lowest DSL prices in Ireland. It is also stated that it is only products for which there is market demand that are developed and this is currently satisfied under non discrimination. Overall it is the respondent's view that ComReg's view of the market demonstrates an inability on the part of the regulator to determine the optimum market outcome in terms of the products and service required. The ability to discern customer demands evolves from continuous interaction between eircom and the OAOs and from experience gained from international operators and equipment suppliers. The respondent claims that eircom is uniquely positioned to gather such information to the benefit of its customers and to determine how best to satisfy their demands.
- 6.38 The same respondent states that the existing mechanism for access, although it works, can be improved. It states that it strongly rejects a regime whereby access obligations for additional wholesale products are defined by ComReg, as this would be disproportionate and may lead to an onerous burden on eircom to develop products for which there is spurious or insufficient demand. The respondent points out that an obligation to meet reasonable requests must be read together with Article 12 (1)⁷⁵ of the Access Directive and Recital 19⁷⁶ of the Access Directive.

⁷⁵ "A national regulatory authority may, in accordance with the provisions of article 8, impose obligations on operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, inter alia, in situations where the national regulatory authority considers that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level or would not be in the end-user's interest."

⁷⁶ "Mandating access to network infrastructure can be justified as a means of increasing competition, but national regulatory authorities need to balance the rights of an infrastructure owner to exploit its infrastructure for its own benefit, and the rights of other service providers to access facilities that are essential for the provision of competing services.... An operator with mandated access obligations cannot be required to provide types of access which are not within its powers to provide. The imposition by national regulatory authorities of mandated access that increases competition in the short-term should not reduce incentives for competitors to invest in alternative facilities that will secure more competition in the long-term...."

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6.39 They state that any ‘reasonable request’ regime would need to be limited by regulatory forbearance in favour of commercial negotiations and the establishment of criteria against which to assess reasonable requests. eircom believe it is disproportionate for ComReg to impose a reasonable request regime in the absence of any criteria to assess reasonableness, as eircom must be protected against disingenuous or spurious requests for access. At the very least, eircom should not have to meet request that are unreasonable; not technically feasible; and require the operator to provide something which is not within its power to provide⁷⁷ and refers to Ofcom’s process test for establishing a reasonable request and isolate the question “would the request impose an undue burden on an SMP operator?” as key. eircom stated that Ofcom set out that the evidence required on the part of a requesting OAO would be “evidence of sufficient demand to cover development costs or willingness of the requesting operator to accept the level of risk.”

6.40 The respondent proposes that ComReg go further than Ofcom in defining the standards. They suggest that the following be met for ‘reasonable’ requests:

- Evidence of sufficient demand to cover development costs should be provided. Previous reasonable requests schemes required little substantiation of demand resulting in considerable time and effort being assigned for little return. It is reasonable for OAOs to be required to provide an outline business case data to assist in the response;
- Evidence of and commitment to uptake forecasts from the requesting OAO should be required;
- Demonstrated willingness on the part of OAOs to accept a level of risk should be stated;
- Any process implemented should allow for clear rejection of the request;
- Timescales for response to such requests need to be established. A balance needs to be struck between responding and delaying the development of the market for all parties. It is unreasonable to impose a high cost response mechanism that will delay and be detrimental to the majority of end users;
- Guidelines are required to allow for the management of competing reasonable requests, particularly in an environment where coverage and penetration are as important as meeting the needs of specialised operators;
- Where multiple solutions may exist for addressing market needs there should be clarity as to whether eircom must provide the exact solution required by the OAO or an alternative solution that meets the same need.

6.41 When asked whether OAOs have an interest in additional products in the wholesale broadband access market, OAOs put forward the following ideas and suggested that an industry forum may be a good way to progress their development. Given that these arise from a number of respondents’ submissions, they are not in any particular order of priority:

- SDSL products
- Products offering different contention ratios, in particular the ability for OAOs to specify and control contention (ATM)
- Different download and upload speeds

⁷⁷ See Recital 19 of the Access Directive.

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- Additional handover points and protocols (IP and ATM) for all products; in particular an ‘unbundled’ IP product and a “traffic tied” port rental product. (Indeed one respondent states that only IP handover should be provided)
- A collocation product for bitstream or associated backhaul to increase efficiencies for OAOs.

6.42 eircom, in its response, states that the examples provided by ComReg in its consultation have not been raised by OAOs to date. They point out that eircom already offers ATM and IP handover; however access at the DSLAM is not possible with the current technology. They suggest in this case that LLU should be the solution. The respondent states that all four types of bitstream access are already operational in Ireland. Therefore obligating eircom to offer all four bitstream access points would impose an additional unnecessary burden on eircom having no incremental benefit to end-users.

6.43 Turning to ComReg’s examples, they state that ComReg misunderstands the current bitstream portfolio as rate adaptive deployments have obviated any requirement for OAOs be allowed to specify their own pre-qualification levels and hence offer products with either lower or higher confidence levels than eircom retail.

6.44 The respondent notes that eircom has also sought interest from OAOs to modify the contention rates on the ATM – DSL services. They state that the anecdotal response from industry has been that this it is not a priority for OAOs.

6.45 The respondent notes further DSL in Ireland is deployed over PSTN – as agreed by industry and ComReg. This approach was chosen in part due to the complex nature of the ISDN solution and eircom has however developed a migration solution to meet the needs of ISDN customers who want to avail of DSL services. This solution, which has also been agreed at the industry level, requires a significant level of administration by eircom and co-operation between operators. To date all parties have been satisfied with performance of this solution. This respondent argues to require eircom to provide DSL over ISDN would require a complete overhaul of the existing architecture. This represents a level of costs and risk that is not substantiated by market demand.

6.46 Turning to technical interfaces, protocols or OSS, one respondent stated that the current DSL products are not provided in a fashion which is equal for all access seekers as they were designed to favour the eircom Retail network which was in existence prior to development of the products thus placing access seekers at a disadvantage. All new products, this respondent stated, should be technically agreed by other access seekers prior to development. One respondent provides a specific example – that as service changes (outages or bug fixing) required by eircom Retail impact on eircom wholesale systems, OAOs are affected by the outage without gaining any benefit. Another respondent states that further obligations should be imposed to ensure better access to eircom’s information systems for provision and repair and wholesale SLAs to support this (not in place at present). This respondent also believes it is vital that eircom should have obligations to provide 90 days prior notification to technical interface specifications for those interfaces operators are required to notify and publish the technical specifications of their customer interfaces under the RTTE Directive (99/5/EC).

6.47 eircom continues in its response, stating that it already has an electronic interface to support mass deployment of bitstream services that has automated the provisioning of the product and the flow of status information. New services such as “Bitstream Transfer” have been seamlessly and quickly deployed using this product. Additional

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user functionality has been incorporated based on eircom's own operational experience and at the request of customers. A further enhancement of this solution is already under development.

- 6.48 They state that OAOs therefore have access to all the information required to operate their own services and should additional functionality be required eircom has a platform to enable the development of such enhancements. Any suggestion of an alternative OSS architecture ignores the functionality solution in place, risk stranding that investment and raises uncertainty around the recovery of future investments. To embark on such a route without demonstrable market demand is of questionable value.
- 6.49 In relation to access to trials, eircom states that it has a history of trialling new services with OAOs and this is part of the market mechanism by which new products are developed and implemented. eircom, in principle would not refuse an approach from an OAO to trial a product/service. In deciding if and how to trial a new service issues such as the protection of commercially sensitive information, recovery of costs, and information sharing have to be considered. Decisions on such trials are a business as usual function and to date there is no evidence that eircom is discriminating between OAOs.
- 6.50 In relation to the proposal by ComReg that eircom has the obligation not to withdraw access to facilities already granted, eircom stated this to be a new obligation being imposed on eircom without justification. eircom stated that while under the legislation ComReg has the power to impose this remedy, eircom believed it is unnecessary, onerous and not in the interest of industry or consumers. It is unnecessary because a) eircom has never unilaterally withdrawn access to facilities for third parties once granted; and b) eircom needs to be able to develop the access and core network to maintain the network integrity. eircom stated that it is mindful of the guidelines set by Ofcom in relation to site closure; however this obligation lacks sufficient clarity and as such is open to abuse. eircom stated it is onerous as eircom needs to retain the flexibility to discuss access with third parties when it is re-designing its network architecture and re-deploying network infrastructure. Without this flexibility eircom may be forced to maintain facilities, cables, and infrastructure which could be withdrawn and replaced elsewhere more efficiently. Some access facilities, if not withdrawn, could impede development completely. A decision to refuse the legitimate removal of a service would be unacceptable and tantamount to unnecessary interference by the regulator which could undermine the support systems and potentially delay or cancel development of services particularly on the edge of the network i.e. new housing and business development parks.
- 6.51 eircom highlighted an example of the problems which can arise from the imposition of an obligation like this. eircom again points to the situation in the United Kingdom where BT has been forced to maintain facilities in otherwise abandoned and derelict sites⁷⁸. This in turn leads to significant overheads in terms not just of physical maintenance but also in terms of administrative maintenance, i.e. record keeping, systems developments etc. The respondent believed the suggestion from ComReg reveals a lack of understanding of commercial dynamics. In an evolving market such as DSL there is every likelihood that services that make commercial sense one day are obsolete within a short space of time. In some cases the cost of maintaining these services outweighs their value. eircom should therefore be allowed to withdraw these types of services. In circumstances where a minority of customers remains on that

⁷⁸ Consultation Document 03/146,

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service reasonable notice would be given along with options for migration or cessation.

- 6.52 In respect of SLAs, five respondents support ComReg's proposals to develop SLAs. The current situation whereby SLAs are not provided for the bitstream product is characterised as very unsatisfactory.
- 6.53 eircom stated that ComReg seems to be suggesting that eircom implement a delivery process type SLA similar to that for leased lines and SB-WLR. This fails to recognise the automated gateway in place as the implementation of such would bring little value to OAOs. In principle eircom is in favour of SLAs that can utilise existing principles and systems, so that any cost of development is manageable
- 6.54 It is stated that SLAs are necessary to allow OAOs to offer retail SLAs providing end-to-end guarantees to its customers. It is stated that SLAs should cover all aspects of the product delivery process including provisioning and fault management. Another respondent states that SLAs are badly needed for the enabling of bitstream access and guarantees regarding the accuracy of information provided by eircom's prequalification and ordering systems. All SLAs need to be supported by effective reporting to ensure non discrimination.
- 6.55 eircom states that wholesale SLAs provide a common platform for all OAOs to develop their own retail SLAs. Bearing in mind that OAOs have, in many cases, more of the end user service under their direct control the real value is in offering retail SLAs. eircom states that ComReg appear to be confused in suggesting that other SLAs may be required due to eircom Retail's purchase of services other than bitstream. However, eircom offers a variety of services to allow OAOs to build their own solution and each carries published Terms and Conditions, prices and implied service level agreements.
- 6.56 Three respondents agree with the use of penalties: one suggests that ComReg's reference to penalties 'as appropriate' should be strengthened and one states that SLAs are only effective when coupled with associated rebates. One respondent points to the positive experience with the improved delivery of leased lines. The respondent adds that there should be transparency as to the SLAs, if any, provided between eircom Wholesale and Retail.
- 6.57 Respondents encourage ComReg to take a very proactive role in fostering transparent and fit for purpose SLAs for the industry, which will in turn allow for excellent service levels for end users. It is also stated that any SLAs established should undergo a review process, in order to assess their effectiveness or otherwise and industry should be afforded the opportunity to contribute to these SLAs.

ComReg's Position

- 6.58 Given the competition problems illustrated with regard to refusal to deal and denial of access, in accordance with the Regulations 13 of the *Access Regulations* ComReg will impose obligations on eircom to meet reasonable requests for access to, and use of, specific network elements and associated facilities in this market. The obligations that ComReg will impose on eircom are proportionate to the problems identified. Without such obligations, OAOs would need to rely on commercial negotiations and evidence submitted to ComReg suggests that this would be unlikely to be sufficient to provide wholesale access on reasonable terms, and that the emergence of a competitive market would be hindered thus damaging the interests of end-users.
- 6.59 ComReg considers that the form of access obligations needed to promote the emergence of sustainable competition should be based upon reasonable requests for

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bitstream products and associated facilities or other elements and/or facilities as set out in Regulation 13 (2) a and 13 (2) f. Although a non-discrimination obligation would ensure that OAOs could avail of the services provided by eircom to its own retail affiliates, such an obligation would not allow OAOs to differentiate their service offerings. As a result, non-discrimination is viewed by ComReg as not sufficiently strong at this moment, as it is less likely to promote diversity and innovation which are in the interest of end-users. The responses received by ComReg suggest that there is considerable interest from OAOs in different products from those currently offered by eircom Wholesale. OAOs point out that their requests have not been advanced and believe this to be a failure of the current regulatory arrangements. ComReg has also considered whether it should impose access obligations requiring eircom to develop new services to offer to OAOs. While this may bring some benefits, ComReg considers such an obligation to be overly onerous and runs the risk of requiring eircom to provide types of access which are not within its powers to provide. Furthermore, OAOs are better placed to request new products, as they are the users of the resulting products.

- 6.60 As an accompanying obligation, and to ensure that OAOs requirements are fully taken into account which has been raised as a concern by OAOs, it is also necessary to require eircom, pursuant to Regulation 13 (2) b, to negotiate in good faith with undertakings requesting access.
- 6.61 It is important that all access seekers have equivalent access to eircom Wholesale when developing new products. eircom Retail must not have privileged access as this would create competition problems whereby OAOs' requests are not afforded equivalent attention or OAOs' requests are rendered transparent to eircom Retail. ComReg intends to monitor this in the future for evidence of compliance.
- 6.62 ComReg notes that it is necessary to gauge access requests in terms of their reasonableness. Reasonableness would be defined by ComReg in a way consistent with the criteria set out in Regulation 13 (4) of the Access Regulations. One respondent has requested that ComReg develop a further refinement of these criteria. ComReg proposes to consult further on the development of criteria for assessing reasonableness. Pending the results of this consultation, requests for access should, in the first instance, be addressed through commercial negotiation, with either party having the right to request regulatory intervention by ComReg. ComReg will assess the reasonableness of any access request on a case by case basis in light of its powers under Regulation 13, including the imposition of obligations covering fairness, reasonableness and timeliness.
- 6.63 Additionally, ComReg considers that capacity-based products facilitate interoperability and proposes to use Regulations 5 (right to request and the obligation to negotiate interconnection) and 6 (power of the regulator to require end to end connectivity with powers of Regulations 10-14) of the *Access Regulations* to require such capacity based interconnection products⁷⁹, outside the SMP designation process.⁸⁰
- 6.64 Furthermore, pursuant to Regulation 13 (2) (e) ComReg also considers it appropriate that, insofar as it is required to avail of wholesale bit stream, eircom should also

⁷⁹ In principle Service Schedules 101, 126, and 302 of the Reference Interconnection Offer

⁸⁰ It should also be noted that ComReg proposes to also mandate, where justified, Bitstream Extension Circuits/ Interconnection Extensions Circuits as well as other future data and voice interconnection services can be mandated without the need for SMP designation.

