

Response to Consultation and Consultation on Draft Decision

Market Analysis -Interconnection Market Review Wholesale Call Origination & Transit Services

(Response to Consultation Document 07/02)

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All responses to the draft decision should be clearly marked: "Reference: Submission re ComReg 07/51" as indicated above, and sent by post, facsimile, e-mail or on-line at www.comreg.ie (current consultations), to arrive on or before 5.30pm, 31st August 2007.

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Please note ComReg will publish all submissions with the Response to Consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24

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1 Executive Summary

Introduction

- 1.1 On 19 January 2007, ComReg issued a national consultation on its review of the fixed interconnection markets for wholesale call origination, transit and termination services. The consultation was issued in two parts, one paper dealing with the market review for wholesale call origination and transit services and the second paper dealing with the call termination market. This document is a response to ComReg Document 07/02.
- 1.2 ComReg received three responses to consultation from the following respondents:
 - BT Communications Ireland Ltd.,
 - eircom Ltd, and
 - Vodafone Ltd.
- 1.3 ComReg thanks all respondents for their submissions. Having examined the views of all respondents, ComReg sets out in this document its conclusions in respect of the market analysis process in relation to the wholesale call origination and transit services.

Timeframe

1.4 The timeframe of this review is at a minimum two years from the date of publication of the Decision.

Market definition

- 1.5 ComReg has defined the following relevant markets:
 - National wholesale market for call origination services on the public telephone network provided at a fixed location;
 - National wholesale market for call transit services on the public telephone network provided at a fixed location (including incoming international transit services); and
 - Wholesale market for outgoing international transit services on the public telephone network provided at a fixed location.

¹ ComReg Document 07/02 - Wholesale Call Origination & Transit Services and ComReg Document 07/03 - Wholesale Call Termination Services.

² Market Review – Interconnection: Wholesale Call Origination and Transit Services.

Market analysis

Call Origination Market

- 1.6 eircom's share of wholesale call origination traffic has remained relatively static at 93-94% from H1 2004 to H2 2006, with a Herfindahl-Hirschman Index ('HHI')³ market concentration of over 8700. This is not surprising given eircom's consistently high share of overall fixed narrowband access paths over the same period (98-99%). eircom's position of strength in this market is underlined by the fact that it is currently the only operator supplying wholesale call origination services to third party customers based on its own network inputs and the fact that its share of wholesale call origination traffic remains at such a high level even where Other Authorised Operator ('OAO') self-supply is included. An assessment of existing competition indicates that eircom is in a position to act independently of its competitors and consumers.
- 1.7 The high costs of entry and significant scale economies enjoyed by eircom constitute a significant barrier to entry. Furthermore, the empirical evidence shows that alternative competing infrastructures are not likely to pose a significant threat to eircom's control of the access network over the period of this review.
- 1.8 There is also insufficient countervailing buyer power ("CBP") to act as an effective constraint on eircom in this market over the period of the review.
- 1.9 ComReg's conclusion is that eircom has significant market power ("SMP") in the market for wholesale call origination services.

Transit Market

- 1.10 eircom's share of transit traffic has remained relatively stable above 70% from H1 2004 to H2 2006, with a HHI market concentration of just under 6000. This is not surprising given eircom's high share of call origination traffic. eircom's position of strength in this market is underlined by the fact that its share of transit traffic remains high despite the fact that self-supply by OAOs is included, effectively inflating the OAO market share. An assessment of existing competition would indicate that, to a sufficient extent, eircom is in a position to act independently of its existing competitors and customers. BT's market share declined by four percentage points between H1 2004 and H2 2005 but has remained static at 15% from H2 2005 to H2 2006 and is not likely to experience a significant increase over the timeframe of the review in light of its continued reliance on mobile traffic and obstacles to wholesale customers significantly reducing their consumption of eircom's transit service. Furthermore, no obvious pricing pressure has been exerted by OAOs to date.
- 1.11 ComReg's conclusion is that significant barriers to entry/expansion exist in the wholesale market for transit services. eircom is unlikely to be effectively constrained by either a new entrant or a smaller existing competitor over the timeframe of the review. This is due to barriers to entry/expansion associated

³ The HHI Index is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers. The HHI can range from close to zero to 10,000. The U.S. Department of Justice considers a market with a result of less than 1,000 to be unconcentrated; a result of 1,000-1,800 to be moderately concentrated; and a result of 1,800 or greater to be a highly concentrated. See U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, 1992.

with eircom's economies of scale and scope, control of infrastructure not easily replicated, the mature nature of the market, barriers to wholesale customers switching a significant proportion of their purchases from eircom, and the effect of eircom's vertically integrated structure. As such, there is limited prospect of a viable competitive alternative to eircom emerging on a sufficient scale over the period of the review.

- 1.12 There is insufficient CBP in this market to restrict the ability of eircom to set its prices and/or other commercial terms independently of its customers.
- 1.13 ComReg's conclusion is that eircom has SMP in the market for wholesale transit services.

Outgoing International Transit Market

- 1.14 ComReg examined whether the outgoing international transit services market was susceptible to *ex ante* regulation. ComReg assessed this market against the Three Criteria set out in the Relevant Markets Recommendation.
- 1.15 In respect of the first criterion, ComReg found that the market did not exhibit significant and non-transitory barriers to entry.
- 1.16 In relation to the second criterion, whether the market tended towards effective competition, ComReg examined the nature and extent of existing competition, market shares, pricing trends and any barriers to expansion. In relation to this point, evidence indicates that the outgoing international transit market is tending towards effective competition.
- 1.17 As regards the third criterion, ComReg considers that competition law is well placed to address any potential competition problems in this market.
- 1.18 ComReg thereby concludes that this market does not meet the Three Criteria test and that *ex ante* regulatory intervention is not appropriate for this market.

Remedies

- 1.19 As ComReg's analyses of the **Call Origination Market** and **National Transit Market** indicated that eircom should be designated with SMP in both markets,

 ComReg is obliged to impose at least one regulatory obligation on eircom in

 each market.⁴ It is proposed that the following regulatory obligations should be
 imposed in each market:
 - Transparency (Regulation 10);
 - Non-discrimination (Regulation 11);
 - Accounting Separation (Regulation 12);
 - Access to and use of specific network facilities (Regulation 13); and
 - Price control and Cost Accounting (Regulation 14).

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⁴ If an operator is designated as having SMP under Regulation 27 of the Framework Regulations, ComReg is obliged to impose on such an operator at least one of the obligations set out in Regulations 10 to 14 of the Access Regulations (as ComReg considers appropriate).

- 1.20 ComReg is of the view that the above obligations are both proportionate and justified on the basis of the potential competition problems identified in these markets (as set out in section 6). They are justifiable, in that they are required to ensure that eircom does not exploit its market power at the wholesale level to the detriment of competition in both upstream and downstream markets, to the ultimate detriment of consumers. The regulatory obligations chosen do not unduly discriminate against eircom in that, while they only apply to eircom, the obligations are imposed in order to specifically address the potential competition problems arising out of eircom's position of dominance in each market. Finally, the proposed regulatory obligations are proportionate in that they are the least burdensome means of achieving the required objective in each instance.
- 1.21 ComReg is of the view that the remedies set out in this market review in relation to the call origination and transit markets support the objectives set out in the Communications Regulation Act 2002 as to how ComReg should exercise its functions. The remedies proposed aim to address identified market failures, to protect consumers against the exercise of market power and to promote competition in the markets involving interconnection services.
- 1.22 In light of the finding that the **Outgoing International Transit Market** fails the Three Criteria Test, ComReg considers that all existing SMP regulatory obligations currently imposed on eircom in this market should be withdrawn, in accordance with Regulation 27(3) of the Framework Regulations. These obligations include:
 - Transparency;
 - Non-discrimination;
 - Accounting Separation;
 - Access to and use of specific network facilities; and
 - Price control and Cost Accounting.
- 1.23 The withdrawal of obligations in the international transit market is considered justifiable in that no operator has been found to enjoy a position of SMP in this market. Indeed, the market has been found to have characteristics which suggest a tendency towards effective competition and is, thus, not appropriate for *exante* regulation.