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grant open access to technical interfaces, protocols, or other key technologies and similarly, pursuant to Regulation 13 (2) (h) eircom is required to provide such OSS or similar software necessary to ensure fair competition in the provision of services. Such access is necessary to ensure that OAOs have equivalent access to eircom wholesale. ComReg understands that the current gateway access is used by all providers taking up bitstream – including eircom retail – and so equivalent access is provided. ComReg also believes it appropriate for eircom to open up any DSL trials to interested access seekers so as to provide all retail providers with equivalent access to services.

- 6.65 ComReg also proposes, pursuant to Regulation 13 (2) (c), to impose the obligation on eircom not to withdraw access to facilities already granted. This is necessary to provide OAOs with certainty in providing their services to end users. ComReg disputes the assertion by eircom that this is a new obligation as it was previously inherent in the ONP legislation and general licence conditions, and is also referenced in the bitstream agreement terms and conditions. However there are instances whereby it may be sensible to withdraw access to facilities, for example where they are no longer required and so where eircom wishes to withdraw access it should submit the request to ComReg. ComReg will consider the matter, taking representations as required, to decide whether the withdrawal should proceed.
- 6.66 Pursuant to Regulation 13(3) ComReg may attach conditions covering fairness, reasonableness and timeliness to the obligations set out above. In this context ComReg believes that Service Level Agreements (SLAs) are required in respect of all products for all process points and notes OAO support for its proposals. Where SLAs do not exist and as new products are developed, it may be more appropriate to develop SLAs pursuant to an access obligation, rather than under non-discrimination, as eircom Retail may not purchase new products or have SLAs. For existing wholesale products purchased by retail affiliates of eircom, it may be appropriate to deal with this under the non-discrimination obligation. ComReg therefore proposes to deal with the issue of SLAs under Regulation 13(3) and Regulation 13(1) or under Regulation 11 of the Access Regulations.
- 6.67 In terms of prior notification of changes to technical interface specifications, under Regulation 5 (1) – 5 (6) of the R&TTE Regulations⁸¹ an SMP operator in the relevant market is obliged to publish and make readily available accurate and adequate technical specifications of interfaces offered by them before services provided through such interfaces are made publicly available. Under Regulation 5 (3), an operator shall publish any updated specifications as soon as may be after the adoption of any such updates.

Non-discrimination

Summary of Consultation issue

- 6.68 In its consultation, ComReg proposed a move from developing bitstream products pursuant to a non-discrimination obligation to a reasonable request regime. However ComReg also saw merit in maintaining the obligation of non discrimination –where eircom’s upstream arm provides a bitstream service to eircom’s downstream retail arm it would continue to be required to provide an equivalent wholesale bit stream product to other operators.

⁸¹ ‘European Communities (Radio Equipment and Telecommunications Terminal Equipment) Regulations, 2001’

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- 6.69 ComReg also believes that where access obligations have been imposed (and in particular at regulated prices) there may be more incentive for eircom to discriminate on non price parameters.
- 6.70 This means that eircom must apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and must provide services and information to others under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners. In taking up bit stream, there should be no unreasonable delays, no undue bundling, and no undue contractual terms for OAOs who wish to avail of the service.
- 6.71 Information and services must be provided to alternative operators in timescales, on a basis, and of a quality, which are at least as good as those provided to eircom's retail arm and associates.
- 6.72 As bitstream is a product which is purchased by OAOs and eircom Retail, ComReg believes that Service Level Agreements (SLAs) are required to monitor eircom's obligation of non discrimination.
- 6.73 ComReg also considered that information gained by eircom as a result of its provision of bit stream services to another operator should not be used by eircom's downstream arms in any manner.
- 6.74 In order to aid compliance with the obligation of non discrimination, ComReg proposed that a Code of Practice should be concluded for bitstream.
- 6.75 ComReg also proposed that eircom's downstream arms should not have privileged access to eircom Wholesale - for example, when developing new products OAOs should be afforded equivalent access to eircom Wholesale as eircom Retail. Not only is there the potential for discriminatory development of products, there is also the potential for the two arms of the eircom business to have undue influence on each other's pricing. ComReg proposes to continuously monitor eircom for any evidence of discrimination in favour of eircom's downstream arms by eircom Wholesale. Should any such evidence of this kind of discrimination be found, ComReg would consider this a breach of the utmost seriousness, and would, with reference to other relevant national and European bodies, seek such sanctions as would prevent a recurrence.

Consultation questions 21 & 22

Q. 21. Do you agree that in addition to provision of reasonable requests, eircom should also be required to provide products on a non discriminatory basis and, as such, should be required to provide to other operators an equivalent wholesale Bit stream product to those services it provides to its retail arm?

Q. 22. Do you agree that an obligation of non discrimination should be imposed on eircom? Please elaborate your answer, making references to ComReg's interpretation of such an obligation set out above.

Responses to question 21 & 22

- 6.76 Five respondents state they support ComReg in proposing an obligation of non discrimination. These respondents state that eircom should be required to provide to OAOs equivalent wholesale bitstream services to those services provided to its retail arm. Indeed it is stated that it is absolutely essential that eircom should be required to provide products on a non-discriminatory basis to allow for fair competition in the broadband space.
- 6.77 Respondents state that there is increased incentive for eircom to discriminate in the wholesale broadband access market arising from the competition problems identified. One respondent adds that OAOs need to be able to compete on a level playing field and without this there is the potential for eircom to provide sub-standard products/services/pricing to OAOs, potentially strangling any competition in the end user broadband space. Respondents agree with ComReg that non discrimination is the only remedy which can directly target the competition problems and that it is necessary to ensure that eircom does not discriminate in favour of its own retail arm and so the obligation is proportionate and justified.
- 6.78 One OAO in particular strongly supports the fact that eircom's downstream arm should not have privileged access to eircom Wholesale. This respondent has also previously suggested that eircom Retail is required to use the same process as OAO's when requesting new products. Indeed this respondent stated this could be required when new OSS or systems are developed so they are designed in a manner providing OAOs and eircom Retail with the same access.
- 6.79 Three respondents support immediate conclusion of a Code of Practice. One of these states that this Code needs to be designed with industry input and should be actively followed up and enforced by ComReg. This respondent also asserts that any Code should apply solely to eircom.
- 6.80 Another respondent, whilst agreeing with non discrimination as the starting point for an SLA, requires that ComReg defines an industry agreed SLA following this. This OAO does not believe that existing SLAs offered by eircom to its customers are satisfactory as this OAO requires a better SLA. One respondent also adds that it is important to monitor the service provided to OAO customers by eircom's 1901 repair service when reporting faults.
- 6.81 One respondent wished to bring to ComReg's attention its concerns about charges for cessation and port transfer charges (currently €60) as it is not aware of eircom charging this fee to its own retail customers. This respondent also believes that the level of the charge and their application acts as a barrier to entry and growth and urges ComReg to review the level and existence of these charges.
- 6.82 Finally, it is suggested that the obligation of non- discrimination should be actively enforced and the monitoring and reporting should be transparent in nature to provide industry with confidence that there is a level playing field for competition.

ComReg's Position

- 6.83 Many of the competition problems raised by OAOs relate to such discriminatory practices such as discriminatory use of information, undue requirements, and issues relating to quality. ComReg and OAOs believe that there is increased potential for discrimination when access has been mandated.

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- 6.84 A non discrimination remedy which can directly target these competition problems, and is necessary to ensure that eircom does not discriminate in favour of its own retail arm. This will need to be supported by obligations of transparency so as to provide visibility of compliance or non compliance.
- 6.85 ComReg notes the broad support from OAOs for its proposals and also notes that eircom did not respond specifically to these proposals.
- 6.86 ComReg therefore proposes that eircom is required to apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and must provide services and information to others under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners. All information and services must be provided to alternative operators in timescales, on a basis, and of a quality, which are at least as good as those provided to eircom's retail arm and associates. This addresses competition problems of low quality and discriminatory provision of information that have been raised by OAOs.
- 6.87 ComReg also considered that information gained by eircom as a result of their provision of bit stream services to another operator should not be used by eircom's downstream arms in any manner. Some respondents suggested that there is a need for a code of practice in this market. ComReg believes at this stage in the development of the market, requiring the operation of a code of practice would be disproportionate. ComReg believes that the access obligations, non-discrimination and transparency ought to be sufficient for dealing with the problems identified in this market. However, ComReg will continue to review the status of the market and if a code of practice were identified as a suitable measure to remedy competition problems, ComReg will revisit this issue.
- 6.88 It is important that all access seekers have equivalent access to eircom Wholesale when developing new products. eircom Retail must not have privileged access as this would create competition problems whereby OAOs' requests are not afforded equivalent attention or OAOs' requests are rendered transparent to eircom Retail. OAOs raised particular competition problems relating to provision and fault management of bitstream services. There are currently no wholesale SLAs for the bitstream service and this impacts on the ability of OAOs to compete in the retail market and also provides no visibility as to the service provided by eircom Wholesale to OAOs vis a vis the service provided to eircom Retail. . ComReg considers that SLAs are vital to provide evidence of adherence to non discrimination obligations. ComReg will therefore, as a matter of priority, initiate a workstream to develop SLAs for provision and fault reporting.

Transparency

Summary of issue

- 6.89 ComReg stated in its consultation that at present eircom publish a limited Bitstream Reference Offer on their website; however detailed process manuals, specification of the wholesale gateway, or codes of practice are not published.
- 6.90 Regulation 10 provides for ComReg to require eircom to publish a reference offer that is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. Such a reference offer should include a description of the relevant offerings broken down into components according to market needs and a description of the associated terms and conditions, including prices.

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- 6.91 As a detailed Bitstream Reference Offer is not published by eircom, ComReg asked for views from interested parties on the most appropriate format for any Bitstream Access Reference Offer and the minimum list of items to be included in such an offer so that ComReg, may under Regulation 10 (3) specify the precise information to be made available, the level of detail and the manner of publication.
- 6.92 Regulation 10 also provides for ComReg to require an operator to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices. ComReg asked respondents to detail any further information they believed should be published

Consultation questions 23 - 25

- Q. 23. Do you agree that an obligation of transparency should be imposed on eircom? Please provide a detailed answer.**
- Q. 24. Which items should be included in any Bit stream Access Reference Offer? Please provide headings and a description of the content under each heading as appropriate.**
- Q. 25. Do you believe that ComReg should require eircom to make public any further information? Please specify if you believe this should be made available in the Reference Offer or otherwise published. Please provide support for your answer.**

Views of Respondents to questions 23 – 25

- 6.93 Four respondents support the imposition of a transparency obligation and believe it is proportionate and justified as it ensures that OAOs have sufficient information and clear processes to assist market entry and increases their ability to compete effectively. Another respondent states that an obligation of transparency is necessary to ensure compliance with an obligation of non discrimination, as it is not feasible without this and is vital to provide confidence to OAOs.
- 6.94 Two respondents state that any Bitstream Reference Offer should mirror the structure and the content of the existing Reference Interconnection Offer and the Access Reference Offer. One adds that experience in other European countries has shown that availability of a detailed reference offer has contributed to a level of sophistication in bitstream access which exceeds that of other EU member states. Another respondent states that they require the ability to actively negotiate any Offer.
- 6.95 One respondent requires the publication of all terms and conditions for eircom's wholesale broadband access services, the definition of key performance indicators and reporting against them. Another respondent believes that in addition to the Reference Offer, eircom should be obliged to publish process manuals, SLAs and an O&M manual as well as wholesale gateway codes. This respondent also states that OAOs should also be provided with the same ability to access eircom information in respect to availability and quality of the line in respect of broadband. Another respondent states that documentation is required for any new products – different

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handover capacities/locations/interfaces; different upload/download/contentions. Another respondent says that it does not see a benefit from publication of process manuals.

- 6.96 Two respondents suggest that an additional obligation to be included in any Reference Offer is an internal reference offer – where eircom retail purchases an input that differs from those bought by OAOs appropriately detailed information should be published in relation to that input including the price.
- 6.97 Another respondent states that it already publishes
- Standard Agreement for the Provision of Bitstream Service including terms and conditions
 - Bitstream Service Description
 - Bitstream Connection Service Product Description
 - Bitstream Service Price List, and
 - Bitstream Service Product Profile
 - An Industry Process Manual is supplied to OAOs once a contract is signed.
 - Training is also provided when required
- 6.98 This respondent states that to date OAOs have not sought anything in addition to the above. In the absence of any specific evidence of discrimination by eircom Wholesale in favour of eircom Retail, or of any demand from OAOs for additional information, diversion of industry resources into the development of additional levels of documentation is unwarranted and the existing level of publication satisfies the obligation of transparency.

ComReg's position

- 6.99 Following the imposition of an access obligation, ComReg believes that it is proportionate and justified to impose an obligation of transparency in respect of all bitstream products and associated facilities. This ensures that alternative operators have sufficient information and clear processes to which they would not otherwise have access. Indeed in order to avail of bitstream it is necessary for OAOs to have access to details of all products available, the terms and conditions applying to purchase of these and applicable prices. Only a transparency obligation can provide this.
- 6.100 One respondent argues that the current piecemeal publication of documentation applicable to Bitstream is sufficient. OAOs argue that they require further information. ComReg has decided to require eircom to develop a sufficiently unbundled reference offer for its bitstream portfolio to include a description of the relevant offerings broken down into components according to market needs and a description of the associated terms and conditions, including prices. This may require some development of the existing limited Reference Offer to include elements set out in Reference Offers for other wholesale products as well as the centralisation of information that is already provided in piecemeal fashion, for example version control and a change management process. Additionally, although a process manual is provided by eircom to OAOs this is provided only on request and is not made available on the eircom website as is usual. ComReg therefore considers that the documentation made available currently by eircom should be centralised and placed on the eircom Wholesale website, as with other access products. It is important that the most up to date offer is available to OAOs and therefore ComReg is of the view that eircom should update the offer and on any update, should notify OAOs and ComReg including a change matrix.

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- 6.101 ComReg notes one respondent's position that diversion of resources into production of a complete reference offer is not justified, and considers that the approach set out above provides sufficient level of transparency to OAOs and is not overly onerous on all parties.
- 6.102 Transparency also provides an important method of ensuring compliance with a non discrimination obligation, as the information needed to measure this would not otherwise be available and so interested parties would not have the confidence that eircom is behaving in a non discriminatory manner. Therefore ComReg considers an obligation of transparency directly targets the nature of the problem and should be imposed on eircom. This would normally be fulfilled by publication of statistics pursuant to Service Level Agreements.
- 6.103 Earlier in this paper ComReg indicated its approach regarding the introduction of SLAs, under access and non discrimination obligations. Transparency of metrics under SLAs will be dealt with as part of the implementation of this obligation.
- 6.104 Where an obligation of accounting separation is imposed, transparency is also required as it allows the calculation of costs and price to be rendered visible and so allows ComReg to check compliance with non discrimination obligations and address the actual and potential competition problems relating to price.