2 Introduction

Initial Review

2.1 On 22 October 2004, ComReg published a national consultation on the interconnection markets⁵ and on 19 May 2005, ComReg notified the European Commission and published its response to consultation.⁶ The European Commission accepted the notified measures, in correspondence to the Chairperson of ComReg on 17 June 2005. The latter process is referred to as the 'initial review' throughout this document. A summary of the initial review can be found in ComReg document 07/02.⁷

Current Review

- 2.2 ComReg decided that, before issuing a Final Decision on these markets, it was appropriate to re-examine and update the market analyses contained in the initial review. This would allow ComReg to have fully considered any change in the market from the time of the initial review. This process is referred to throughout the document as the 'current review'.
- 2.3 The current review involved collecting and updating data, and extending some elements of the initial review to take account of changing conditions. As part of the current review, ComReg issued specific data directions on the interconnection markets⁸ and conducted meetings and conference calls with a large number of operators (hereinafter collectively referred to as "the data gathering exercise"). ComReg has reviewed the findings of the European Commission in its new Draft Recommendation on Relevant Markets⁹ as well as the independent expert report advising the Commission on this new recommendation ("the Expert Report")¹⁰. ComReg has also carefully reviewed the findings of other national regulatory authorities ("NRAs") and the comments of the Commission on these findings as a useful source of ancillary information on the market analysis process in relation to the interconnection markets.

Timeframe

2.4 The timeframe of this review is at a minimum two years from the date of publication of the Decision.

 $http://ec.europa.eu/information_society/policy/ecomm/info_centre/documentation/studies_ext_consult/index_en.htm$

⁵ ComReg Document 04/106a.

⁶ ComReg Document 05/37a.

⁷ pages 7-8.

⁸ Interconnection Data Direction sent to the fixed and mobile network operators – dated 09 June 2006 & Interconnection Data Direction sent to fixed network operators – dated 03 May 2007. An International Transit Data Direction was also sent to fixed and mobile operators on 18 July 2005.

⁹http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review/recommen dation_final.pdf

¹⁰ Martin Cave, Ulrich Stumpf and Tommasso Valletti, July 2006, "A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to *ex ante* Regulation", available from:

Liaison with Competition Authority

2.5 ComReg consulted with the Competition Authority (CA) in relation to its findings on the Interconnection Markets and provided the CA with a summary of these findings. The CA having considered these findings and discussed them with ComReg concluded that they were appropriate.

Structure of this document

- 2.6 The response to consultation on interconnection is published in two parts. This document examines the markets involving wholesale call origination and wholesale call transit services.¹¹
- 2.7 The remainder of this document is structured as follows:
 - **Section 3** presents ComReg's conclusions on the definition of the wholesale origination and transit markets. This section consists of a review of the market definition procedure and its scope, including demand and supply-side assessments;
 - Section 4 presents ComReg's market analysis of the origination and transit markets and presents ComReg's view on whether the markets are effectively competitive;
 - **Section 5** presents ComReg's view on those undertakings with SMP in the origination and transit markets;
 - Section 6 provides a discussion of potential competition problems, the general principles associated with remedies are outlined, a range of possible remedies are identified, and remedies are set out;
 - **Section 7** outlines the other services which are necessary for the provision of interconnection;
 - **Section 8** presents the Regulatory Impact Assessment conducted for the call origination market;
 - **Section 9** presents the Regulatory Impact Assessment conducted for the transit markets:
 - Annex A sets out the Draft Decision Instruments;
 - Annex B contains notification of the draft measures:
 - Annex C sets out a glossary of terms used in this document;
 - **Annex D** presents ComReg's views on the methodology for a wholesale price cap; and
 - **Annex E** assesses the appropriate SMP criteria to be considered in the competition assessment for each market.

¹¹ The response to consultation and consultation on Draft Decision on the market for wholesale call termination to end users located on individual networks at fixed locations will be published shortly.

Consultation Question

Q. 1. Are there additional factors that in your opinion require analysis by ComReg? If so, please indicate precisely what they are. In respect of the factors analysed, is there additional analysis that in your opinion must be carried out. If so, please indicate precisely what that is.

Views of Respondents

- 2.8 Two respondents commented on the fact that the market analysis relied on historic market share data. One of these respondents called upon ComReg to conduct a truly prospective market review, taking into account trends from advanced markets and forecasts for Ireland for supply and demand-side market developments. The second respondent commented on the fact that ComReg should use the most recently available data in carrying out its market analysis.
- 2.9 Another issue raised by one of the respondents concerned ComReg's failure to analyse the state of the markets in the absence of regulation and the resulting circularity of reasoning. This respondent added that ComReg should follow the European Commission guidance known as the 'modified greenfield approach' in this and other market reviews and in the imposition of proportional regulatory remedies.
- 2.10 Another respondent considered that a number of regulatory remedies remained unfit for purpose as currently drafted and would have limited impact. This respondent suggested that these remedies should be reviewed for European best in practice to improve their effectiveness. The remedies referred to by this respondent included Access, Transparency and Non-discrimination. It is further of note that the respondent's submission related more to other markets such as Access and not specifically to the interconnection markets.

ComReg's Position

- 2.11 ComReg is minded of the need to analyse the market on a forward-looking, prospective basis. In this regard, historic data is used as a guide to future developments in the market. This methodology is in keeping with the SMP Guidelines which note that "NRAs should take past data into account in their analysis when such data are relevant to the developments in that market in the foreseeable future." Where available ComReg also considers data from other jurisdictions. ComReg is also cognisant of the need to consider the most up-to-date data in its analysis. As such, the market share data has been updated to Q1 2007 in this document.
- 2.12 In response to the point raised on analysing the market in the absence of regulation, ComReg notes that it is an inherent difficulty when examining markets that are currently subject to regulation that it is not possible to present real life market data concerning the case absent such regulation. To attempt to manipulate the data to show the complexion of the market without regulation would involve the use of myriad assumptions, thereby leaving the analysis open to challenge. Nonetheless, it should be noted that even when examining the markets in the presence of regulation strong evidence to indicate that the

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¹² SMP Guidelines. See paragraph 20.

- incumbent enjoys a position of SMP in all these markets (save outgoing international transit) remains.
- 2.13 With regard to regulatory remedies, ComReg notes that it has carried out an analysis of the market reviews and regulatory measures imposed by other NRAs in relation to these markets. ComReg has also endeavoured to ensure that the remedies are both justified and proportionate and in particular that they may address the potential competition problems identified. ComReg notes that it has responded to the specific issues raised by the respondent in section 6.

Conclusion

2.14 ComReg considers that it has carried out a full and thorough analysis of these markets and that it has examined all relevant factors.

3 Relevant Market Definition

Background to Product Market Definition

- 3.1 In order to consider the definition of interconnection markets, ComReg assessed the extent to which products or services have objective characteristics, prices and intended use which make them sufficiently interchangeable. The analysis of demand-side considerations involves an assessment of all those products or services that are viewed as sufficiently close substitutes by customers to be included within the same relevant product market. ComReg examined the scope for effective demand substitution by applying, where possible, the hypothetical monopolist test. The Small but Significant and Non-transitory Increase in Price ("SSNIP") or hypothetical monopolist test provides a useful conceptual framework within which to identify the existence of close demand substitutes. 13
- 3.2 ComReg also considered the scope for supply-side substitution where "its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy" and where "suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and permanent changes in relative prices." The SSNIP test is also used, where possible, for the identification of effective supply-side constraints. For the products of a firm to be regarded as effective supply-side substitutes, it is not only necessary for the production, marketing and distribution of the relevant products to be possible without the need for significant new investments; it must also be possible within a relatively short period of time. When these conditions are met, the market may be broadened to include the products that those suppliers are already producing. 16
- 3.3 The initial review described the procedures which were followed by ComReg in undertaking market definition and analysis and outlined the regulatory basis of the exercise.¹⁷ This current review draws on that approach and takes into account developments in the interconnection markets since the initial review and further information provided by operators in response to recent data requests.
- 3.4 The definition of the relevant market is a dynamic task.¹⁸ ComReg notes that this current review is prospective in analysing possible developments in the market, and considers a timeframe of two years at a minimum.

¹³ EU Commission, Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law, OJ [1997] C372/5 ("the Commission's Notice on Market Definition"), paragraph 17 states - "The question to be asked is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range of 5% to 10%) but permanent relative price increase in the products and areas being considered. If substitution were enough to make the price increase unprofitable because of the resulting loss of sales, additional substitutes and areas are included in the relevant market".

¹⁴ The Commission's Notice on Market Definition, para. 20.

¹⁵ OFT Guideline (July 2001) OFT 342, The role of market definition in monopoly and dominance inquiries, Economic Discussion Paper 2, para. 2.20.

¹⁶ Richard Whish (2003), Competition Law, Fifth Edition, pages 32-33.

¹⁷ See ComReg Document 04/106.

¹⁸ In accordance with the Commission's Guidelines on Market Analysis and Significant Market Power ("the SMP Guidelines") ComReg must "conduct a forward looking, structural evaluation of the relevant market, based on existing market conditions", para. 20.

Scope

- 3.5 The markets considered in this review encompass a range of wholesale services provided over fixed public narrowband networks that are necessary inputs for entities seeking to provide fixed public narrowband retail services. The initial review defined four interconnection markets. These were:
 - Wholesale call origination;
 - Wholesale call termination to end users;
 - Wholesale call termination to service providers¹⁹; and
 - Wholesale national call transit.
- 3.6 A potential fifth market for international call transit services was to be the subject of a further separate consultation.
- 3.7 Having further considered responses to the previous consultation, responses to data requests, responses to the current consultation and input from discussions with both the European Commission and industry, ComReg is considering the following three interconnection service types under the current review:
 - Wholesale call origination;
 - Wholesale call termination; and
 - Wholesale call transit (including international transit services).
- 3.8 This is line with the previous Recommendation on Relevant Markets²⁰, and with the new Draft Recommendation²¹.
- 3.9 The nature of interconnection means that the wholesale market cannot be analysed in isolation from the downstream retail markets which rely on these wholesale inputs. In related consultations, ComReg has considered the retail markets which require call origination and transit services as inputs. ²²
- 3.10 Similar to the initial review, ComReg defines the boundaries between call origination, call termination and national transit as follows:

¹⁹ Following discussion with the European Commission on whether the call termination to service providers market was potentially susceptible to *ex-ante* regulation, ComReg withdrew its notification of this market.

²⁰ Commission Recommendation of 11/02/2003 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 of the Council on a common regulatory framework for electronic communication networks and services.

²¹http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review/recomme ndation_final.pdf

²² Retail Narrowband Access Markets (06/39, 07/26); Retail Calls Market Review (06/51) Wholesale unbundled access (including shared access) to metallic loops and sub-loops (04/40).

Structure of the Interconnection Markets in Ireland

Primary switching / routing function

Network

Origination

Transit

Transit
Network

Transit
Network

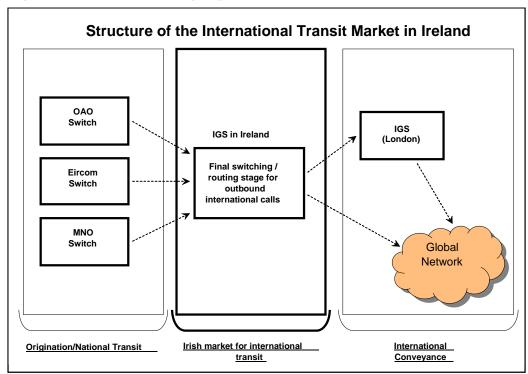
Transit
Termination

Figure 3.1: Structure of Interconnection Markets in Ireland

Source: ComReg

3.11 ComReg defines the outgoing international transit market as follows:

Figure 3.2: Structure of Outgoing International Transit Market in Ireland



Source: ComReg

- 3.12 Please note that the term 'MNO' refers to Mobile Network Operator and the term 'IGS' refers to International Gateway Switch.
- 3.13 Futher to the diagrams as set out above, the boundaries between call origination, call termination, national and outgoing international transit services may be broadly characterised as follows:
 - Origination services provide primary switching/routing functionality at the originating end of a call. The primary switching/routing stage is the first point in the network where call routing is done on a call-by-call basis. It incorporates carriage from the service provider's end of the end user's local loop (which includes the subscriber's line card or equivalent, in its entirety), through the primary switching/routing stage (including, where appropriate, traffic concentration and/or non-call-by-call routing prior to the primary switching/routing stage), to the next stage in the switching/routing of the call (either call termination or call transit).
 - Termination services provide primary switching/routing functionality at the terminating end of a call. The primary switching/routing stage is the final point in the network where call routing is done on a call-by-call basis. It incorporates carriage from the end of the previous stage in the call routing (either call origination or transit), through the primary switching/routing stage (including, where appropriate, traffic concentration and/or non-call-by-call routing subsequent to the primary switching/routing stage), to the end user's local loop, including the subscriber's line card or equivalent, in its entirety.
 - Transit conveyance comprises all elements of national call routing that take place between call origination and call termination with the exception of any switching/routing stage that, for the call in question, undertakes a function not typically associated with simple call routing. For the avoidance of doubt, this definition of transit excludes switching/routing stages which undertake a specific CPS/WLR²³ function and switching/routing stages which undertake a specific NTC²⁴ function for the call in question. In the initial review, ComReg proposed that incoming transit services through international gateway exchanges were part of the international transit market. However, following a subsequent detailed Data Direction in 2005 and more in-depth analysis, ComReg now concludes that the conditions of competition for such services are more analogous to national transit services and should be included in the national transit market.
 - International transit services involve the switching/routing of outgoing retail international calls from an onshore international gateway switch. The necessary requirements for supplying outgoing international transit services include an international gateway switch, international transmission capability and agreements with terminating operators in other countries.

²³ Carrier Pre Select; Wholesale Line Rental.

²⁴ National Trunk Call.

- 3.14 The Framework Regulations²⁵ require that the market analysis 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 Recommendation on relevant product and service markets ("the Relevant Markets Recommendation") by the European Commission.²⁶ In carrying out market definition and market analysis, ComReg must take the utmost account of the Relevant Markets Recommendation and the Commission's Guidelines on Market Analysis and Significant Market Power ("the SMP Guidelines").²⁷ In addition, ComReg considers the Commission's Notice on Market Definition²⁸ and any relevant competition case law or decisions. ComReg adopted the European Commission's approach in the Relevant Markets Recommendation as its starting point for defining the market, such that the review is concerned with wholesale call origination, transit and termination. It is also possible for NRAs to define markets other than those listed in the Relevant Markets Recommendation where this is justified by national circumstances and where the Commission does not raise any objections in accordance with Articles 7(4) and 15(3) of the Framework Directive.²⁹ As outlined above, the market definition and analysis considers both current market conditions and any potential developments that may take place on a prospective basis, i.e., over the next two years at a minimum.
- 3.15 In order to make these market reviews more accessible to interested parties, the consultation was published as two separate documents, one document considered the markets for wholesale call origination and wholesale transit (ComReg Document 07/02), while the market for wholesale termination was presented in another document (ComReg Document 07/03). Following on from this, ComReg is issuing its response to consultation and consultation on Draft Decision on all of the interconnection markets in two separate documents. This document will address ComReg's response to consultation and consultation on Draft Decision with regard to wholesale call origination and wholesale transit services. The response to consultation and consultation on Draft Decision on the markets for wholesale call termination to end users located on individual networks at fixed locations will be published shortly.

3.16 Market Definition: Call Origination

Initial Review

3.17 In the initial review, ComReg proposed that there was a relevant market for wholesale call origination services on the public telephone network provided at a fixed location.

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

²⁶ Framework Regulations 26 and 27.

²⁷ European Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, (2002/C 165/03).

²⁸ European Commission, Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law, OJ [1997] C372/5.

²⁹ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ L 108, 24.4.2002, p. 33.

- 3.18 In defining the relevant wholesale call origination services market, ComReg proposed in the initial review that:
 - The construction of alternative access facilities and/or purchased and/or leased network connections were not in the same relevant product market as fixed origination services;
 - Self-supply was included for all operators in the call origination market;
 - There was a single relevant market for the supply of call origination services to suppliers of retail calls to end users and calls to service providers;
 - Wholesale metered and unmetered call origination services were within the same relevant market; and
 - There was a single national market for supply of wholesale call origination services.

Current Review

- 3.19 Since the time of the initial review, a key area of change in the retail calls market has been the growth of voice calls over the internet (VoIP), so ComReg believes it is also important to review whether wholesale broadband access should be considered to be part of the same relevant product market as call origination services. In the current review ComReg has addressed the following issues:
 - Do fixed origination services, construction of alternative facilities and purchased or leased network connections belong in the same relevant product market?
 - Should self-supply be included in the same relevant product market as wholesale call origination services provided to third party retail service providers?
 - Is there a single relevant market for the supply of wholesale metered and unmetered call origination services?
 - Is there a single relevant market for the supply of origination to suppliers of retail calls to end users and calls to service providers?
 - Should wholesale broadband access or Next Generation Networks be considered as part of the same relevant market as call origination services?
 - What is the geographic market definition?