Accounting Separation

Summary of consultation issue

- 6.105 ComReg noted that the provision of financial information by operators designated as having SMP has always been an essential part of regulation in Ireland. ComReg also noted that the proposed application of a non-discrimination obligation can require, *inter alia*, the imposition of financial reporting regimes in order to monitor compliance with such an obligation. ComReg stated that it is appropriate to impose an obligation of accounting separation upon an operator designated as having SMP in this market.
- 6.106 The obligation of accounting separation will support ComReg in its monitoring behaviour with regard to non-discrimination. ComReg stated it would implement accounting separation on a by service and/or product basis rather than at a market level, as it is important to discourage possible anti-competitive cross-subsidisation.
- 6.107 ComReg argued that the proposed application of a retail minus price control would require accurate assessments of avoidable retail costs. ComReg also noted that accounting separation is based on the nature of the problem identified, justifiable and proportionate. An accounting separation obligation is designed to provide evidence which would help to demonstrate the presence or absence of discrimination.
- 6.108 ComReg also stated that it would consult further on accounting separation and cost accounting methodologies, and in the interim maintain the existing level of accounting separation on those operators having SMP until such time as any further consultations are completed.

Views of respondents

- 6.109 One respondent considers that the proposal to control wholesale broadband prices by application of a retail minus price control would require ComReg to collect information about avoidable retail costs. The same respondent notes that *eircom's*

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separated accounts use an agreed methodology to allocate retail costs to services. It is also noted by the respondent that a requirement to expand the current level of accounting separation to wholesale broadband access services would be inappropriate, disproportionate and unreasonable at this time, given that the broadband market is at an immature stage. The respondent also claims that the retail costs reported in the separated accounts would need to be adjusted if they were used in the calculation of an appropriate margin.

- 6.110 Four other respondents agreed with ComReg's accounting separation proposal, and noted the proposal to consult further on this and maintain the current regime in the interim. One respondent stated that it is imperative that such an obligation should be imposed on *eircom* to ensure that there is the ability to enforce the obligation of non-discrimination.

ComReg's position

- 6.111 ComReg maintains the view that the obligation of accounting separation is proportionate and justified given the nature of the problem identified in this market. As the market is still developing, it is essential that ComReg applies obligations that foster a level playing field to ensure the development of sustainable competition.
- 6.112 Accounting separation is necessary to make effective a non-discrimination obligation, as it is designed to help disclose possible market abuses, provide evidence in relevant markets of the presence or absence of discrimination, and provide information on the retail costs necessary in the calculation of a retail minus price control.
- 6.113 For accounting separation to be effective in this market, further information on the retail costs associated with broadband services will be necessary to enable the calculation of a retail minus price control. ComReg proposes to address the issue of accounting information in a further consultation on accounting separation.

Price Control and Cost Orientation

Summary of consultation topic

- 6.114 It was noted that Regulation 14(1) of the Access Regulation grants ComReg powers to impose wholesale price controls and obligations concerning cost accounting systems for the provision of access where a market analysis indicates that a lack of effective competition means that an operator might apply a price squeeze. ComReg also noted that the application of a price control should take account of investment and innovation incentives.
- 6.115 ComReg indicated that a wholesale price control was essential to prevent a price/margin squeeze occurring where an SMP vertically integrated operator in this market might leverage its market power in the wholesale broadband access market into the downstream retail markets for broadband services. ComReg stated that two forms of wholesale price control can be used to prevent the application of a price/margin squeeze:
- Cost orientation on the basis of forward looking long run incremental costs (FL-LRIC); and
 - Retail minus.

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6.116 ComReg argued that retail minus price control was less burdensome than cost orientation on the basis of FL-LRIC, and provided better protection against a price/margin squeeze. It was also stated that at this stage in the development of the market for broadband services, it may be better to focus on the relative level of retail and wholesale prices, rather than the absolute level of wholesale costs. ComReg noted that should it prove impossible to implement retail minus, FL-LRIC may be the only effective remedy.

Views of respondents on cost orientation of wholesale prices

6.117 Five respondents do not believe or are not convinced that cost orientation on the basis of FL-LRIC would be an effective remedy for the competition problems identified in this market. One respondent noted that it would only be effective if associated with rigorous and transparent stack testing going forward to ensure no anti-competitive pricing. Another respondent noted that while cost-orientated prices are the correct way of regulating monopoly power, given the conditions in the Irish market retail minus may provide the best solution, at least in the short to medium term.

6.118 With regard to cost orientation on the basis of FL-LRIC, one respondent claims that it is difficult for both regulators and operators to know precisely the level of future take-up with sufficient certainty to determine an appropriate unit cost for cost orientation of wholesale prices. They claim that if the objective is to ensure efficient entry of competitors into the market for retail broadband services there are other less onerous remedies than that of FL-LRIC, such as retail minus.

6.119 Four other respondents also consider that there exists a less burdensome and more proportionate remedy i.e. retail minus. However, one of these respondents noted that the significant complexity surrounding FL-LRIC costing for bitstream should not be a reason for not undertaking such analysis.

ComReg's Position

6.120 ComReg notes the responses to consultation agreeing with ComReg that at this time an obligation of cost oriented prices for wholesale bitstream prices on the basis of FL-LRIC would not be appropriate. Cost orientation on the basis of FL-LRIC would be difficult to implement in this market and would be disproportionate given the available alternative of a retail minus obligation.

6.121 While ComReg believes that FL-LRIC would not be appropriate at this time it may be appropriate to reconsider this in future market reviews depending on the development of competition in this market.

6.122 While ComReg believes that retail minus should form the basis of price control for wholesale bitstream services, there are certain facilities associated with the service that ComReg believes should be offered at cost oriented prices. These are discussed later in the document.

6.123 The eircom backhaul products, both IP and ATM, that comprise the Bitstream Connection Service and which are associated with the wholesale bitstream products, are essential components of the end to end service, and a significant cost to an OAO in providing competing retail services. These products provide the physical and logical interconnection between eircom's network and the OAO networks. As such ComReg believes that these products should be regulated in a manner consistent with the regulation of other capacity-based interconnection products such as In Span Handover (ISH). Currently eircom has an obligation to provide capacity based interconnection products at prices oriented to FL-LRIC costs, and ComReg believes

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that subject to further consultation this obligation should be extended to bitstream backhaul products.

Summary of consultation topic on retail minus

- 6.124 ComReg set out arguments in favour of the application of a retail minus price control. The primary purpose of retail minus is to safeguard against the application of a price/margin squeeze by a vertically integrated operator designated as having SMP in this market.
- 6.125 ComReg suggested in its discussion that a retail minus price control would be applied to the wholesale prices proposed by a vertically integrated SMP operator in this market.
- 6.126 ComReg outlined that an effective retail minus price control would require the margin between the wholesale and retail prices to be appropriately established. The margin would comprise at least the avoidable retail costs associated with offering a basic DSL offering. If the margin were overstated, this would risk discouraging investment at the network level by an SMP vertically integrated operator. On the other hand if the margin were understated, this would risk constraining the development of competition in the retail market.
- 6.127 ComReg stated that the margin between wholesale and retail prices should be based on a forward looking assessment of the additional costs that must be incurred to provide the retail service. It was also stated by ComReg that due account of investment risks would also need to be taken into account.
- 6.128 ComReg invited comment on the appropriateness of its proposed retail minus price control. ComReg also invited comments on a number of complexities involved in implementing the proposed retail minus price control, including discussion on the use of forward looking costs, the appropriate rate of return, timing or frequency of application of a price/margin squeeze test, the treatment of new products and services, and accounting for price discounts and special offers.

Views of respondents

- 6.129 One respondent argued that the imposition of a separate price control in this market is neither required nor justified. The respondent claims there would be no separate requirement for a price control if a vertically integrated SMP operator in this market, when changing prices or introducing new services, were to:
- Set the prices for the range of wholesale broadband services required to support all retail broadband offerings;
 - Set prices for each of the retail services offered; and
 - Test each retail price to ensure a sufficient margin such that any ex post test applied under competition law will show that an operator equally or more efficient than the vertically integrated SMP operator recovered wholesale and retail costs and made a positive contribution to fixed costs.
- 6.130 The same respondent, however, stated that if ComReg were to determine that a separate obligation for price control is necessary in this market, then testing the margin between the price for wholesale broadband services and the prices for the associated retail product set is an appropriate mechanism. They presented a case for applying such a retail minus price control across a portfolio of services in the market, rather than on a product by product basis.

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- 6.131 Another respondent expressed the view that a retail minus price control would be the most pragmatic and reasonable mechanism in this market. The same respondent also stated that there should be an appropriate margin sustained between the wholesale and retail price to allow for operators who are equally as efficient as a vertically integrated SMP operator to be able to compete, in accordance with well understood economic and competition law principles.
- 6.132 Another respondent also agreed that a retail minus price control was appropriate and suggested figures that might constitute an appropriate margin. One respondent expressed the view that using a retail minus price control can achieve ComReg's regulatory objectives.
- 6.133 Two respondents highlighted that for retail minus to be an appropriate mechanism for preventing the application of a price/margin squeeze, the method used to apply a price/margin squeeze test by ComReg should be made transparent. One of the respondents remarked that it was vital for ComReg to provide details on how ComReg would analyse whether a margin squeeze is taking place. The other respondent stated that there must be transparency in relation to the retail minus process.
- 6.134 Another respondent stated that a retail minus price control on its own would not prevent a vertically integrated SMP operator in this market from exercising discrimination by affecting the structure of wholesale products offered or through promotions.
- 6.135 Four respondents agree that the retail costs used in determining the margin between wholesale and retail prices should be forward looking and that they should be the appropriate incremental costs associated with offering the retail service. One of these respondents submits that the incumbent's retail costs should be the costs used in determining that margin and refers to two consultant reports which it had commissioned, which present an economic case supporting this view. The same respondent states that these costs may be estimated initially based on plans for the roll-out of a portfolio of retail broadband services. The respondent claims that there is no objectively justifiable way of allocating retail costs to each wholesale-retail product pair across the portfolio of services offered to the market.
- 6.136 The same respondent also claims that the launch of a substantial new retail service will always involve a marketing investment that will only be recovered over a business planning cycle of a number of years. For this reason, they consider it is appropriate to take a forward looking view of retail costs and to project sustainable levels of each cost type for a mature market when determining the correct margin between retail and wholesale prices. They also claim that competitors in the market for retail broadband services will not only offer a portfolio of such services but will offer these alongside a range of other services and some of their retail costs in the broadband access market will be recovered across the full range of services offered. The respondent therefore claims that for the broadband services to prove profitable additions to a competitor's portfolio, revenues from those services need only recover the costs of the essential wholesale inputs, and the incremental retail costs of adding the retail service with a positive margin.
- 6.137 Another respondent cautioned that the starting point for calculating the margin must be the same, in that the retail affiliate of a vertically integrated SMP operator would be looking into the same bitstream interface as OAOs. Another respondent argued that the retail costs used in the margin calculation should be based on those of a hypothetically efficient operator. Another respondent stated that the additional costs

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should be based on the cost of implementation, cost of infrastructure, cost of a CPE modem, sales costs, cost of customer care, cost of technical support and cost of billing.

- 6.138 One respondent considers that any attempt to use a constant money amount across a retail broadband portfolio is flawed. They claim that the nature of the avoidable retail costs of delivering retail broadband services is such that many of them rise with enhanced service specification and hence with the retail price. They also claim that the use of a constant percentage between retail and wholesale prices wrongly implies that all retail costs vary proportionately with the specification of the network offering.
- 6.139 On the issue of the frequency of review of wholesale-retail margins they note that the use of forward-looking incremental retail costs to establish general margin levels indicates that these margin levels should then apply over an extended period. The respondent also notes that retail costs will depend to some extent on the growth of the new markets for retail broadband services and volumes may vary substantially, and as a consequence a review may be necessary.
- 6.140 Another respondent believes that the margin between the retail and wholesale prices should be established using a percentage of the retail price, and reviewed on an annual basis. Another respondent stated that the margin should be expressed as a percentage of the retail price, based on the relevant forward looking costs. The same respondent also questions the fact that ComReg has bundled speeds and contention ratios to yield an averaged price outcome that assumes an averaged wholesale purchasing basket and that the cost allocation between relevant products needs to be made transparent. Another respondent also considered that the margin figure should be reviewed annually, while another respondent considered that a review should occur every time there is a retail price change by a vertically integrated SMP operator.
- 6.141 On the appropriate retail return to apply in a retail minus price control, only three respondents specifically answered this question, with one respondent claiming from experience that retail costs i.e. bad debt, billing, marketing plus a contribution to fixed costs and a small profit margin, amount to some 25% of the OAO selling price. The other 75% is represented by wholesale input charges, and system and network costs. Two other respondents stated that an appropriate retail rate of return (after incurred costs) would be 30% and 45% respectively.
- 6.142 Another respondent stated a preference for the return of the retail business to be assessed using a return on turnover rather than on capital employed. It was claimed that this measure is more appropriate for retail services where a low amount of capital is employed. It was also noted by the respondent that the OFT in the UK proposed a return on turnover to be used in the application of a margin squeeze test in situations where there are retail services with low levels of capital employed. The same respondent stated that ComReg has required *eircom* to set wholesale prices to offer a return on turnover that is almost five times the level applied by the OFT in the BSKyB case in December 2002.⁸²
- 6.143 One respondent agrees that relative degree of investment should be taken into account when establishing the difference between retail and wholesale prices. They also believe that the efficiency of the OAO own network and systems costs should be recognised. They caution, as did another respondent, that OAOs should not be

⁸² "BSkyB: The outcome of the OFT's Competition Act investigation", 17 December 2002, CA/98/20/2002, Office of Fair Trading, London.

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penalised due to any inefficiency on the part of a vertically integrated SMP operator in this market and that the investment decisions would need to be properly tested and assessed for appropriateness.

- 6.144 One respondent claims that discounts, time-limited promotions, or bespoke contracts lead to an increase the overall volume of subscription to retail (and so to wholesale) broadband services and to the reduction in the lifetime retail revenue per subscription from those customers availing of the special prices. They claim that the revenue foregone in offering discounts, price promotions, or bespoke contracts is best treated as a marketing cost and the effect of such pricing can be included alongside other costs of supplying wholesale broadband services used to set the margin above wholesale services.
- 6.145 Another respondent stated that their objective would be to ensure that they would always have enough of a gap to recover costs and that OAOs must have confidence that such discounts are not predatory. They proposed that a vertically integrated SMP operator in this market must obtain approval from ComReg for any special pricing schemes, and second ComReg must approve them in advance.
- 6.146 One respondent stated that the same retail minus mechanism should be applied to the promotion products and that there should be at least six months notice of such promotions, while another respondent considers that wholesale discounts associated with limited promotions or bespoke contracts should be made available to all access seekers.
- 6.147 In relation to the issue that a multiplicity of retail products may be supported by one wholesale product, one respondent noted that there would be an implicit higher money margin between wholesale and retail product pairs with a higher specification – and higher customer value – associated with higher backhaul and content costs. They also argued that it is also consistent with this approach to allocate higher levels of common marketing costs to such higher value services. Conversely entry-level offerings characterised by lower product specifications should attract lower levels of retail costs, and so the wholesale to retail margin should fall in money terms.
- 6.148 Another respondent expressed concern with the current bundling arrangements, also raised by another respondent, and argued that for each SMP retail product variant there should exist a wholesale variant with a reasonable price gap. Another respondent considers that in the retail minus mechanism, that the minimum retail product which uses a wholesale bitstream should be sufficient as a base product for calculating the wholesale price in a retail minus price control. They argued that this was because additional retail features (such as static IP addresses, email addresses, web-space, etc.) are added, after the wholesale bitstream is supplied, at the discretion of OAOs.
- 6.149 ComReg invited views on the possibility of future competing operators requesting wholesale products materially different from those offered by a vertically integrated SMP operator. One respondent claimed that there is sufficient information already available to price additional wholesale services requested by OAOs, as the attributes would fall within the extremes of those currently offered, by interpolation. Where a wholesale service is requested with attributes outside the current range, it still may be possible to extrapolate a suitable wholesale price point.
- 6.150 Another respondent stated that it is not clear that this situation will practically arise, as normally the first mover would be the vertically integrated SMP operator. If a reasonable request for a new service were made by an OAO, the respondent claims that the vertically integrated SMP operator would develop a wholesale product for its

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downstream retail affiliate. Another respondent considers that new products should be dealt with on a sliding scale, and any new product should be placed between two existing wholesale products (interpolation). The relative separation in the products should be transferred to the same relative difference in retail minus amounts between the two wholesale products. Another respondent considered that the status quo should be maintained.

- 6.151 On other implementation matters, one respondent stated that the current regime, where prices are not approved but only disapproved, is not correct for the market. They argue that ComReg should move to approval of prices in advance of any price list notification. It is claimed that this would enhance transparency. Another respondent considered that ComReg should consider the issue of timing of launching changes in retail prices. They suggested that a vertically integrated SMP operator should be required to submit to ComReg, for approval, proposed prices at least 6 months. They also would like ComReg to take account of the cost implications of the market maturing.
- 6.152 On whether a retail minus price control is an appropriate mechanism for compliance, one respondent argued that continual monitoring for compliance would be required. As part of this they argue that a vertically integrated SMP operator should be obliged to submit details of any change in prices for retail broadband services to ComReg in advance of their introduction, and that ComReg should actively analyse such prices and request changes to a wholesale price if there is an insufficient gap between the retail and wholesale prices to allow equally efficient OAOs to compete. Two other respondents consider that this is an appropriate mechanism for compliance.

ComReg's Position

- 6.153 ComReg agrees with the respondents that a retail minus price control would be more proportionate than a FL-LRIC form of price control. ComReg also notes that the respondents agree that an appropriate margin between the wholesale and retail price would prevent the application of a price/margin squeeze.
- 6.154 As *eircom* is a vertically integrated operator and has been identified as having SMP in the wholesale market, it might exert this market power by applying a margin squeeze in the downstream retail market. A retail minus price control can be used to remedy the leverage of upstream market power into potentially competitive downstream retail markets.
- 6.155 ComReg intends to apply obligations that would deal with potential margin squeeze problems in a proportionate and reasonable manner. ComReg is also aware that the margin used in a retail minus price control should enable an operator equally or more efficient than that of the vertically integrated SMP operator to earn a normal return. In this context, ComReg notes the comments of the Competition Authority in Annex G and intends to construct the retail-minus pricing mechanism in a way which does not dampen price competition at the retail level and which takes account of the incentives for entry and innovation.
- 6.156 ComReg acknowledges that for a retail minus price control to be effective, it is essential that the method by which it is applied is made transparent. ComReg proposes therefore to make transparent its method for applying a retail minus price control in this market in a separate consultation document on the application of a retail minus price control.

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- 6.157 As is clear from the responses to consultation, the application of a retail minus mechanism raises a number of complex issues of implementation. A common theme of the responses was the importance of transparency in the process. ComReg agrees that transparency is very important and believes that in addition to issuing a further consultation it would be appropriate for ComReg to engage directly with interested parties in the industry before forming a final position.
- 6.158 Unfortunately in order to give the appropriate level of transparency to the process of determining a final retail minus mechanism a considerable period of time will be required. During this time it is desirable to have clarity in the market as to what price controls will be in operation. Therefore ComReg sets out below the obligations with respect to wholesale price control to apply for the interim period between the adoption of this measure and the adoption of a final retail minus price control.
- 6.159 In selecting these interim measures ComReg has taken into consideration the respondents' concerns relating to the deficiencies of current obligations, the responses to the consultation questions, and the clearly expressed desire for pricing transparency. However, the mechanism set out below is without prejudice to any final position that ComReg may take subsequent to the further consultations. ComReg envisages that it will issue the next consultation paper proposing a final retail minus mechanism in the new year following detailed discussions with interested industry parties.
- 6.160 Together with the ex-ante obligations of transparency and access, a retail minus price control methodology that is itself transparent will enable market participants to monitor whether a vertically integrated SMP is complying with a price/margin squeeze test. This suggests that it may not be necessary for ComReg to monitor compliance on an approval basis.
- 6.161 In the longer term if ComReg were to apply an ex post form of retail minus price control, then this would result in ComReg investigating alleged breaches of the retail minus price control after the setting of retail and wholesale prices by the vertically integrated SMP operator in this market. Such investigations would arise when other parties submit to ComReg convincing reasons for why they believe that a price/margin squeeze is being applied by a vertically integrated SMP operator in this market. ComReg would be convinced of a price/margin squeeze if it is shown in the retail minus price control framework that is made transparent by ComReg, that an equally efficient operator to the vertically integrated SMP operator is unable to operate profitably. As part of its further consultation, therefore, ComReg will consider whether the market is then at the stage of development where the ex-post application of the retail minus price control is sufficient to deal with the problem of a potential price/margin squeeze.
- 6.162 However, on the basis the current state of the market ComReg does not believe that the immediate application of an ex post price control would be in the interest of end-users at this stage. ComReg will therefore apply the interim measures detailed below in the form of an ex ante retail minus price control which will require a vertically integrated SMP operator in this market to submit, for approval, its wholesale prices before publication. Approval would be given where it can be shown that the proposed prices do not represent a price/margin squeeze.

Interim Retail Minus Controls

- 6.163 ComReg will set retail minus controls for each of the four current eircom Wholesale IP bitstream products that are part of eircom's bitstream service at a level that reflects current gross margins.⁸³ The gap between retail prices and wholesale prices must be at least as big as the margin implied by these retail minus controls set out in the draft decision in Annex F. Separate controls will be applied to the connection and rental charges for each product. ComReg has chosen to apply these controls at the level of each connection and rental charge during the interim period because this provides for a greater degree of clarity and certainty than alternatives which might include estimating average retail and wholesale revenues across a number of prices for one product, or even across a portfolio of products.
- 6.164 The retail minus controls are applied to all current standard charges where there are equivalent retail and wholesale prices. For the interim period, ComReg has chosen to set the margin on the basis of a money figure in euros rather than on a percentage basis. In the consultation ComReg asked the question as to whether it would be better to express the retail minus in percentage or absolute money terms. The responses indicated that there was no consensus on the proportions of costs that are variable with price changes and those that are invariant. ComReg, in approving the current wholesale prices, has analysed the margins available to competing operators after taking into account of retail costs that must be incurred in order to provide retail service equivalent to eircom's retail offering. This analysis concluded that although there are positive margins on all the services these margins, especially on the low end services are extremely thin and that even a small change in the gross margin between wholesale and retail prices could lead to a margin squeeze. Given the uncertainty around variable and invariable retail costs, it is possible that expressing the retail minus as a percentage would give rise to a reduction in the margins available to competing operators and lead to a margin squeeze. Therefore, while ComReg further investigates these issues in collaboration with the industry, absolute monetary values will be used as ComReg believes that this is the most transparent mechanism, and will prevent any possible margin squeeze in the short term.
- 6.165 If eircom change any of the characteristics of either their retail or their wholesale IP products during the interim period,⁸⁴ that may change the relevance of this retail margin calculation. During the interim period, ComReg requires eircom to follow the notification and publication process set out below. Any such changes may be accompanied by requirements to adjust wholesale prices and/or terms and conditions.

Retail Discount Schemes

- 6.166 eircom currently has one retail discount scheme – the Bulk Connection Discount Scheme. This provides discounts on the self install connection charge for bulk orders for DSL service. It is available for eircom's retail DSL products other than eircom Broadband Home Starter. There are a number of discount levels depending on the size of the order.

⁸³ The formulae reflect existing eircom standard retail and wholesale prices. For example, for the first product in the table, the current eircom broadband home starter self install connection charge is €81.81 (ex VAT). Subtracting €21.81 from this gives the current eircom bitstream expand IP connection charge of €60. The application to discounts schemes and promotions is discussed below.

⁸⁴ Including connection charges for technician install.

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6.167 If eircom make any changes to this discount scheme or introduce any new discount scheme during the interim period, then ComReg may require corresponding changes to wholesale bitstream prices or other terms and conditions. eircom shall notify ComReg in writing for its prior approval of any proposed corresponding amendments to wholesale bitstream product prices. In making this assessment, ComReg will take into account the extent of any objective justification for the discount scheme, such as the scheme characteristics implying cost savings relative to the standard product. Where an objective justification of this nature has not been demonstrated to ComReg's satisfaction, ComReg may require changes in wholesale prices that reflect the retail minus formulae set out in the Table above and apply the approach applied to new promotion schemes as set out below.

Retail Promotions

6.168 eircom have also been running a number of temporary promotions in recent months at both the retail level and the wholesale level. Those available at the time of writing are:

Retail promotions

- Flat Rate Internet upgrade – due to finish on 27 August 2004
- Refer a friend – due to finish on 9 August 2004
- Business Plus/Business Enhanced Broadband Promotion – due to finish on 31 August 2004
- Summer surfing – due to finish on 31 August 2004
- Summer surfing 2 – due to finish on 30 September 2004

Wholesale promotions

- 1893 Flat rate upgrade – due to finish on 30 November 2004
- Bitstream price promotion – due to finish on 30 November 2004

6.169 ComReg published a Discussion Paper in October 2003 which discussed regulatory approaches to temporary discounts.⁸⁵ The paper included a general discussion of the issues and was not linked to any specific market. Subsequently, ComReg received a number of submissions from fixed and mobile operators providing their views. Most respondents believed that promotions were an important sales tool and some expressed concerns that ComReg was attempting to regulate them. Most respondents, however, believed that some form of regulation was required. Views on the most appropriate form of regulation were mixed with all of the following approaches advocated by at least one respondent:

- restrictions on duration of promotion;
- application of net revenue test;
- discounted price above cost;
- equivalent wholesale discounts;
- prior regulatory approval;
- ex post competition law only.

⁸⁵ Regulatory Approach to Bundling and Temporary Discounts, ComReg 03/120.

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- 6.170 In the context of an interim remedy for this market, ComReg believes that controls on promotions are necessary in order to avoid the damaging effects of a margin squeeze on competition in the provision of retail DSL services. This is particularly important for this market because of the extensive use of promotions to sell DSL products. For many new customers the margin on the standard product will be irrelevant because they have taken up DSL under a promotion. Under current plans, for example, eircom will have been running at least one retail promotion for around nine of the 12 months to 30 September 2004.
- 6.171 ComReg does not intend to intervene further in relation to existing promotions, as listed above, as long as the terms and conditions, including prices and deadlines, remain unchanged. ComReg will treat any amended promotion (including extension of deadline or early withdrawal) in the same way as a new promotion as set out below.
- 6.172 Any new retail promotion that changes the self-install connection charges or monthly rental charges, or makes any other changes to the characteristics of the product will require prior notification in writing and approval of ComReg. eircom shall also notify ComReg in writing, for its prior approval, of any corresponding proposed wholesale price amendments. The Assessment Procedure shall apply in respect of eircom's proposed wholesale amendments.
- 6.173 Any promotion that only changes self-install connection charges or monthly rental charges will have the retail minus controls set out in the draft decision in Annex F applied to it. However, to allow further pricing flexibility for eircom promotions, ComReg will allow eircom to distribute required monetary reductions in wholesale prices across the wholesale connection and rental charges as they see fit. For example, if eircom wishes to introduce a retail promotion for its broadband home starter product, providing free connection and the first 2 months line rental for free, it could, for the same promotional period, set a wholesale connection charge of minus €21.81 and a monthly wholesale rental of minus €12.95 for the first two months, or it could set a wholesale connection charge of minus €47.71 ($€21.81 + €12.95 + €12.95 = €47.71$), equivalent to a reduction in the wholesale connection charge by the same monetary amount in total, with no change in the wholesale monthly rental charge. Other combinations would also be possible. ComReg would restrict the timing of any wholesale price reductions to be broadly similar to the timing of retail price reductions (for example, in this instance, ComReg would not accept a reduction in wholesale monthly rental prices for the last 2 months of the customer or port life). ComReg may instead allow eircom to make equivalent reductions to other relevant wholesale charges, where it can be shown that it would not lead to a disadvantage to purchasers of bitstream products.
- 6.174 Where promotions change product characteristics other than the connection or rental charges,⁸⁶ then ComReg will change the retail minus controls detailed in the draft decision in Annex F in a manner that reflects the change in cost implied by the change in product characteristics. This approach is aimed at preventing eircom from squeezing margins by other means for example improving the retail product instead of reducing the price differential. This will allow eircom to improve the retail product, but will require eircom to make corresponding improvements to the wholesale product, usually to the price. For example, if as part of a promotion eircom wished to provide a freephone customer helpdesk number instead of a tariffed number, then ComReg would use an estimate of the net cost of making this

⁸⁶ This includes the bundling of other products and services.

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change and require a corresponding downward adjustment to wholesale prices, allowing eircom flexibility as to which wholesale price(s) to reduce as above.