Consultation proposal

- <u>Do fixed origination services, construction of alternative facilities and purchased or leased network connections belong in the same relevant product market?</u>
- 3.20 ComReg maintained the view put forward in the initial review that the construction of alternative access facilities e.g., cable networks, fixed wireless access (FWA), and/or purchased and/or leased dedicated network connections (e.g. leased lines, partial private circuits (PPCs) were not in the same relevant product market as fixed origination services provided on a wholesale basis. This

- arose from a detailed consideration of demand-side and supply-side substitutability factors as set out below.
- 3.21 On the demand side, it was found that OAOs could not credibly threaten to switch to constructing alternative access facilities and/or purchasing or leasing dedicated network connections on a sufficient scale so as to constrain small but significant changes in the price of wholesale call origination. This was based on the following rationale:
 - One potential alternative to the purchase of call origination was to establish an access network (e.g. cable, fibre to the home, FWA, etc.). ComReg was of the view that the construction of alternative ubiquitous networks did not represent a viable substitute for origination services following small price changes for providers seeking to provide retail voice services. For example, OAOs would not be able to switch to cable or fibre networks quickly enough or on a sufficient scale so as to constrain a hypothetical monopolist of fixed origination services from increasing its price by a small but significant amount. As outlined in the initial review, cable construction designed to offer both telephony and cable television has been limited (as of Q1 2007 there were under 1000 cable narrowband access paths representing only a tiny proportion of overall access paths³⁰) and was found to be likely to remain so over the lifetime of the current review. Construction of Fibre to the Home was also considered to be at a very nascent stage in Ireland with only a few thousand lines. The use of narrowband FWA tended to be limited geographically; was used primarily to offer broadband services and was considered unlikely to become ubiquitous in the short term. As outlined further in section 4, FWA was considered by many respondents to the data gathering exercise³¹ to comprise an uneconomic technology for large scale deployment. Accordingly, its supply was unlikely to increase significantly over the period of this review so as to pose an effective demand-side substitute for fixed origination services.
 - Another possible alternative was to lease an established network connection to the end user location. As noted by one respondent to the data gathering exercise, leased network connections such as leased lines and PPCs were not close substitutes for fixed origination services due to the functional differences between the products, different initial investment required, and significant differentials in the pricing of origination services and terminating segments of leased lines. This respondent noted that such investment or pricing differentials would constrain OAOs switching in a prompt or effective manner from fixed origination services to leased network connections in response to small but significant price changes. As outlined in the initial review, OAOs would require sufficient volumes of traffic to justify the financial commitment associated with leased lines and there was an inherent risk that traffic volumes generated might not warrant the required expenditure to acquire the capacity. It was therefore found to be unlikely that a leased line would be a cost effective substitute for wholesale call origination

³⁰ Quarterly Report Questionnaire to Fixed Operators, Q1 2007.

³¹ See paragraph 2.3 above for further details of ComReg's data gathering exercise.

- services for many routes and would only likely be justified for a small proportion of routes where there were larger customer sites, e.g. large business premises.
- Local Loop Unbundling (LLU) was considered not to be a sufficiently close or effective substitute for fixed call origination. This was because there was a significant difference in the functionality provided by wholesale switched call origination and by Unbundled Loop Metallic Path (ULMP), and as noted in the Draft Recommendation, while ULMP could be used to provide voice services, new entrants in principle would not unbundle local loops to provide narrowband access only. The information available to ComReg indicated further that take-up of LLU continued to be minimal (approximately 1.18% of access paths as at Q1 2007³²). In addition, there was a substantial pricing differential between wholesale call origination services and unbundled local loops, which was further likely to constrain effective switching by OAOs from wholesale call origination services in response to small but significant price changes above the competitive level.
- 3.22 On the supply side, the key issue considered was whether an existing supplier of end user connections (either on a leased or purchased basis) would be in a position to switch quickly and at relatively low cost to supplying wholesale call origination services to third parties sufficient to constrain a 5-10% price increase by a hypothetical monopolist. It must also be shown that such supply substitution is reasonably likely to occur in practice. As demonstrated above, the supply of alternative means of accessing the end user appears constrained at present reflecting the significant time and cost involved in building out to the end user. This was considered unlikely to increase significantly or quickly enough such as to constrain a 5-10% increase in the price of fixed origination services. Further, as outlined in the initial review, there were significant cost and functionality differences between the provision of end user connections on the one hand and wholesale call origination services on the other. It was therefore ComReg's preliminary view that existing suppliers of end user connections would not be in a position to switch supply relatively quickly or at relatively low cost or on a significant enough scale such as to constrain small but significant price increases.
- 3.23 Finally, it was noted that the Draft Recommendation on Relevant Markets stated that each of the alternatives discussed above entailed considerable time and investment (a large proportion of which were sunk costs), and for this reason the degree of roll-out remained limited.³³ As such, ComReg was of the view that these alternatives should not be considered effective substitutes for call origination services for the purposes of the market definition.

³² Quarterly Report Questionnaire to Fixed Operators, Q1 2007.

³³ Commission Draft Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services, Brussels 28 June 2006, SEC(2006)837. http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review/recommendation_final.pdf

Views of respondents

3.24 The only respondent to comment on this specific issue agreed that the wholesale fixed call origination market did not include alternative facilities in the current review period.

Conclusion

- 3.25 In conclusion, ComReg's analysis indicated that both demand-side and supplyside substitutability between fixed origination services and the construction of alternative facilities and/or purchased and/or leased network connections was limited.
- 3.26 On the demand side, it was considered that OAOs could not feasibly opt for constructing alternative access facilities and/or purchasing or leasing dedicated network connections on a sufficient scale to constrain small but significant changes in the price of wholesale call origination.
- 3.27 On the supply side, it was determined that an existing supplier of end user connections (either on a leased or purchased basis) would not be able to switch quickly, easily and at relatively low cost to supplying wholesale call origination services to third parties sufficient to constrain a 5-10% price increase by a hypothetical monopolist.
- 3.28 As such, ComReg considers that the construction of alternative facilities and/or purchased and/or leased network connections is not in the same relevant product market as fixed origination services. It is of note that this finding is in line with the Draft Recommendation on Relevant Markets.

Consultation proposal

- Should self-supply be included in the same relevant product market as wholesale call origination services provided to third party retail service providers?
- 3.29 In the initial review, ComReg proposed that self-supply should be included in the relevant product market, together with wholesale call origination services provided to third party retail service providers.
- 3.30 It was noted in the current review that a recent independent report prepared for the European Commission sets out the following: "Only in the case where a rival firm has reached a network roll-out and geographical coverage comparable with the existing operator(s), where the necessary spare capacity is available, wholesale billing and account management systems exist, and where switching costs are low, supply substitution appears to impose a strong enough pricing constraint on the existing wholesale products. In this case the rival firm's self provided inputs could be included in the same relevant wholesale market together with incumbent's wholesale offerings." In that regard, ComReg carried out further analysis on this issue, and had the following views.

³⁴ Martin Cave, Ulrich Stumpf and Tommasso Valletti, July 2006, "A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to *ex ante* Regulation", An independent report, available from,

- 3.31 It was considered that when determining whether self-supply should be included in the relevant product market, two considerations arise: *Firstly*, self-supply should only be considered for those operators who supply their retail arm based on their own network inputs. This was because including the wholesale call origination minutes that operators purchase from another operator and then both supply to their own retail arm and sell on to another operator as a reseller, could significantly overstate the operator's ability to influence a hypothetical monopolist's commercial behaviour. Applying the SSNIP test, it was unlikely that a hypothetical monopolist wholesale provider of call origination services based on own network inputs would be constrained from implementing a 5-10% price increase above the competitive level by the provision of this service by resellers. This was because the resellers' wholesale inputs would also presumably be subject to the 5-10% price increase by the hypothetical monopolist.
- 3.32 Secondly, even where operators supply their retail arm based on own network inputs, self-supply should only be included for those operators where certain conditions are fulfilled. For example, it must be the case that those operators would not have to make significant investments (e.g., in network infrastructure, wholesale billing and/or account management) or incur significant time delays to make those wholesale services available commercially. Their networks must also be sufficiently rolled out and of sufficient capacity and coverage so as to comprise a viable alternative for wholesale customers. Wholesale customers must also be able to switch to these alternative suppliers without incurring significant costs (e.g., in physically connecting to the alternative suppliers' networks). It would therefore appear appropriate to include self-supply for those operators currently self-supplying based on own network inputs, where the above conditions are fulfilled.
- 3.33 Taking the above into account, it was found to be appropriate and justified to include eircom's self-supply in the relevant market. This was because eircom would not have to make significant additional investments or incur significant time delays for the purposes of supplying additional wholesale customers given that substantially the same network inputs were used and eircom already had the requisite systems in place (e.g., wholesale billing) for supplying wholesale customers. Further, eircom's network had the greatest level of interconnect and build-out in the country which suggested that any additional wholesale supply could be made available on a sufficient scale, so as to constrain a small but significant price increase by a hypothetical monopolist.
- 3.34 It was maintained that as eircom was currently the only operator providing a wholesale call origination service to wholesale customers based on own network inputs, it was questionable whether any of the OAOs would be able to convert their existing self-supply capacity relatively quickly and at relatively low cost for the purposes of supplying an appreciable number of wholesale customers. There was little evidence to suggest that OAOs could provide a viable wholesale alternative reasonably quickly, at relatively low cost, or on a scale sufficient to

http://ec.europa.eu/information_society/policy/ecomm/info_centre/documentation/studies_ext_consult/index_en.htm, p. 17. An OFT consultation paper (OFT 506) in October 2002 on draft guidelines regarding "Mergers: a substantive assessment" also notes at para. 3.22: "The OFT may take into account captive capacity or production where that capacity or production could be readily and profitably switched to the free market..."

- constrain a 5-10% price increase by a hypothetical monopolist provider of call origination services based on their existing network inputs. For example, their network roll-out and geographical coverage is notably less extensive compared to eircom.
- 3.35 Notwithstanding, ComReg included OAO self-supply of traffic carried over own network inputs, as its inclusion had no bearing on the SMP assessment in this instance and was likely to understate rather than overstate eircom's market share. However, ComReg noted that were the inclusion/exclusion of OAO self-supply to have had a more significant impact on the overall finding of SMP, ComReg would have to consider in greater detail the real competitive constraint posed by such self-supply and whether it would be more appropriately dealt with under the competition assessment rather than in market definition. To do otherwise, might result in an incorrect finding of effective competition in the market.

Views of respondents

3.36 It is of note that none of the respondents commented in relation to this issue with regard to the wholesale call origination market.

Conclusion

- 3.37 ComReg outlined its view that when considering whether self-supply should be included in the relevant product market two considerations arise. *First*, self-supply should only be considered for operators who supply their retail arm based on their own network inputs. *Second*, even where operators supply their retail arm based on own network inputs, self-supply should only be included for those operators where certain conditions are fulfilled (e.g. where their network roll-out and geographical coverage is of a sufficient scale, where the necessary spare capacity is available, switching costs are low, and they would not have to make significant investments or incur significant time delays to make those wholesale services available commercially).
- 3.38 ComReg considers that self-supply by all operators currently supplying their own retail arm based on their own network inputs should be included in the market, as the inclusion of OAO self-supply has a negligible impact on the SMP finding in this case and is more likely to understate eircom's position rather than overstate it. However, should OAO self-supply have a more significant bearing on the SMP assessment a more detailed assessment of whether this in fact represents a real or strong competitive constraint would be required.

Consultation proposal

- Is there a single relevant market for the supply of wholesale metered and unmetered call origination services?
- 3.39 In the initial review, ComReg proposed that wholesale metered and unmetered call origination services fall within the same relevant market.
- 3.40 On the demand side, it was found to be technically and functionally feasible for retail service providers to use either metered or unmetered wholesale origination services to provide retail metered or unmetered services. Differences were entirely a function of the pricing model, as outlined in the initial review. In that regard, it could be argued that a chain of substitution between the various

metered and unmetered offers existed such that they may be considered part of the same relevant market. Alternatively, it could be argued that a distinct break in the chain potentially arises for certain high-volume Internet users using Flat Rate Internet Access Call Origination (FRIACO), who might be unwilling to switch to metered services in response to small but significant price changes. However, the distinction between metered and unmetered wholesale services was further blurred by the tendency of retail providers to supply partially unmetered services, which beyond a certain point or cap revert to a metering system. In any case, on the supply side there would appear to be scope for effective supply-side substitution between wholesale metered and unmetered call origination services respectively sufficient to include them as part of the same relevant product market.

- 3.41 On the supply side, a hypothetical monopolist supplier of metered wholesale fixed origination services would be unable to profitably raise prices by 5 to 10%, because existing suppliers of unmetered wholesale fixed origination services would be in a position to switch to supplying metered services quickly at manageable cost.
- 3.42 ComReg considered that there had been no significant changes in the market which would impact on this conclusion.

Views of respondents

3.43 One respondent agreed that both metered and unmetered call origination services were in the same relevant market as the distinction was primarily a function of the pricing model rather than in difference in terms of demand or supply-side substitutability between the two services.

Conclusion

3.44 ComReg examined supply-side and demand-side substitutability factors in order to determine the appropriate market delineation in relation to metered and unmetered call origination services. On the demand side, it was determined that it was feasible from both a technical and functional perspective for retail service providers to use the products interchangeably although the degree of demand substitution between metered and unmetered wholesale services was somewhat blurred by the tendency of retail providers to supply partially unmetered services, which beyond a certain point or cap revert to a metering system. On the supply side, however, it was found that a price increase of 5-10% in wholesale metered call origination services would be unprofitable as existing suppliers of wholesale unmetered services would be able to switch to supplying such services quickly and at relatively low cost. Arising from the above analysis, ComReg considers that wholesale metered and unmetered call origination services fall within the same relevant market.

Consultation proposal

- Is there a single relevant market for the supply of origination to suppliers of retail calls to end users and calls to service providers?
- 3.45 In the initial review, ComReg proposed that there was a single relevant product market for wholesale origination services for calls to end users and calls to service providers. This includes, *inter alia*, origination services provided for

directory enquiry services, operator assisted services and call completion services.

- 3.46 On the demand side, an end user would not typically substitute the origination of one type of call with another, and so there was no effective demand-side substitution between particular call types at the retail level. As outlined in the initial review, a wholesale purchaser of call origination services would, however, likely seek to acquire origination from an entity with a ubiquitous network. This would presumably enable it to offer a comprehensive bundle of call services to its retail customers incorporating both calls to end users and service providers. It could be argued that a discrete wholesale demand therefore exists for call origination services provided as a bundle incorporating both calls to end users and service providers such that they form part of a single relevant market. In any case, on the supply side there would appear to be scope for effective supply-side substitution between retail calls to end users and calls to service providers respectively sufficient to include them as part of the same relevant product market.
- 3.47 On the supply side, a hypothetical monopolist provider of call origination services for calls to end users would be unable to profitably raise prices by 5-10%, because existing suppliers of the wholesale inputs needed to offer retail calls to service providers could easily switch to supplying the wholesale inputs needed to offer retail calls to end users, and vice versa, immediately and at virtually no additional cost, because the wholesale inputs are functionally the same.

Views of respondents

3.48 One of the respondents agreed that there was a single market for the provision of wholesale fixed call origination services for both end users and service providers primarily on the basis of the ease of supply-side substitution between the provision of services to these customer segments.

Conclusion

3.49 ComReg considers that arising from its analysis there is sufficient supply and demand-side substitutability to render a single relevant product market for wholesale call origination services to end users and service providers.

Consultation proposal

Should wholesale broadband access or Next Generation Networks be considered as part of the same relevant market as call origination services?

Wholesale Broadband Access

- 3.50 ComReg did not consider that in the context of this review wholesale broadband access (WBA) should be considered a close substitute for wholesale call origination services used for the purposes of providing narrowband services to customers at the retail level.
- 3.51 At both the retail level and indirectly at the wholesale level, it was considered conceivable that there could be an indirect constraint imposed on originating operators from operators providing voice over internet protocol services

- (VoIP)³⁵. These types of calls would include managed voice over broadband services (VoB)³⁶ or unmanaged voice over internet (VoI)³⁷ services. In terms of functionality a VoB call might be substitutable for a fixed call.³⁸ However, for a number of reasons this was unlikely to act as an effective enough constraint on wholesale call origination to be included in the same relevant market as, for example, end users might prefer to keep their telephone line to receive incoming calls and use the broadband connection in a complementary way.³⁹
- 3.52 In addition, it was pointed out that VoB uptake was dependent on users having a broadband connection. Currently, Ireland is experiencing relatively high growth rates in the take up of broadband by consumers. However, this growth in broadband has not given rise to the significant use of VoB. This was compounded by experience in other countries, where VoIP users remained a small proportion of broadband users, and VoB users represented a proportion of VoIP users. It was considered that the potential for significant demand-side substitution was also likely to be constrained by the need for customers to make two levels of investment to switch to VoB. First, they would require a broadband connection. Second, they would need an adaptor. Thus, choosing a broadband only connection solely for making voice calls might be too costly to be considered an effective substitute for traditional voice services at this time. As such, ComReg was of the view that the vast majority of consumers would be unlikely to switch to VoB services in the event of a 5-10% increase in price by a hypothetical monopolist provider of call termination services.
- 3.53 Finally, it was noted that the European Commission appeared to be of the view that the relevant linked wholesale markets for VoB were the local loop and WBA and that there was no wholesale call origination equivalent for VoB. 43 Instead, VoB was already regulated at the wholesale level through markets 11

³⁵ VoIP (voice over IP) is an IP telephony term for a set of facilities used to manage the delivery of voice information over the Internet. VoIP involves sending voice information in digital form in discrete packets rather than by using the traditional circuit-committed protocols of the PSTN network.