Notification & Publication Procedures

- 6.175 ComReg believes there is the potential for a retail minus mechanism to give eircom's retail operation an unfair advantage in the market, in that they know that any change they make to retail prices will automatically trigger a change in the wholesale price. However, if a competing operator were to make a price reduction it will continue to pay the same wholesale price, and hence will have lower margins. To prevent this effect from distorting competition, ComReg believes that it is essential that prior to eircom making any retail price change that would cause a change in the wholesale price, eircom must notify in advance of the imminent wholesale price change. Furthermore eircom may not put in to effect, publish or cause to be published any associated amendments to retail prices and/or terms and conditions prior to publishing any amendments to wholesale prices. eircom shall not make such associated amendments to retail prices effective, prior to the amendments to the wholesale prices becoming effective. The period of notification for wholesale prices should be long enough to prevent competing operators from being unfairly disadvantaged, but should be short enough that it does not make the market unnecessarily rigid.
- 6.176 In this light, ComReg regards as proportionate the notification and publication process detailed in the draft decision in Annex F. The process also enables ComReg to check for possible price squeezes before approving changes.

Other Interim Price Controls

- 6.177 There are currently a range of other bitstream related wholesale charges and services that are not so amenable to a retail minus control, mainly because they do not have direct retail equivalents. The interim approach to controlling prices for each of these addition services is set out below.

Service Establishment Charge

- 6.178 eircom currently set a service establishment charge of €8,035 per Access Seeker and aims to recover eircom's costs in providing authorisation and training in bitstream IT systems for Access Seeker staff. During the interim period, ComReg requires that eircom make no increase in this charge, or changes to other terms or conditions, without prior approval from ComReg. ComReg would expect to give approval where there is an appropriate cost-based justification.

Cessation Charge

- 6.179 eircom currently set a wholesale cessation charge of €60 per port. This charge does not apply to Access Seekers who agree to amendment of their contracts to reflect a minimum 6 month term for each bitstream subscriber port. During the interim period, ComReg requires that eircom make no increase in this charge, or changes to other terms or conditions, without prior approval from ComReg. ComReg would expect to give approval where there is an appropriate cost-based justification.

Bitstream Connection Service

- 6.180 eircom's wholesale bitstream connection service enables Access Seekers to connect to eircom's wholesale bitstream service. It provides access and transport services

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from the eircom ADSL regional POPs to the Access Seekers' handover point. Prices for access and local transport (ALT) currently reflect retail leased line prices. There is a further rental charge of €2,032 per annum for a 1Mb/s CBR VP transport (VT) link. During the interim period ComReg requires that eircom make no increase in the VT charge, or changes to other terms and conditions, without prior approval of ComReg. As discussed earlier, ComReg believes that the obligation of prices oriented to FL-LRIC costs should, subject to further consultation, be extended to bitstream backhaul products. Immediately on commencement of this obligation, ComReg requires eircom to reduce ALT prices to the equivalent of wholesale leased line prices.

ATM products

6.181 eircom currently has two wholesale ATM products, known as eircom Bitstream Swift and eircom Bitstream Express. Neither of these products have direct retail equivalents. To date ComReg has not intervened to regulate the prices of these products, though ComReg does have concerns about the level of prices and how they relate to the level of prices for wholesale IP products. ComReg expects to consult more fully on whether and if so how, these prices should be regulated. In the interim, ComReg requires that eircom make no increase in the prices for these products, or changes to other terms and conditions, without prior approval of ComReg. ComReg would assess any proposed changes in the light of costs and the way in which these products relate to the eircom bitstream IP products and their prices.

New products/charges

6.182 Should eircom wish to introduce new products during the time in which the interim measure is in place then eircom must first submit them to ComReg so that the impact of the new products on the retail minus mechanism can be assessed. A number of respondents suggested that when assessing the correct retail minus to be applied to new products it should be possible to interpolate/extrapolate from existing products. ComReg believes that this is likely to be the case and will during the interim period assess new products case by case on this basis. If any new products are to be introduced then the notification and publication procedure outlined above will apply.

Notification of price changes, views of respondents

6.183 One respondent believes that the appropriate advance notification of price changes to be made by a vertically integrated SMP operator should be at least six weeks, and that prices may only change once approval is granted. Another respondent claims that it is vital that proposed price changes are submitted to ComReg well in advance and that OAOs are informed, by the SMP operator, of any such proposals before approval. They also propose that a vertically integrated SMP operator should be prevented from making any form of public announcement before the full regulatory approval process is completed. Another respondent believes that six months would be an appropriate notification period for any change in the wholesale price, while another respondent considers three months to be appropriate.

ComReg's position

6.184 ComReg is aware that there is a trade-off between a fair competitive response to price changes and undue burdens that may constrain the competitive actions of a vertically integrated SMP operator in this market. There is a need to strike a balance between protecting competitors in the downstream market from the possible

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application of a price/margin squeeze, and enabling the vertically integrated SMP operator to compete in the market.

Cost accounting systems

Summary of consultation issue

- 6.185 A cost accounting system would be necessary where an obligation has been imposed on an operator in relation to cost oriented pricing, price controls, recovery of costs and/or retail tariff controls. With regard to this market, the obligation of a retail minus price control has been proposed as an appropriate obligation to be imposed on those vertically integrated operators having SMP. ComReg proposes to impose a further obligation with regard to cost accounting systems on those vertically integrated operators having SMP in this market in support of the price control obligation. Additionally, in support of ComReg's proposed imposition of accounting separation with regard to retail broadband activities, ComReg also proposes to impose an obligation on those vertically integrated operators having SMP in this market with regard to cost accounting systems on retail broadband activities, again in support of the retail minus price control obligation, and to produce and support accounting statements.
- 6.186 The detailed application of this obligation will be included in the future accounting separation consultation, where issues with regard to maintenance of accounting records, on-demand reporting, audit and timeliness with regard to supply of data will be discussed.
- 6.187 ComReg proposes to consult further on cost accounting and accounting separation methodologies supporting cost accounting. In the interim ComReg is proposing that it maintain the existing level of cost accounting obligation on *eircom* until such time as any further consultations are completed.
- 6.188 ComReg also notes its obligation to cause to be published a statement by *eircom* of compliance with relevant cost accounting systems.⁸⁷

Views of respondents

- 6.189 One respondent consider that the current cost accounting systems imposed on *eircom* to comply with obligation of accounting separation and transparency should be sufficient to inform the setting of wholesale prices. They propose that the margin-based mechanism appropriate to setting of wholesale broadband prices requires only information on those retail costs that are associated with the range of retail products delivered using the wholesale broadband services in this market. They also claim that as the margin should be based on recovering the totality of broadband retail costs over the totality of retail service offerings, and submit that there is no need for an accounting system that distinguishes the costs of each individual retail offering. They find that as well as being excessively onerous such a requirement is likely to be

87 Access Regulation 14(5): The Regulator shall ensure that, where implementation of a cost accounting system is imposed under this Regulation in order to support price controls, a description of the cost accounting system is made publicly available, showing at least the main categories under which costs are grouped and the rules used for the allocation of costs. Compliance with the cost accounting system shall, at the choice of the Regulator, be verified by the Regulator or by a suitably qualified independent body. Access Regulation 14(6): The Regulator shall cause to be published annually a statement concerning compliance with any cost accounting system imposed under this Regulation.

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impractical as the basis for allocating retail costs differently between similar retail offerings is likely to be arbitrary.

- 6.190 Three respondents agree with ComReg and welcomed ComReg's proposals to consult further on this and maintain the current regime in the interim.

ComReg's position

- 6.191 ComReg is still of the view that the obligation of cost accounting systems is justifiable and proportionate. The obligation of cost accounting systems supports obligations of cost-orientation and accounting separation, and helps effect the non-discrimination obligation.
- 6.192 ComReg is of the view that the current cost accounting systems imposed on eircom to comply with obligation of accounting separation and transparency are insufficient to enable the application of a retail minus price control. Therefore ComReg proposes to consult further on cost accounting systems and accounting separation methodologies supporting cost accounting.

7 Regulatory Impact Assessment

Legislative basis

Summary of consultation issue

- 7.1 The Ministerial Direction (issued by the Minister for Communications Marine & Natural Resources in accordance with S13 of the Communications Regulation Act, 2002 published in February 2003, directs:

“The Commission before deciding to impose regulatory obligations on undertakings in the market for electronic Communications or for the purposes of the management and use of the radio frequency spectrum or for the purposes of the regulation of the postal sector, shall conduct a Regulatory Impact Assessment 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.”

- 7.2 Regulation 9(1) of the Access Regulations states that: “Where an operator is designated as having significant market power on a relevant market as a result of a market analysis carried out in accordance with Regulation 27 of the Framework Regulations, the Regulator shall impose on such operator such of the obligations set out in Regulations 10 to 14 as the Regulator considers appropriate”. Furthermore, paragraph 21 of the SMP guidelines says, “if NRAs designate undertakings as having SMP, they must impose on them one or more regulatory obligations, in accordance with the relevant Directives and taking into account the principle of proportionality.” ComReg is therefore compelled to impose at least one obligation where an undertaking is designated to have SMP.
- 7.3 ComReg can impose any or a combination of obligations from those obligations listed in Regulation 10 to 14 of the Access Regulations⁸⁸. Under Regulation 9(6) of the Access Regulations, obligations shall be ‘based on the nature of problem identified; be proportionate and justified in the light of the objectives laid down in section 12 of the Act of 2002 and only be imposed following consultation in accordance with Regulations 19 and 20 of the Framework Regulations’. The regulatory impact assessment is required to assess whether the range of obligations proposed are proportionate and justified and meet ComReg’s objectives in terms of the promotion of competition, the development of the internal market and the promotion of the interests of end-users.
- 7.4 In considering these issues, the principles proposed in “Regulating Better: A Government White Paper setting out six principles of Better Regulation”⁸⁹, provide useful assistance. The criteria to be considered when undertaking a regulatory impact assessment include:
- Identification or quantification (where possible) of impacts
 - Structured consideration of alternatives to regulation and of different regulatory approaches
 - Built-in comprehensive, consultation processes

⁸⁸ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

⁸⁹ Regulating Better: A Government White Paper setting out six principles of Better Regulation”. Appendix 1 – Regulatory Impact Analysis.

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- Formal consideration of compliance issues

7.5 The remedies selected are as follows:

- Access to and use of specific network facilities
- Price control and cost orientation
- Non-discrimination
- Transparency
- Accounting separation and cost accounting systems

ComReg's position

7.6 ComReg believes the market analysis process represents a comprehensive review of the market under consideration and is approximate to a regulatory assessment as considered by the Ministerial Direction quoted in 7.1 above.

7.7 Indeed, the impact of the remedies proposed has been assessed throughout this market review. ComReg has given structured consideration of alternatives to regulation and of different regulatory approaches.

7.8 ComReg has upheld the principles outlined in the Government White Paper of Better Regulation⁹⁰. These considerations are explained below. The impact and alternatives have been discussed throughout this consultation process and review of the market and the implications of regulatory compliance have been considered.

7.9 ComReg has considered the impact of regulation in this market and deems that it is both appropriate and justified, in light of the market analysis and the evidence of competition problems experienced by respondents. In a market where there is SMP, intervention would enable entry for other operators, creating a level playing field and preventing eircom from foreclosing the market. Ultimately, regulation of the market will promote sustainable competition which will benefit end users and the internal market.

7.10 At the outset, ComReg has considered the appropriateness of the regulation proposed and the alternative forms of regulation to address the specific competition problems. Where there is SMP the new regulatory framework obliges ComReg to impose appropriate, proportionate and justified regulation. In a market for wholesale broadband access, where the SMP operator has a market share in excess of 50% and where evidence of competition problems has emerged, ComReg considers that it is necessary to impose obligations and has selected the appropriate level of regulation.

7.11 There are a number of alternatives which are available and ComReg has considered their appropriateness in Section 6. In this regulatory impact assessment, the level and scale of intervention has been considered:

- Forbearance from regulation
- Non-discrimination
- Transparency
- Access to and use of specific networks
- Application of price control and cost orientation

⁹⁰ Regulating Better: A Government White Paper setting out six principles of Better Regulation". Appendix 1 – Regulatory Impact Analysis.

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- Application of cost orientated prices
 - Application of retail minus
 - Accounting separation
- 7.12 Under the regulatory framework, ComReg does not have the legal discretion to altogether forebear from intervention once a finding of SMP has been made. ComReg has established that the market for wholesale broadband access is not effectively competitive and as outlined in Section 7.2, Regulation 27 compels ComReg to impose some form of regulation.
- 7.13 This includes the option to impose a remedy that has less of an impact on the SMP operator; however, the obligation must be appropriate to address the competition problem identified. For example, ComReg could impose an obligation of transparency and/or non-discrimination in isolation. Applying either of these remedies on a stand-alone basis would not however, address the competition problems in this market. For example, eircom could use its vertical integration to enable it to foreclose the market, by denying access to the network or by using some other form of non-pricing tactic. This would create an imbalance, putting other operators at a disadvantage in providing the service. Thus, ComReg concludes that it would not be possible to tackle these potential abuses with limited intervention.
- 7.14 A more effective form of regulation would be to impose an obligation for access to the eircom network with supporting obligations where necessary. Access requires a form of price control. ComReg believes that wholesale price control is essential to prevent eircom from leveraging its market power in the wholesale broadband access market, into the retail market.
- 7.15 The possibility of applying cost based regulation in the market for wholesale broadband access has been considered. Given the current market conditions, cost-based regulation is the least preferred option for price control. Currently, the market for wholesale broadband access is expanding; in order to ensure that investment incentives are maintained it is preferable to focus on applying a retail minus mechanism rather than cost orientation. Furthermore, it is likely to prove more difficult to assess costs in a market which is expanding, where there is increased risk of error. ComReg aims to structure a regulatory regime which encourages investment in infrastructure.
- 7.16 ComReg considers it necessary to impose a form of pricing control. The preferred option is retail minus which is used to perform a margin squeeze test. In this response to consultation ComReg has stated its preference to apply the test on an ex-ante basis, given the current level of development of competition and the evidence of competition problems which have emerged in this market to date. On a forward looking perspective of market development, ComReg would favour a gradual move to ex-post application, based on the assumption that competitive forces develop. This approach considers the approach which is appropriate for the market at this point in time, yet recognises that in the future, market developments could require an alternative application of the retail minus mechanism.
- 7.17 ComReg has outlined its preferred level of intervention and has attempted to ensure that the remedies are proportionate, appropriate and justified. The alternative forms of regulation and the overall impact have been considered.
- 7.18 ComReg launched its consultation process on the market for wholesale broadband access in document number 04/25 on 5 March 2004. This response to consultation has taken on board all of the responses to consultation, which have informed the

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findings of this market review. Furthermore, a consultation will be held on the detailed implementation of retail minus and accounting separation and cost accounting systems.

- 7.19 Issues of compliance have been considered and some of these issues have been raised in this market review. A consultation will be held on the detailed implementation of retail minus and accounting separation and cost accounting systems.
- 7.20 ComReg, taking account of its obligations under Section 12 of the Communications Act 2002 and the Directives and Regulations of the New Regulatory Framework believes the remedies listed in Section 6 are proportionate and justified.

Regulatory impact assessment and justification of remedies

Respondents' views

- 7.21 One respondent commented on the scope of the Regulatory Impact Assessment (RIA). The respondent notes that it supports the use of a RIA with respect to the selection of remedies. The respondent also notes that current regulatory best practice requires the use of an impact assessment before implementation of remedies. It holds that the RIA is used to determine how the remedies proposed will impact the dynamic operation of all aspects of the market, currently and in the future. The respondent argues that the market analysis in Consultation Paper 04/25 does not take into account future developments of the market.
- 7.22 One respondent notes that ComReg should not intervene where a market has been working well.
- 7.23 It was raised by one respondent, that ComReg should adopt a light-handed and transparent approach to regulation of this market so as to ensure the avoidance of disruptions to market developments.

ComReg's position

- 7.24 ComReg notes the respondents' comments and thanks all respondents for their input.
- 7.25 ComReg takes on board the respondents' comments and notes that in the first instance, the purpose of carrying out a RIA is to assess the impact on the overall market. This impact analysis, which has been incorporated into the market analysis and is summarised in this section, takes into account the current need for regulation and prospective developments in the market, as outlined above.
- 7.26 Following the assessment of the market and having taken on board the views of respondents, ComReg continues to believe that there is failure of the market for wholesale broadband access and hence that regulatory intervention is necessary to safeguard sustainable competition.
- 7.27 In the first instance this implies that ComReg is obliged to impose some form of regulation and this should be appropriate to the competition problem it seeks to address. Forbearance by ComReg would not be a regulatory option, as was suggested by one respondent.
- 7.28 The respondent raises its concerns that in a rapidly changing environment, the imposition of regulation would create additional uncertainty for investors. ComReg is of the view however, that in a market where there is SMP, uncertainty arises in the delay or absence of regulatory intervention. Indeed, a greater level of disruption would arise from the unregulated presence of an SMP operator in the market.

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ComReg has attempted to select the form of regulation most appropriate to an expanding market.

- 7.29 A RIA requires ComReg to examine the extent and impact of regulation. One respondent notes that regulation should not be imposed where a market has been working well. It is ComReg's assessment that the market for wholesale broadband access has not been as working well as possible and has detailed in section 6 a number of issues raised during the consultation on this market, which suggest the continued requirement for ex-ante intervention to ensure this market develops.
- 7.30 ComReg has taken into consideration the various regulatory options available. Where there is a finding of SMP on a given market ComReg is obliged to intervene. The regulatory options that have been proposed have been examined and justified in light of the competition problem that they seek to address. These are outlined in Section 6.
- 7.31 It was raised, by one respondent, that ComReg should adopt a light handed and transparent approach to regulation of this market so as to ensure the avoidance of disruptions to market developments. ComReg believes that a robust market review has been performed which examines the options and the appropriateness of regulation. ComReg is satisfied that the approach taken is sufficiently light-handed and appropriate to address the dominance and potential abuse in this market.

Conclusion

- 7.32 Regarding the issue of proportionality and justification of ComReg's proposed remedies ComReg has considered these issues and taken them into account in proposing the remedies for this market. ComReg believes that it is appropriate to consider the issue of proportionality and justification of remedies when discussing ComReg's proposed remedies. This is outlined in greater detail in Section 6.

8 Submitting Comments on the draft direction

- 8.1 All comments are welcome; however it would make the task of analysing responses easier if comments were referenced to the relevant question numbers from this document.
- 8.2 The consultation period will run from 29 July to 27 August 2004 during which ComReg welcomes written comments on the question below.

Question 1: Do respondents believe that the draft text of the proposed decision set out in Annex F is, from a legal, technical and practical perspective, sufficiently detailed, clear, precise and intelligible with regard to the specifics of the remedies proposed? Please elaborate on your response.

- 8.3 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. Respondents are requested to clearly identify confidential material and if possible to include it in a separate annex to the response. Such information will be treated as strictly confidential.

Annex A – Explaining wholesale broadband access and bit stream

eircom provide wholesale broadband access, both to its own retail arm and to competing operators, as a bit stream service.

“High speed bit stream access refers to the situation where the incumbent installs a high speed access link to the customer premises (e.g. by installing its preferred ADSL equipment and configuration in its local access network) and then makes this access link available to third parties, to enable them to provide high speed services to customers. The incumbent may also provide transmission services to its competitors, to carry traffic to a ‘higher’ level in the network hierarchy where new entrants may already have a point of presence (e.g., transit switch location). The bit stream service may be defined as the provision of transmission capacity (upward/downward channels may be asymmetric) between an end user connected to a telephone connection and the point of interconnection available to the new entrant”⁹¹

The European Commission state in The Recommendation⁹² that: “Bit stream depends in part on the PSTN and may include other networks such as the ATM network.” ComReg is of the view that bitstream also includes the IP network. In Ireland ATM and IP access points generally occur at the same location and the wholesale products a functionally and priced comparably. The *Recommendation* also states that bit stream access is a wholesale product that consists of the provision of transmission capacity in such a way as to allow new entrants to offer their own, value-added services to their clients. Resale offers are not a substitute for bit stream access because they do not allow new entrants to differentiate their services from those of the incumbent.”

In order to be able to differentiate their services from those of the incumbent, new entrants must have access at a point where they can control certain technical characteristics (see below for the details regarding technical parameters) of the service to the end-user and/or make full use of their own network (or alternative network offerings⁹³) thus being in a position to alter the quality (e.g. the data rate or other features) supplied to the customer. This includes indirect control, i.e. the incumbent alters the technical parameters as requested by the new entrant (see below for the details). It should be noted that the market for backbone facilities, where alternative operators offer backhaul services should not be left aside when considering bit stream access.

The main elements defining bit stream access are outlined in the figure below and include the following:

- high speed access link to the customer premises (**end user part**) provided by the incumbent;
- transmission capacity for broadband data in both directions enabling new entrants to offer their own, value-added services to end users;

⁹¹ ONPCOM01-18Rev1 – Open Network Provision Committee, European Commission. Working Document. High Speed Bit stream access. 2001

⁹² EU Commission Recommendation of 11 February, 2003 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 the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services. page 24 (Footnote 37).

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- new entrants have the possibility to differentiate their services by altering (directly or indirectly) technical characteristics and/or the use of their own network;
- bitstream access is a wholesale product consisting of the DSL part (access link) and **backhaul** services of the (data) backbone network (ATM, IP backbone).

Bit stream access is thus defined as the corresponding wholesale product for DSL services (high speed services). However, this definition leaves open at which point the traffic is handed-over as there are various hand-over points for DSL traffic between the incumbent and the OAO or ISP⁹⁴.

According to the European Commission⁹⁵ high speed services offered to new entrants on the basis of unbundling, shared access and resale are explicitly mentioned as not being counted as bit stream access.

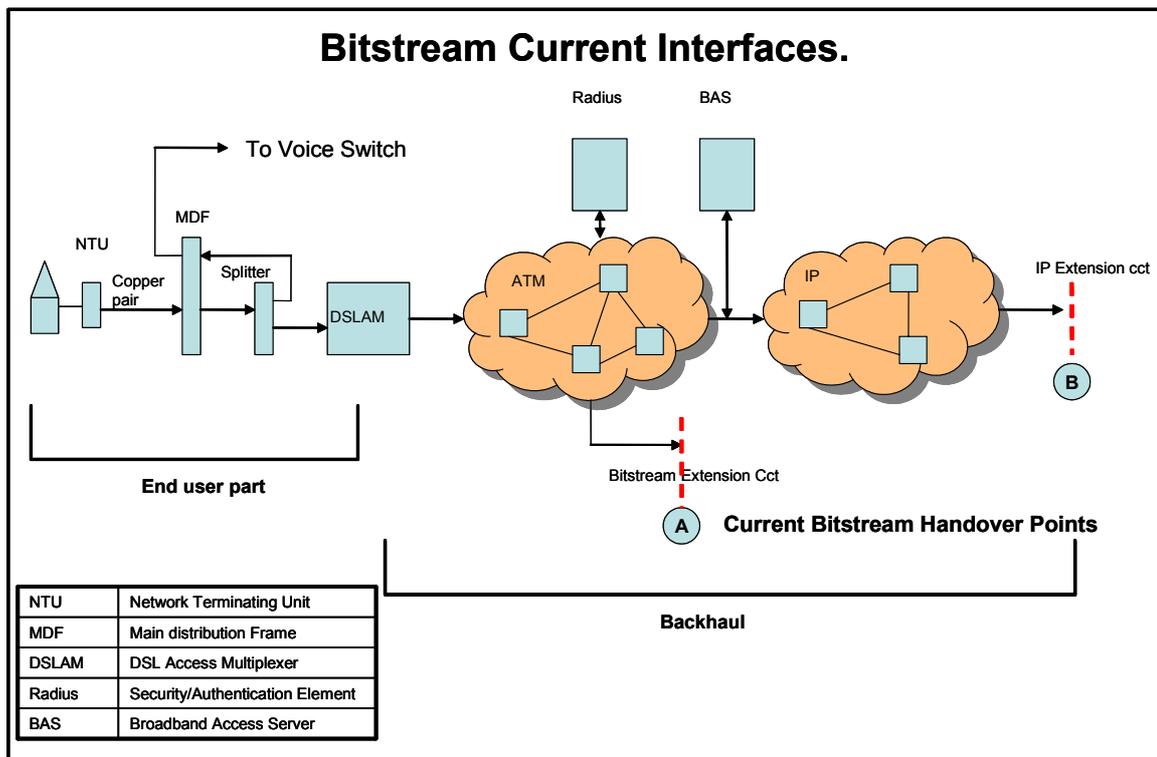


Figure A – A , B Current Bit stream Handover Points

⁹⁴ An OAO is an Other Authorised Operator and an ISP is an Internet Service Provider

⁹⁵ ONPCOM02-03 - OPEN NETWORK PROVISION COMMITTEE Working Document Local broadband access -developments regarding unbundling, bit stream access and leased lines. February 2002

Annex B – Price Comparison between bit stream and LLU

The current standard charges for (fully) unbundled local loops are as follows⁹⁶

Service	Charges
Successful connection for existing metallic path	€121.52
Successful connection for existing metallic path (with survey option to allow connection of spare path)	€154.25
Cancelled connection order	€24.12
Upgrade from line sharing to full unbundling	€80.70
Monthly rental charge	€16.81
Line testing	€49.18
Fault clearance	€117.31
Disconnection Charge	€49.58

eircom's current standard charges for (sub) unbundled local loop – Full are as follows⁹⁷:

Service	Charges
Cabinet Survey	€99.17
Cabinet Site Offer	€81.96
Subloop ULMP	€168.65
Monthly rental charge	€15.25
Line testing	€49.18
Sub Loop ULMP Disconnection	€69.03

eircom's current standard charges for (sub) unbundled local loops – Line Sharing are as follows⁹⁸:

Service	Charges
Cabinet Survey	€99.17
Cabinet Site Offer	€81.96
Subloop Line sharing	€172.51
Monthly rental charge	€8.22
Line testing	€18.09
Sub Loop (Line sharing) Disconnection	€92.34

eircom's current standard charges for line sharing connections are as follows:

Service	Charges
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⁹⁶ All charges are exclusive of VAT

⁹⁷ Attendance charges will also apply, which are dependent on an initial charge for the first 30 minutes and subsequent charge thereafter and whether the visit is planned/unplanned/ standard/after-hours

⁹⁸ Attendance charges will also apply, which are dependent on an initial charge for the first 30 minutes and subsequent charge thereafter and whether the visit is planned/unplanned/ standard/after-hours

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Successful line sharing connection for existing path	€123.41
Successful shared connection for existing path (with survey option to allow connection of spare path)	€156.14
Cancelled connection order	€24.12
Monthly rental charge	€9.00
Line testing	€18.09
Fault clearance	€117.31
LS Disconnection	€75.00

eircom's current standard charges for collocation facilities are as follows:

Service	Charges
Pre-ordering charges	
Information requests	€318 per site
Full survey reports	ranging between €1143 and 2845 per distant site
Site inspections	ranging between €1143 and 2845 per distant site
Site offers	€6133
Occupancy charges	varying by location
Basic rental	
Licence fees	For generator provision, flooring and air-conditioning, the MDF and cabling
Capital contributions	For generator provision and air-conditioning
Power charges, process charges and charges for attendance services	(both planned and unplanned).

eircom's current standard charges for bit stream access⁹⁹ are as follows:

Service	Charges
Service establishment per access seeker (not per line)	€8,035
Port connection charge	€60
Monthly service charge for 512 kbps port	€49
Monthly service charge for 1,024 kbps port	€79
Monthly service charge for Rate Adaptive Port (24:1)	€27
Monthly service charge for Rate Adaptive Port (48:1)	€20
Port Transfer Charge	€60

⁹⁹ These charges are currently subject to a number of promotional discounts

Annex C - Consultation Questions

Question 1: Do respondents believe that the draft text of the proposed decision set out in Annex F is, from a legal, technical and practical perspective, sufficiently detailed, clear, precise and intelligible with regard to the specifics of the remedies proposed? Please elaborate your response.

Annex D - Broadband Access Technologies

Services based on the copper loop - Digital subscriber line technologies are based on copper loops that convert the copper pair into a digital line, using modems at both ends of the loops. DSLAMs¹⁰⁰ at the operator's exchange connect high speed DSL data traffic, typically over ATM and IP networks, to the Internet. The incumbent, eircom provides wholesale broadband access as a bit stream service. An overview of bit stream services is contained in Annex A. Many retail xDSL variants based on this technology are provided, whether symmetric or asymmetric, with differing capacities and degrees of contention. Typically for households and small businesses, asymmetric DSL (ADSL) is used, which has a download speed in excess of 150 kbps. With ADSL, most of the two-way bandwidth is directed down stream (in the downward direction to the end-user) and can be used for both voice and data. Symmetric DSL (SDSL) provides symmetric capacity, which means equal capacity is directed both downstream and upstream (in the upward direction from the end user). SDSL cannot be shared with voice. Many variants exist (xDSL), differing in capacity provided and the degree of contention they involve i.e. the number of users with which the technology is shared.

Cable - ntl and Chorus are television distribution companies which operate nationally with a combination of cable and MMDS (Multipoint Microwave Distribution System) networks in a number of regional areas in Ireland. Chorus and ntl do not compete with each other in the same geographic territory as their origins in Ireland come from exclusive franchise areas. There are also a number of smaller cable providers who provide a range of services in their locality such as Cablesurf in Waterford and Crossan Cable in Longford. Currently cable/MMDS networks pass approximately 87% of all households in Ireland. Approximately 40% of the households passed are passed using MMDS technology which is currently incapable of providing broadband access. It is unlikely that the MMDS network will be upgraded for the delivery of two-way broadband services due to disproportionate infrastructure investment and a need for spectrum allocation. The remaining cable networks have generally not been upgraded to the point where they are able to provide services other than broadcasting services. Cable networks are currently technically capable of offering a wholesale broadband access product; however there are no wholesale products available in the market.