³⁶ VoB (voice over broadband) is a service that allows you to make telephone calls over a high-speed Internet connection rather than through a regular telephone outlet without having to go through your computer. On the Internet, your call is carried in packets using Voice over Internet Protocol (VoIP).

³⁷ VoI services are accessible only through the installation of software on a computer and are available on a limited customer basis, that is, on a closed user group basis. Unlike VoB and traditional voice telephony services, VOI does not have a number range, ancillary services or service mediation. VOI calls are carried over the public internet and are not able to guarantee any quality of service.

³⁸ See conclusions in Retail Calls, Calls for Input (ComReg Document 06/51) where VoB services were considered substitutes in the non-residential market.

³⁹ Cave M. et al, A Review of certain markets included in the Commission's Recommendation on relevant Markets subject to ex ante Regulation, July 2006.

⁴⁰ The latest available data shows that in terms of broadband penetration growth, Ireland achieved the fifth highest growth rate in the OECD (5.8%), fifteen places above the OECD average (3.4%) at the end of December 2006. In terms of broadband penetration (on a per capita basis) Ireland is five places below the OECD average (with a rate of 12.5% compared to the OECD average of 16.9%); ComReg Doc 07/34 - Quarterly Key Data Report – June 2007, pages 24-25.

⁴¹ ComReg's latest market research shows that only a small proportion of broadband users (10% at the end of 2006) actually use VOIP services and only a subset of those use VOB. Source: ComReg Trends Survey Q4 2006, amárach Consulting.

⁴² Cave M. et al, A Review of certain markets included in the Commission's Recommendation on relevant Markets subject to ex ante Regulation, July 2006.

 $^{^{43} \}underline{\text{http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/1146\&format=HTML\&aged=0\&language=en\&guiLanguage=en}$

and 12 of the Recommendation. However, ComReg noted its intention to monitor developments in this market.

Next Generation Networks

3.54 ComReg drew attention to that fact that since the time of the initial review, a key area which could impact on the definition of the call origination market was the development of Next Generation Networks (NGNs). In line with the SMP Guidelines, an approach to market definition has been taken that is, in so far as possible, technology neutral. ComReg considered the potential impact of NGNs on the interconnection markets. It was recognised that the shift to NGNs may enable an operator to offer existing services more efficiently, and to offer new types of service, and that ultimately, this may impact on the market definitions for interconnection products and services. However, it was ComReg's view that within the timeframe of this review, a move towards NGNs represented the use of a more efficient technology to offer services which were similar to those included in the market up to this juncture. Following the principles of market definition, and particularly the principle of technological neutrality, the competitive conditions of product and service markets were not likely to change solely due to developments in the delivery technology. ComReg therefore concluded that the move towards NGNs was not likely to impact on the market definition for wholesale call origination services over the period of this review.

Views of respondents

- 3.55 One respondent considered that ComReg had followed the guidelines for conducting market reviews and believed that the definition of the market was correct at this time. In the next period the respondent noted that the technologies available to the market would bring changes to how services are delivered, such as VoIP and the use of the NGN, however it believed that as regulation was agnostic to technology these replacement technical platforms should have little impact on the market definition exercise.
- 3.56 A second respondent agreed that the wholesale fixed call origination market did not include WBA in the current review period.

Conclusion

- 3.57 Arising from its analysis, ComReg is of the view that WBA should not be considered an effective substitute for wholesale call origination services used for the purposes of providing narrowband services to customers at the retail level over the period of this review.
- 3.58 In relation to NGNs, ComReg notes that where a call originates regardless of the underlying technology it is part of the market definition, once the call origination is providing the same service as over traditional technology and the user experience is not significantly different.
- 3.59 ComReg will however closely monitor technological developments at the wholesale level, and may find that it is appropriate to re-assess its treatment of NGNs in the market definition if there are substantial changes in the way the relevant linked retail products are carried at the wholesale level and/or there are significant changes in the demand/competitive conditions for those services over the timeframe of the review. Further, ComReg draws attention to the recent

publication of the document "Regulatory Aspect of NGNs" (ComReg Document 07/40) and the involvement on a weekly basis with industry working groups which will better inform both ComReg and industry of the potential impact of NGNs.

Geographic market

Consultation proposal

Arguments put forward relating to "Exclusive" Access

- 3.60 In the initial review, ComReg proposed that there was a single national market for the supply of wholesale call origination services. This was proposed because origination services were offered to and by all operators in Ireland on terms that did not differentiate by reference to geographic location. Charges were geographically averaged by all operators regardless of whether or not they were subject to retail regulation. In turn, geographic averaging at the retail level exerted an indirect uniform pricing constraint on wholesale call origination pricing.
- 3.61 However, one respondent to the consultation in the initial review argued that due to the increasing provision of "exclusive" network access to end users by OAOs, it was their view that the definition of the relevant market for wholesale call origination needed to be augmented. The respondent argued that ComReg was required to define additional relevant wholesale call origination markets (based on the geographic area covered by each agreement) for each OAO that had agreed "exclusive" arrangements with property developers to install access infrastructure. Each operator should then be found to have SMP and be subject to the same regulatory obligations imposed on eircom in the national call origination market. Finally, the respondent drew a parallel between these "exclusive" access areas and the call origination market in the UK, where a separate geographic call origination market had been defined for the Hull area.
- 3.62 While ComReg did not agree with this view in the original consultation, it conducted a further investigation into this issue to determine whether there had been any developments in the market that would challenge the definition of a single national market. ComReg conducted meetings and conference calls with certain operators and issued a Data Direction to all relevant operators in June 2006 to obtain further information in relation to the issue of "exclusive" access arrangements (see paragraph 2.3 above for further details of ComReg's data gathering exercise). It was noted that this issue had also been consulted on in the context of the market reviews for Retail Narrowband Access (ComReg Document 0639) and Retail Calls, Call for Input on the Assessment of the Three Criteria (ComReg Document 06/51).

Approach to Geographic Market Definition

3.63 Following established European case law and guidance, ComReg approached the definition of the relevant geographic market by identifying "a clearly defined geographic area in which [the product] is marketed and where the conditions are sufficiently homogeneous for the effect of the economic power of the undertaking concerned to be able to be evaluated"⁴⁴ and "which can be

⁴⁴ Case 27/76 United Brands v. Commission, [1978] ECR 207, [1987] 1 CMLR 429, paras 10 and 11.

distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas." ⁴⁵

- 3.64 It was noted that the geographic market definition exercise, like product market definition, starts by first identifying possible demand and supply-side substitutes for a narrowly defined area by way of the SSNIP or hypothetical monopolist test. In that regard, ComReg considered whether a price increase by a hypothetical monopolist of electronic communications infrastructure in a property development would induce customers to switch to telecommunications providers located outside the relevant area/property development, or if providers located elsewhere could easily switch to supplying customers in the relevant area/property development. If such demand/supply-side substitution was possible and likely to occur on a sufficient scale in response to small but significant price increases, then it would appear appropriate to expand the scope of the geographic market.
- 3.65 In some instances customers may not be able to easily switch their purchases and suppliers may not be able to easily switch their supplies across geographic areas. Notwithstanding this, it may be appropriate to delineate a broad geographic market if the conditions of competition are sufficiently similar across a broad geographic region and suppliers' commercial behaviour at the local level is significantly influenced by competition at the broader regional or national level. For example, it may be possible to determine the boundaries of the geographic market by looking at pricing and other commercial behaviour and identifying whether common constraints apply across such commercial behaviour in different areas such that they should be included in the same geographic market, even if demand and supply-side substitution is not present.⁴⁶
- 3.66 With this in mind, ComReg noted that the two main OAOs engaging in agreements with property developers/builders for the provision of electronic communications infrastructure in the State, continued to price their retail services nationally, irrespective of whether those services were offered in "exclusive" access areas or not. Additionally, these operators' retail packages were available nationally. Further, ComReg outlined that it had received evidence from one OAO in response to the data gathering exercise to suggest that revenues from "exclusive" access infrastructure represented only a very small proportion of their overall revenues at present. This would further suggest that OAOs would be unlikely to implement any costly changes to their billing and marketing systems for the purposes of charging different prices to a small segment of customers located in such developments. Some OAOs also suggested that, while local pricing could be implemented, there would be a

⁴⁵ The Commission's Notice on Market Definition, para. 8.