FWA - Currently eircom and EsatBT are the only licensed operators to provide services in the 3.5 GHz and 26 GHz bands via Fixed Wireless Access¹⁰¹. Both voice and Internet services can be delivered to end users over the platform, however the provision of broadband access via licensed FWA is minimal. Its use is typically limited to areas where it is more economical to use FWA in the delivery of local loops and for backhaul e.g. in areas where subscribers are more sparsely dispersed. Neither eircom nor EsatBT currently provide wholesale FWA services to third parties.

In order to encourage entry into the FWA market on a smaller scale, ComReg adopted a competitive procedure to assign licences on the basis of base station by base station. At the end of January 2004, thirty seven licences were awarded to seven operators for the provision of fixed wireless access local level (FWALA) services using the spectrum from the 3.5 GHz frequency band¹⁰². Further awards may be made following this first round. While there is sufficient spectrum to provide national coverage, it is not clear that all

¹⁰⁰ Digital Subscriber Line Access Multiplexers.

¹⁰¹ Fixed wireless access (using technology such as LMDS systems) which can provide varying bandwidth services is currently used to provide voice access in Ireland.

¹⁰² ComReg Document No (03/32) - Request for Expressions of Interest - 3.5 GHz Local Licences for Wireless Broadband.

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areas will be licensed. It is expected that services will become available by year end 2004.

Local broadband FWA services can be provided using license-exempt spectrum, often based upon the technology standard IEEE 802.11 known as Wi-Fi, but also using proprietary systems. Higher capacity technology known as Wi-Max (IEEE 802.16) will soon be available. (Wi-Max is capable of operating in both licensed and un-licensed systems). A number of operators (Irish Broadband, Leap Broadband, Ice Wireless, Digiweb Wireless and Amocom) offer license-exempt “always on” broadband services in the major urban areas of Ireland to approximately 1,350 subscribers.

Wi-Fi Hot-Spots – Wi-Fi technology is also used to provide wireless broadband access in localised areas known as “hot-spots”, allowing users to gain broadband access via their laptop computers or Personal Digital Assistants (PDA). Hot-spots are typically located in public areas such as Internet cafés, train stations, hotels, and conference centres. Bitbuzz, O2, eircom, and Esat BT offer Wi-Fi hot-spot services in Ireland.

Satellite – Satellite broadband services are typically used to fill the gap in deployment between other technologies. The investment required for a two-way service is high. In Ireland a number of small companies such as Digiweb, Media Sat, Websat, and Orbitlink nationally provide two-way broadband services via satellite. Take-up of satellite services is limited due to bandwidth capabilities (in the up-stream direction) and latency (i.e. the ability to deal with real-time traffic such as voice).

Fibre To The Home – FTTH provides broadband services over an optical fibre link to the customer’s home or business. They are mainly used for high capacity users, which are almost always non-residential and are generally installed as part of a corporate network. Currently the take-up of FTTH is minimal in Ireland.

High Bandwidth Mobile Access - In 2002, 3G licences were granted to three mobile operators in Ireland (3, Vodafone and O2). 3G technology can be used to deliver high speed data services through a mobile handset. 3G services are currently only available on a trial basis.

Power lines – Electrical power networks can be used to deliver bandwidth of broadband dimensions both upstream and downstream. Power lines are not currently utilized to provide broadband access in Ireland. However, the ESB is currently carrying limited commercial trials in county Galway.

Despite there being a number of technologies available for the purpose of broadband delivery, the current review will focus primarily on DSL, cable and FWA services provided using licence-exempt spectrum as these are the most widely used and actively utilized services in Ireland.

Currently powerlines and high bandwidth mobile wireless are largely experimental and are not publicly available. The take up of both satellite and FTTH has been very low.¹⁰³ Wi Fi hotspots have attracted a great deal of attention, but their use is largely confined to localised communities and hotels.

¹⁰³ In September 2003 there were approximately 200 satellite and less than 60 FTTH subscribers.

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1.4	<p>provided;</p> <p>A brief overview of the results of the public consultation to date on the proposed market definition (for example, how many comments were received, which respondents agreed with the proposed market definition, which respondents disagreed with it)</p>	<p>There were a total of twenty eight respondents to the public consultation. Eight of these gave detailed responses to the consultation questions posed. The remaining respondents were individual end users. There was agreement that in theory with a market definition to include self supply by cable and FWA and bitstream services. There was also agreement that LLU is in a separate market.</p>	Page 10-32
1.5	<p>Where the defined relevant market is different from those listed in the recommendation on relevant markets, a summary of the main reasons which justified the proposed market definition by reference to Section 2 of the Commission's Guidelines on the definition of the relevant market and the assessment of significant market power¹⁰⁴, and the three main criteria mentioned in recitals 9 to 16 of the recommendation on relevant markets and Section 3.2 of the accompanying Explanatory Memorandum¹⁰⁵.</p>	Not applicable	

¹⁰⁴ Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications and services, OJ C 165, 11.7.2002, p. 6.

¹⁰⁵ Commission Recommendation of 11.2.2003 on Relevant Product and Service Markets with 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 ECNs and ECSs, C (2003) 497

Section 2 - Designation of undertakings with significant market power

Please state where applicable:

2.1	The name(s) of the undertaking(s) designated as having individually or jointly significant market power. Where applicable, the name(s) of the undertaking(s) which is (are) considered to no longer have significant market power	<p>eircom has been designated as having significant market power in the national market for wholesale broadband access.</p> <p>A reference in this section to any given undertaking shall be deemed to include that undertaking and any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, the undertaking in question and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities falling within the scope of the relevant markets defined in section</p>	Page 41
2.2	The criteria relied upon for deciding to designate or not an undertaking as having individually or jointly with others significant market power	<ul style="list-style-type: none"> • Market Share • Potential Competition and Barriers to Entry • Absence of Countervailing Bargaining Power 	Pages 36-40
2.3	The name of the main undertakings (competitors) present/active in the relevant market.	The self supplied cable operators are ntl, Chorus, cablesurf and Crossan broadband. The largest self supply FWA providers are Ice wireless, Amocom, Digiweb Wireless and Irish Broadband	Page 84-85
2.4	The market shares of the undertakings mentioned above and the basis of their calculation (e.g., turnover, number of subscribers)	In total cable operators account for 12% of the market and FWA providers account for 3% of the wholesale market	Page 37

Please provide a brief summary of:

2.5	The opinion of the national competition authority, where provided	The Authority supports the approach and findings of this analysis exercise.	Page 91
2.6	The results of the public consultation to date on the proposed designation(s) as	All eight of the respondents agreed with ComReg's preliminary conclusions regarding market	Page 40

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	undertaking(s) having significant market power (e.g., total number of comments received, numbers agreeing/disagreeing)	analysis. The proposed designation remains unchanged after the consultation.	
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Section 3 - Regulatory Obligations

Please state where applicable:

3.1	The legal basis for the obligations to be imposed, maintained, amended or withdrawn (Articles 9 to 13 of Directive 2002/19/EC (Access Directive))	The following obligations are proposed under the Access Regulations which transpose Articles 9 to 13 of Directive 2002/19/EC (Access Directive): <ul style="list-style-type: none"> • Transparency – Regulation 10 • Non-discrimination – Regulation 11 • Accounting Separation – Regulation 12 • Access to, and use of, specific network facilities – Regulation 13 • Price Control and Cost Accounting – Regulation 14 	Pages 42-63
3.2	The reasons for which the imposition, maintenance or amendment of obligations on undertakings is considered proportional and justified in the light of the objectives laid down in Article 8 of Directive 2002/21/EC (Framework Directive). Alternatively, indicate the paragraphs, sections or pages of the draft measure where such information is to be found	Such information can be found in sections 6 & 7 of this document.	Pages 42-78
3.3	If the remedies proposed are other than those set out in Articles 9 to 13 of Directive 2002/19/EC (Access Directive), please indicate which are the ‘exceptional circumstances’ within the meaning of Article 8(3) thereof which justify the imposition of such remedies. Alternatively, indicate the paragraphs, sections or	Prior notification of changes to technical interface specification - Regulation 5(1) – 5 (6) of the R&TTE Regulation	Pages 56

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	pages of the draft measure where such information is to be found		
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Section 4 - Compliance with international obligations

In relation to the third indent of the first subparagraph of Article 8(3) of Directive 2002/19/EC (Access Directive), please state where applicable:

4.1	Whether the proposed draft measure intends to impose, amend or withdraw obligations on market players as provided for in Article 8(5) of Directive 2002/19/EC (Access Directive)	Not Applicable	
4.2	The name(s) of the undertaking(s) concerned	Not Applicable	
4.3	Which are the international commitments entered by the Community and its Member States that need to be respected	Not Applicable	

Annex F – Decision

DECISION

1 STATUTORY POWERS GIVING RISE TO DECISION

- 1.1 In making this Decision, the Commission for Communications Regulation ('ComReg') has taken account, its functions under Regulation 6 (1) of the Access Regulations,¹⁰⁶ has (where appropriate) complied with the Policy Directions made by the Minister¹⁰⁷ and has also taken the utmost account of the EU Commission's Recommendation¹⁰⁸ and the Guidelines¹⁰⁹. This Decision is based on the market definition, market analysis and reasoning conducted by ComReg in relation to the market for wholesale broadband access for the purpose of delivering broadband to end users,¹¹⁰ as part of the consultation process arising from the ComReg document entitled *Market Analysis: Wholesale Broadband Access – Response to Consultation* (Document No. 04/83) dated 29 July 2004. The said document forms part of this Decision.
- 1.2 This Decision is made pursuant to Regulations 25, 26 and 27 of the Framework Regulations¹¹¹, Regulations 9, 10, 11, 12, 13 and 14 of the Access Regulations and having regard to sections 10 and 12 of the Communications Regulations Act, 2002.

2 MARKET DEFINITION

- 2.1 This Decision relates to the market for wholesale broadband access as identified in the EU Commission's Recommendation. The market in this Decision is defined as the market for wholesale broadband access as identified in the EU Commission's Recommendation.
- 2.2 The relevant geographic market for wholesale broadband access is defined as Ireland.

3 DESIGNATION OF UNDERTAKING WITH SIGNIFICANT MARKET POWER ('SMP')

¹⁰⁶ S.I. No. 305 of 2003 the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003 which transposes Directive 2002/19/EC of the European Parliament and the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities ('the Access Regulations').

¹⁰⁷ Policy Directions made by Dermot Ahern T.D. Minister for Communications, Marine and Natural Resources on 21 February 2003 and 26 March 2004.

¹⁰⁸ EU Commission Recommendation of 11 February, 2003 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 the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

¹⁰⁹ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

¹¹⁰ As referred to in the EU Commission's Recommendation.

¹¹¹ S.I. No. 307 of 2003 the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transposes Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

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- 3.1 *eircom* is designated as having SMP in market for wholesale broadband access in Ireland.

4 SMP OBLIGATIONS

- 4.1 ComReg is required to impose *ex ante* regulatory obligations that are appropriate, based on the nature of the problem identified, proportionate and justified in the light of the objectives set out in Article 8 of the Framework Directive¹¹², in order to remedy SMP in the market on which *eircom* is designated as having same. The *ex ante* regulations which ComReg has decided to impose are described further in the sections below.

5 ACCESS¹¹³ OBLIGATIONS

- 5.1 *eircom* shall have an obligation to meet reasonable requests for access to, and use of, wholesale bitstream access products, features or additional associated facilities by undertakings¹¹⁴ requesting access or use of such wholesale bitstream access products, features or additional associated facilities, as provided for by Regulation 13 of the Access Regulations. Without limiting the generality of Regulation 13 of the Access Regulations and this section, *eircom* shall:-
- I. Negotiate in good faith with undertakings, requesting access.
 - II. Give third parties access to specified network elements, facilities or both such elements and facilities.
 - III. Not withdraw access to certain facilities already granted without the prior approval of ComReg.
 - IV. Grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services.
 - V. Provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services.
- 5.2 It shall be a condition of the obligations contained in section 5.1 that *eircom* conclude legally binding Service Level Agreements ('SLAs') with Other Authorised Operators ('OAOs') in respect of all products and all process points.

6 OBLIGATION OF NON-DISCRIMINATION

¹¹² Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

¹¹³ As defined in the Access Regulations.

¹¹⁴ The expressions 'associated facilities' and 'undertaking' shall have the same meaning as contained in Regulation 2 of S.I. No. 307 of 2003 the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transposes Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

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- 6.1 *eircom* shall have an obligation of non-discrimination as provided for by Regulation 11 of the Access Regulations. Without limiting the generality of Regulation 11 and this section, *eircom* shall:-
- I. Provide a wholesale equivalent for retail offerings.
 - II. Apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provide services and information to others under the same conditions and of the same quality as *eircom* provides for its own services or those of its subsidiaries or partners.
 - III. Ensure that information and services are provided to OAOs according to timescales, on a basis, and of a quality, which are at least equivalent to those provided to *eircom*'s retail arm and associates.
 - IV. Conclude legally binding SLAs with OAOs in respect of all products and all process points.

7 OBLIGATION OF TRANSPARENCY

- 7.1 *eircom* shall have an obligation of transparency as provided for by Regulation 10 of the Access Regulations. Without limiting the generality of Regulation 10 of the Access Regulations and this section, *eircom* shall publish and keep updated a bitstream access reference offer ('BARO') that is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. *eircom* shall ensure that the BARO includes a description of the relevant offerings broken down into components according to market needs; and a description of the associated terms and conditions, including prices.
- 7.2 *eircom* shall publish, specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use and prices.
- 7.3 *eircom* shall publish all SLAs concluded (and as from time to time amended) in accordance with section 5.1 and section 6.1 (iv) of this Decision.

8 ACCOUNTING SEPARATION

- 8.1 *eircom* shall have an obligation to keep separated accounts as provided for by Regulation 12 of the Access Regulations. All of the obligations in relation to accounting separation applying to *eircom* in force immediately prior to the effective date of this Decision, shall be maintained in their entirety and *eircom* shall comply with those obligations, pending a decision to be made by ComReg following further consultation in relation to the implementation of accounting separation obligations and cost accounting obligations. Without limiting the generality of the obligation to comply with all accounting separation obligations¹¹⁵ in force immediately prior to the effective date of this Decision, *eircom* shall

¹¹⁵ Including any obligations contained in various Decision Notices not relating exclusively to accounting separation, any obligations set out Decision Notices relating to the Reference Interconnect Offer ('RIO') and any detailed requirements and obligations set out in any correspondence between ComReg and *eircom*.