⁴⁶ See, for example, Oftel *Review of Fixed Narrowband Wholesale Exchange Line, Call Origination, Conveyance and Transit Markets* – March 2003. See also *NTL Incorporated and Cable & Wireless Communications Plc: A report on the proposed acquisition,* Competition Commission, March 2000. In its analysis of the acquisition by NTL of Cable & Wireless Communications, the UK Competition Commission considered that the main characteristics of the pay-TV market are national. For example, BSkyB operates a national pricing structure at both the retail and wholesale level. Furthermore, despite operating wholly within separate local franchises the cable companies operate a uniform pricing policy and the bulk of their programme offerings are of national rather than local interest. The Competition Commission accordingly considered the relevant geographic market to be national. This report is available from available from:

www.competition-commission.org.uk/rep_pub/reports/2000/437ntl.htm#full.

number of hurdles to overcome including reworking billing and marketing systems. Thus, it would appear that OAOs were subject to a national pricing constraint due to their competitors' prices being determined at the national level and that non-trivial adjustments would be needed for the purposes of applying a more localised pricing policy, which may not be justified for a small segment of consumers. It was also suggested by ComReg that any operator that attempted to offer higher prices in a specific area would potentially suffer negative media exposure which might have a negative effect on its brand. Accordingly, these factors would render it less likely that differential pricing would occur.

- 3.67 Furthermore, some OAOs indicated in their response to the data gathering exercise that although there may be instances where they were currently the only operator providing network infrastructure in certain developments, these were not under "exclusive" agreements as requests for access may be dealt with through commercial negotiations. According to the respondent, eircom's standard process of designing an access network and supplying fixed line services in response to requests from property developers was being followed in approximately 1800-2000 new housing estates each year. The respondent identified only 6-10 housing estates⁴⁷ where it claimed it had been denied access or had experienced protracted commercial negotiations. In any case, ComReg reasoned that the operators servicing these developments continued to be subject to national competitive constraints and no evidence had been provided to suggest that this situation was likely to change over the period of the review.
- 3.68 ComReg expressed the view that service offerings, pricing behaviour and marketing arrangements within these developments were largely determined at the national level. Insufficient evidence had been provided to suggest that this situation would change over the period of the review. These "exclusive" access areas should consequently not be defined as separate geographic markets for call origination services.

Comparisons with the Hull geographic market in the UK

- 3.69 In relation to comparisons drawn between "exclusive" access areas and the Hull geographic market defined in the UK, ComReg noted that the Hull area had a population of over 250,000 representing approximately 0.5% of the UK population. A geographic area in Ireland with a similar proportion would have a population of approximately 17,500 people. However, one of the key areas identified by the respondent included no more than 500 dwellings. ComReg considered that to define numerous geographic markets of such small size and impose SMP obligations in each case could not be considered practical, proportionate or justified.
- 3.70 In any case, Ofcom's findings were based on the fact that Kingston was isolated from the competitive constraint deriving from the operation of BT's geographical averaging. As such, if a hypothetical monopolist of electronic communications services in the Hull area were to raise the price of call

⁴⁷ The respondent noted that the list of exclusive access areas it has provided may not be an exhaustive list, but has provided no evidence to suggest that there are a significant number of new areas yet to be identified. ComReg is of the view that the actual number of such areas is unlikely to be much greater than those already identified by the respondent. In any case, ComReg has no reason to believe that the full list of actual locations exhibiting these characteristics would be any greater than a fraction of a percentage of all developments in Ireland.

origination services by a small but significant amount, providers outside the Hull Area would be unlikely to be in a position to enter the market to constrain that price increase, as the cost of investment would likely be significant and involve sunk costs. However, in Ireland there was no corresponding situation where providers offering services in these "exclusive" access areas were isolated from the competitive constraint deriving from the pricing of operators active in the national market. On the contrary, these operators continued to price at a national level in competition with operators active in the national market.

Views of respondents

- 3.71 One respondent agreed that the scope of the market was national as the conditions of competition (pricing behaviour, marketing etc.) were essentially homogeneous throughout the country.
- 3.72 A second respondent noted that they did not dispute the definition of the wholesale call origination market as set out by ComReg. However, they expressed the view that due to the increasing provision of "exclusive" network access to end users by OAOs in private property developments for residential and commercial premises, the definition of the relevant market for wholesale call origination needed to be augmented and drew parallels to the UK where a separate geographic call origination market had been defined for the Hull area.
- 3.73 In addition, they commented on the fact that ComReg itself observed, "In some instances customers may not be able to easily switch their purchases and suppliers may not be able to easily switch their supplies across geographic areas". They believed that this appeared to match established European Commission guidance, where the definition of the relevant geographic market "can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas".
- 3.74 The respondent also maintained that it was ComReg's responsibility in the context of a market analysis to ensure that sufficient evidence was gathered and that a thorough assessment of market power was made.

ComReg's position

- 3.75 Further to the respondent's claim that ComReg should ensure that sufficient evidence is gathered and that a thorough assessment of market power is made, ComReg considers that it has carried out a complete and thoroughgoing investigation of this issue. It is of note in particular that the respondent has provided no new arguments/evidence to ComReg with regard to this issue in its response to consultation. ComReg wishes to underline that it made all due endeavours to obtain information from operators regarding "exclusive" access agreements. A detailed Data Direction was sent to all relevant operators in relation to the extent of exclusivity afforded by such arrangements.⁴⁸ In addition, documented conference calls were held with a number of operators (see paragraph 2.3 above for further details of ComReg's data gathering exercise).
- 3.76 In respect of the observation that "In some instances customers may not be able to easily switch their purchases and suppliers may not be able to easily switch

⁴⁸ Direction to Provide Information, Interconnection Market Review, 09 June 2006.

their supplies across geographic areas", this has not been confirmed to be the case for the "exclusive" access areas in question. Indeed, the information provided by the respondent in its response to the data gathering exercise suggested that its standard process of supplying fixed line services in response to requests from property developers was being followed in the vast majority of cases. Furthermore, other operators indicated that although there may be instances where they were currently the only operator providing network infrastructure in certain developments, these were not under "exclusive" agreements as requests for access may be dealt with through commercial negotiations.

- 3.77 Furthermore, it is of note that there exists a proportionate and practical alternative which may have implications for demand/supply-side substitution in respect of these developments going forward; namely the use of ComReg's powers under section 57 of the Communications Regulation Act, 2002 (as amended). Essentially, section 57 of the Communications Regulation Act, 2002 gives a right to a network operator to negotiate an agreement to share the "physical infrastructure" of a "physical infrastructure provider".
- 3.78 Moreover in respect of its claim that (in line with established European Commission guidance) the areas in question "can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas", the respondent has failed to show how the conditions of competition appreciably differ in those areas. Indeed, the respondent has failed to address ComReg's analysis that the service offerings, pricing behaviour and marketing arrangements within these developments continue to be subject to national competitive constraints.
- 3.79 Furthermore, in terms of the comparisons made with the UK, Ofcom's definition of a separate geographic market in the Hull area was based on the fact that Kingston was isolated from the competitive constraint deriving from the operation of BT's geographical averaging. However, in Ireland there is no corresponding situation where providers offering services in "exclusive" access areas are isolated from the competitive constraint deriving from the pricing of operators active in the national market. On the contrary, these operators continue to price at a national level in competition with other operators active in the national market. In this way, the operators participating in these arrangements continue to be subject to a national competitive constraint and the relevant geographic market can accordingly be regarded as national in scope.
- 3.80 Furthermore, while Kingston provides services exclusively in the Hull area, operators serving particular developments in Ireland also provide services outside of these areas. Importantly those service providers set prices nationally and do not differentiate based on location.
- 3.81 Arising from a review and detailed consideration of all relevant information received regarding this issue, ComReg does not consider that the conditions of competition are appreciably different in these "exclusive" access areas to those pertaining in the national market as a whole so as to justify the delineation of separate sub-national markets.⁴⁹

⁴⁹ Further detailed analysis of this issue is included in Market Analysis – Retail Fixed Narrowband Access Markets, Response to Consultation, ComReg Document 07/26, 4 May 2007, pages 36-42.

Conclusion

- 3.82 ComReg is of the view that service offerings, pricing behaviour and marketing arrangements within these developments are subject to national competitive constraints. As such, as long as operators engaging in these arrangements continue to determine their commercial terms and conditions on a national basis (i.e., continue to be subject to national competitive constraints) and there are constraints on them determining those terms on a more localised level, ComReg is of the view that the relevant geographic market is national. Nonetheless, ComReg will continue to monitor developments and may revisit the market definition should significant change occur.
- 3.83 Notwithstanding ComReg's findings in relation to the market definition exercise, ComReg notes that section 57 of the Communications Regulation Act, 2002 (as amended) provides an alternative means to address possible difficulties in respect of the commercial negotiation of access agreements going forward.