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continue to comply with *inter alia*, the obligations described in the following Decision Notices previously issued by ComReg:-

- D5/99 – Accounting Separation and Publication of Financial Information for Telecommunication Operators;
- D8/99 – Costing Methodology for use in Accounting Separation;
- D10/99 – Accounting Separation and Publication of Financial Information for Telecommunications Operators;
- D9/00 – Accounting Separation and Publication of Financial Information for Telecommunications Operators;
- D10/00 – Accounting Separation and Publication of Financial Information for Telecommunications Operators, Supplemental Information referring to Decision Notice D9/00;
- D2/01- Accounting Separation for Internet Service provision and Report on Investigation into Indigo and *eircom.net*;
- D7/01- *eircom's* Reference Interconnection Offer & Accounting Separation and Publication of Financial Information for Telecommunications Operators; and
- D12/01- Revision of Timetable for Publication of Separated Accounts and Financial Information by *eircom*.

9 PRICE CONTROL

- 9.1 *eircom* shall, pursuant to Regulation 14 of the Access Regulations, have obligations relating to wholesale price control as determined from time to time by ComReg, following consultation, for the purposes of establishing the margin between wholesale and retail prices proposed to be offered by *eircom*, preventing the potential application by *eircom* of a price or margin squeeze and for the purpose of preventing *eircom* from sustaining prices at an excessively high level.

Interim Price Controls

- 9.2 Pending a further decision by ComReg, to be made following further consultation in relation to the implementation of wholesale price controls referred to in section 9.1 and without limiting the generality of Regulation 14 of the Access Regulations and section 9.1, *eircom* shall:-
- I. Pursuant to its obligations of non-discrimination referred to in section 6 and its obligations of transparency referred to in section 7, notify ComReg in writing of any proposed amendments to retail terms and conditions, including price, in respect of its existing and future Asymmetric Digital Subscriber Line ('ADSL') products. In this regard, *eircom* shall also notify ComReg in writing, for its prior approval, any proposed amendments to wholesale terms and conditions, including price, in respect of its existing

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and future bitstream products. ComReg shall as soon as is reasonably practicable, undertake and complete its assessment of *eircom*'s proposed wholesale amendments and either approve such amendments or, pursuant to its powers under Regulations 10, 14 and 17 of the Access Regulations, direct that adjustments be made to such amendments, or the actual wholesale terms and conditions, including price, if no amendments have been proposed or notified to ComReg (which procedure for the purpose of this Decision shall be referred to as 'the Assessment Procedure').

- II. Apply the retail minus controls to each of the connection and rental charges for each of the four *eircom* wholesale bitstream products, as set out in the Table.¹¹⁶ The margin between the retail prices and the wholesale prices must be at least as big as the margin implied by the retail minus controls in the Table. ComReg may however, deviate from the formulae set out in the Table for the purpose of fulfilling its functions and objectives as set out in Regulation 6 of the Access Regulations and section 10 and section 12 of the Communications Regulation Act, 2002 and for the purpose of ensuring compliance with Regulation 14 of the Access Regulations.

Table – Interim Retail Minus Price Controls

Regulated Wholesale Product & Charge	Related Retail Product & Charge	Price Control*
<i>eircom</i> Bitstream expand IP; connection	<i>eircom</i> broadband home starter; self-install connection	Retail minus 21.81 euros
<i>eircom</i> Bitstream expand IP; monthly rental	<i>eircom</i> broadband home starter; monthly rental	Retail minus 12.95 euros
<i>eircom</i> Bitstream Swift IP; connection	<i>eircom</i> broadband home plus/business starter; self-install connection	Retail minus 21.81 euros
<i>eircom</i> Bitstream Swift IP; monthly rental	<i>eircom</i> broadband home plus/business starter; monthly rental	Retail minus 18 euros
<i>eircom</i> Bitstream Express IP; connection	<i>eircom</i> broadband business plus; self-install connection	Retail minus 21.81 euros
<i>eircom</i> Bitstream Express IP; monthly rental	<i>eircom</i> broadband business plus; monthly rental	Retail minus 29.40 euros
<i>eircom</i> Bitstream Sonic IP; connection	<i>eircom</i> broadband business enhanced; self-install connection	Retail minus 21.81 euros
<i>eircom</i> Bitstream Sonic IP monthly rental	<i>eircom</i> broadband business enhanced monthly rental	Retail minus 54 euros

*These price controls apply to prices exclusive of VAT.

Retail Discount Schemes

- III. Notify ComReg in writing of any proposed amendments to the *eircom* Bulk Connection Discount Scheme or of the proposed introduction of any new

¹¹⁶ Namely: '*eircom* Bitstream Expand IP', '*eircom* Bitstream Swift IP', '*eircom* Bitstream Express IP' and '*eircom* Bitstream Sonic IP' as described in *eircom*'s ADSL Bitstream Service Product Description, Version 1, dated 31 March 2004.

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retail discount scheme. *eircom* may be required to make corresponding amendments to wholesale bitstream product prices, or other terms and conditions, if it makes any amendment to the *eircom* Bulk Connection Discount Scheme or, proposes to introduce any new discount scheme. *eircom* shall notify ComReg in writing, for its prior approval, of any proposed corresponding amendments to wholesale bitstream product prices. The Assessment Procedure shall apply in respect of *eircom*'s proposed wholesale amendments. In making its assessment, of what (if any) amendments are required to wholesale bitstream product prices and if demonstrated to ComReg's satisfaction, ComReg will take into account the extent of any objective justification for a discount scheme for example, the scheme characteristics implying cost savings relative to the standard product. Where an objective justification of this nature has not been demonstrated to ComReg's satisfaction, ComReg may require changes in wholesale prices that reflect the retail minus formulae set out in the Table and apply the approach applied to new promotion schemes as set out below.

IV. Retail Promotions

Notify ComReg in writing of any proposed amendments to a retail promotion (including a new retail promotion) that amends the self-install connection charges or monthly rental charges or, makes any other amendments to the characteristics of the relevant product. *eircom* shall also notify ComReg in writing, for its prior approval, of any corresponding proposed wholesale price amendments. The Assessment Procedure shall apply in respect of *eircom*'s proposed wholesale amendments.

Any promotion that only makes amendments to self-install connection charges or monthly rental charges will have the retail minus controls set out in the Table above applied to it. In order to allow further pricing flexibility for *eircom* promotions, ComReg will however allow *eircom* to distribute required monetary reductions in wholesale prices across the wholesale connection and rental charges as *eircom* sees fit.¹¹⁷ ComReg may allow *eircom* to make equivalent reductions to other relevant wholesale charges, where it can be shown that it would not lead to a disadvantage to purchasers of bitstream products.

Where promotions change product characteristics other than the connection or rental charges,¹¹⁸ ComReg will amend the retail minus controls as set out in the Table in a manner that reflects the change in cost implied by the amendment in product characteristics. This approach is aimed at preventing *eircom* from squeezing margins by other means, for example, improving the retail product instead of reducing the price differential. This will allow *eircom* to improve the retail product, but will require *eircom* to make

¹¹⁷ For example, if *eircom* wishes to introduce a retail promotion for its broadband home starter product, providing free connection and the first 2 months line rental for free, it could, for the same promotional period, set a wholesale connection charge of minus €21.81 and a monthly wholesale rental of minus €12.95 for the first two months, or it could set a wholesale connection charge of minus €47.71 (€21.81 + €12.95 + €12.95 = €47.71), equivalent to a reduction in the wholesale connection charge by the same monetary amount in total, with no change in the wholesale monthly rental charge. Other combinations would also be possible. ComReg would restrict the timing of any wholesale price reductions to be broadly similar to the timing of retail price reductions (for example, in this instance, ComReg would not accept a reduction in wholesale monthly rental prices for the last 2 months of the customer or port life).

¹¹⁸ This includes the bundling of other products and services.

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corresponding improvements to the wholesale product, usually to the price.¹¹⁹

- V. Not put in to effect, publish or cause to be published any associated amendments to retail prices and / or terms and conditions prior to publishing any amendments to wholesale prices. *eircom* shall not make such associated amendments to retail prices effective, prior to the amendments to the wholesale prices becoming effective.
- VI. Pursuant to its non-discrimination obligations referred to in section 6 and its transparency obligations referred to in section 7, publish the amendments to its wholesale prices (referred to in section 9) in the BARO no less than 15 working days prior to the date they are intended to become effective and specify the date on which they are intended to become effective.
- VII. With respect to the charges and products detailed in the Product Schedule below, notify ComReg in writing, for its approval, of any proposed amendments thereto. The Assessment Procedure shall apply with respect of such a notification. *eircom* shall not publish or cause to be published any increase in the prices (or any proposed amendments to the other terms and conditions) to the products detailed in the Product Schedule without first both notifying ComReg thereof and at the same time submitting to ComReg an appropriate cost based justification with respect to the proposed increases or amendments.

Product Schedule

- The *eircom* Service Establishment Charge;
 - The *eircom* Cessation Charge;
 - The *eircom* Bitstream Connection Service VT Link Charge;
 - The *eircom* ATM Products¹²⁰; and
 - *eircom* New Products / Charges.
- VIII. Ensure that the *eircom* Bitstream Connection Service Access and Transport Link Charge ('ALT') is consistent with the equivalent wholesale leased line price.

10 COST ACCOUNTING

- 10.1 *eircom* shall have obligations in relation to cost accounting as provided for by Regulation 14 of the Access Regulations. All of the obligations in relation to cost accounting applying to *eircom* which were in force immediately prior to the

¹¹⁹ For example, if as part of a promotion *eircom* wished to provide a freephone customer helpdesk number instead of a tariffed number, then ComReg would use an estimate of the net cost of making this change and require a corresponding downward adjustment to wholesale prices, allowing *eircom* flexibility as to which wholesale price(s) to reduce as above.

¹²⁰ *eircom* Bitstream Swift and *eircom* Bitstream Express.

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effective date of this Decision shall be maintained in their entirety and *eircom* shall comply with those obligations pending a decision to be made by ComReg following further consultation in relation to the implementation of accounting separation obligations and cost accounting obligations.

11 EFFECTIVE DATE

- 11.1 This Decision shall be effective from the [●] day of [●] 2004 and until further notice by ComReg.

John Doherty
Chairperson
The Commission for Communications Regulation
The [●] day of [●] 2004

Annex G - Views of the Competition Authority

Under Regulation 27(1), ComReg is required to liaise with the Competition Authority in its definition and analysis of markets. The Competition Authority has been asked to provide their view with respect to the outcome of ComReg's review and analysis of the market for wholesale broadband access. This view is set out below.



The Competition Authority

An tÚdarás Iomáíochta

John Doherty
Chairperson
Commission for Communications Regulation
Abbey Court
Irish Life Centre
Lower Abbey Street
Dublin 1

27th July 2004

Re: ComReg Market Review – Wholesale Broadband Access

Dear Chairperson,

I have been asked, in my capacity as a Member of The Competition Authority ("the Authority"), to provide the Authority's view with respect to the outcome of the Commission for Communications Regulation's ("ComReg") review and analysis of *"wholesale broadband access which includes the provision of bitstream services through self-supply and supply to third parties; and the self-supply by cable operators and Fixed Wireless Access services"* in Ireland.

ComReg is obliged under the EU Communications Regulatory Framework to conduct market definition and market analysis activities to determine the relevant markets for the purposes of the new regulatory framework and in accordance with competition law. Under Regulation 27(1) ComReg is required to liaise with the Authority in its process of market definition and analysis of markets that are outside or differ from those recommended by the Commission under the *Relevant Market Recommendation*. In December 2002, a cooperation agreement was signed between the Authority and ComReg in accordance with Section 34 of the Competition Act 2002 to facilitate *inter alia* cooperation in this type of exercise.

Staff at the Competition Authority participated in the Steering Group and inputted comments to the final decisions. The Steering Group is the senior group of advisors and ComReg staff involved in recommending market analysis decisions to ComReg. The Authority considers that its staff contributed fully in the process. Any comments made by them in the preparation of the consultation documents were considered and ComReg took their recommendations into account in drafting the market proposals.

In its Relevant Market Recommendation, the Commission recommends that National Regulatory Authority's should analyse the market for *"wholesale broadband access which includes the provision of bitstream services through self-supply and supply to third parties; and the self-supply by cable operators and Fixed Wireless Access services"* in Ireland. ComReg has considered the characteristics of this market in the context of the Irish national circumstances. In light of the extensive analysis and volume of data and information collected by its staff, ComReg has concluded that the relevant market proposed by the European Commission is appropriate and supported by the market conditions prevailing in Ireland

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Parnell House, 14 Parnell Square, Dublin 1, Ireland.

Tel: +353 1 804 5400 • LoCall: 1890 804 5400 • Fax: +353 1 804 5401 • www.tca.ie

Even with a preliminary assessment in line with best practice competition analysis that eircom Limited ("eircom") holds in excess of 50% market share ComReg went on to examine the competitive environment in each of these markets in accordance with the cumulative criteria prescribed in the European Commission's *Relevant Market Recommendation*. ComReg carried out a market analysis, based on an assessment of the competitive environment in each of the markets; barriers to entry, level of countervailing bargaining power, potential competition, patterns of actual market behaviour, to establish whether an undertaking in these proposed markets holds Significant Market Power ("SMP").

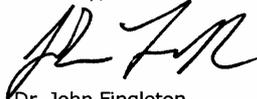
ComReg concluded that the market is characterised by a lack of effective competition and that eircom should be designated as holding SMP on the market for *"wholesale broadband access which includes the provision of bitstream services through self-supply and supply to third parties; and the self-supply by cable operators and Fixed Wireless Access services"* in Ireland. The Authority is of the view that the evidence presented in the document in this regard supports ComReg's conclusions.

While it is not the intention of the Authority to comment on the proposed remedies, the Authority wishes to make certain observations in connection with the price control obligation. In implementing this obligation, care should be taken that it does not dampen price competition at the retail level by facilitating anti-competitive practices and removing the incentive for eircom to pass-on efficiency gains to customers at the retail level. In addressing this issue in its consultation on remedies the Authority would ask ComReg to have regard to the potential for any price control remedy to affect the incentives for entry and innovation in the market in reaching its final decision.

The Authority is of the view that in conducting its market analysis ComReg has defined markets in accordance with competition law and taken due account of the SMP Guidelines issued by the EU Commission in accordance with regulation 27(1) of the Framework Regulations. The Authority is also of the opinion that ComReg's conclusions are appropriate on the basis of the information in its possession.

We would also note that Authority's comments are made in the context of the specific provisions of the SMP guidelines relating to the relationship between markets defined for the purposes of ex ante regulation vis-à-vis competition law enforcement. The Authority reserves the right to re-examine any or all of the issues underlying these recommendations in the light of facts and evidence that may arise in specific future cases before it.

Sincerely,



Dr. John Fingleton
Member and Chairperson, Competition Authority