Overall Conclusions on Wholesale Call Origination Market Definition

3.84 Following on from its detailed analysis, ComReg concludes that there is a national wholesale market for call origination services on the public telephone network provided at a fixed location.

Market definition: wholesale transit

Initial Review

- 3.85 In the initial review, ComReg proposed that there was a relevant market for wholesale national transit services on the public telephone network provided at a fixed location.
- 3.86 In defining the relevant transit market, ComReg proposed in the initial review that:
 - Transit interconnection services were within a distinct relevant product market to carriage over alternative facilities;
 - Self-supply was included in the relevant product market together with wholesale services provided to third party retail service providers;
 - The relevant market for wholesale transit services was a multi-network market;
 - International transit services were not within the same wholesale market as national transit services; and
 - There was a single national market for supply of wholesale national transit services.
- 3.87 ComReg also defined a distinct market for international transit services and committed to conducting a further review of this market.

Current Review

- 3.88 ComReg has revisited the analysis of all of these issues, and has carried out additional research on the development of the transit market, and on the market for international transit.
- 3.89 Transit is generally provided as a service bundled with origination or termination. Transit bundled with call origination would occur on the incumbent's network, and would involve a CPS call conveyed from the local switch to the point of interconnection with the CPS operator. Where transit is bundled with termination, the transit service entails the conveyance of a call from one point of interconnection to the local point of interconnection closest to the called party. In the current review ComReg has addressed the following issues:
 - Do transit interconnection services fall within a distinct relevant product market to carriage over alternative facilities?
 - Should the transit market be segmented according to the nature of origination and/or termination?
 - Is self-supply of transit services included in the relevant product market?
 - Is the relevant market a multi-network market?
 - What is the geographic market definition for transit of calls both originated and terminated in Ireland?
 - Are international transit services in the same market as national transit services?
 - Are incoming and outgoing international transit services in the same product market?
 - Are incoming international transit services in the same market as national transit services?
 - Is there a single market for outgoing international transit services?
 - Should self-supply be included in the outgoing international transit services market?

Consultation proposal

- Do transit interconnection services fall within a distinct relevant product market to carriage over alternative facilities?
- 3.90 ComReg proposed in the initial review that transit interconnection services fell within a distinct relevant product market to carriage over alternative facilities. ComReg has considered again the extent to which wholesale leased line trunk circuits, fibre optic networks, direct connection, and switched/routed transit over mobile should be defined within the same relevant market as transit interconnection.
- 3.91 On the demand side, it appeared that few operators would use alternative facilities on a sufficient scale in place of switched/routed transit services in response to small but significant price changes. Respondents to the data gathering exercise indicated that they did not see their demand for fixed transit services falling significantly in the foreseeable future. In addition, they did not

perceive direct interconnection or point-to-point capacity based products as effective substitutes for the public switched/routed transit network as the costs involved in replacing switched/routed transit with direct interconnection or point-to-point capacity were generally prohibitive and only feasible on a few individual routes where high traffic volumes would justify the expense.

- 3.92 Furthermore, although there may be scope for operators to substitute switched/routed transit services with direct interconnection or point-to-point capacity on a few individual routes where traffic volumes were high, there were fundamental functional and usage differences between such point-to-point capacity and switched/routed transit services which would influence demand for those services and were reflected in their different pricing structures. For example:
 - In considering whether wholesale transit interconnection services and wholesale leased line trunk circuits fell within the same relevant product market, functional differences, primarily the difference between a dedicated point-to-point link and a switched/routed service which connected multiple points, were reflected in pricing differentials. It should be noted that transit services referred to the conveyance of switched/routed calls on the public telephone network. conveyance may be provided over leased lines, this would entail the provision of dedicated capacity between two fixed points whereas with switched/routed transit it was possible for calls to be conveyed between multiple end-points. In light of this key functional difference it was considered to be unlikely that purchasers of switched/routed transit would switch in sufficient numbers to purchasing dedicated capacity or leased lines between two fixed points in response to a 5 to 10% increase in the price of transit such as to render that price increase unprofitable. Furthermore, leased lines were found to be significantly more expensive than switched/routed transit services and as such only economically justifiable if there was significant traffic on a particular route. Arising from this, there would be many routes for which a direct connection would not be cost-effective and applying a SSNIP test it was unlikely that operators would switch to point-to-point capacity on a sufficient number of routes so as to constrain small price increases in fixed transit.
 - In considering the extent to which fibre optic networks could be in the same relevant product market as transit, it should be noted that, fibre optic is a point-to-point technology in other words, it will not allow multiple end-points or users to receive output from a single source. Thus, fibre optic networks were unlikely to represent a close substitute for switched/routed transit for the same reasons highlighted for leased lines above. In addition, the deployment of fibre optic networks would require significant investment and commitment of resources which would further constrain the ability of operators to switch to them on a sufficient scale in response to small price changes in switched/routed transit.

Further, it was noted that the fibre optic networks being developed in Ireland generally aimed to deliver broadband services within defined geographical areas (e.g. Metropolitan Area Networks), which further suggested that they would not act as close substitutes for switched/routed transit.

ComReg also considered the provision of direct interconnection as a possible substitute for wholesale fixed transit services. This would mean that an operator had built out its network to the extent where it could directly connect with other operators, such as mobile operators or other fixed operators. It was noted that direct interconnection required substantial commitment and planning, and was time-consuming as well as requiring significant investment. It was ComReg's view that network build did not in itself provide evidence of effective demand substitution, and that the main reason for network build at this level was to meet growing traffic volume. Operators were unlikely to be in a position to switch to direct interconnection with sufficient immediacy or on a significant enough scale so as to render small price increases in wholesale fixed transit services unprofitable. Implementing direct interconnections was likely to be a relatively long-term development taking place over a period of years. Network roll-out per se was unlikely to be evidence of short-term wholesale demand substitution⁵⁰ but was more likely to be evidence of a gradual move over time towards decreasing reliance on the incumbent's network and self providing conveyance. As such, it was considered that this issue should be more appropriately examined in section 4 in terms of the level of actual and potential competition. Furthermore, some of the operators contacted as part of the review indicated that direct connections had high fixed costs and if traffic volumes were insufficiently high on a particular route then the operators reverted to using switched/routed transit services for that route. This suggested that a SSNIP test would indicate that a small but significant price increase in wholesale transit services would not lead to operators self-supplying the input sufficiently quickly or on a sufficient number of routes so as to render that price increase unprofitable. Rather, it would only appear economic to switch to direct interconnection on a small proportion of high-volume routes. Furthermore, information from operators indicated that use of direct connections to replace switched transit appeared to be declining.

3.93 In addition, on the supply side:

ComReg examined whether Mobile Network Operators ("MNOs") could or would switch quickly and at relatively low cost from self-supplying switched/routed transit services over mobile networks to supplying switched/routed transit services over fixed networks in response to small price changes. ComReg noted that there had been more build out recently by mobile operators who were increasingly using direct interconnection between their mobile networks as opposed to transit or conveyance on fixed networks for their mobile-to-mobile traffic. In light of this, the relevant question to address was whether they could easily switch to supplying transit for fixed traffic such as to constrain small but significant price increases in wholesale fixed transit services. However, it was noted that to compete in the provision of third party fixed switched/routed transit services would likely require further significant investment and time delays in implementing additional interconnects with

⁵⁰ Cave M. et al, A Review of certain markets included in the Commission's Recommendation on relevant Markets subject to ex ante Regulation, July 2006, p. 63.

the fixed network operators. These costs would likely only be justified with sufficient levels of traffic, which might not be present on all routes and at each point of interconnection. Furthermore, it was not clear that MNOs had appropriate incentives to switch to supplying the wholesale fixed transit market in response to small price changes, in light of the significant network investments that would be required and other barriers to entry/expansion as discussed in section 4 below. It was underlined that such substitution must be reasonably likely to occur in practice in order to be considered. ComReg suggested that it was therefore unlikely that there would be effective supply substitution by MNOs to the wholesale provision of fixed transit services in response to a small but significant price increase.

Views of respondents

3.94 One respondent noted that ComReg has consistently understated the scale of the transit market by the exclusion of traffic terminated (primarily with MNOs) using direct connections. For example, upon the installation of a direct connection between an OAO and a MNO, this transit traffic is no longer available to eircom. That respondent viewed direct connection as a direct substitute for a wholesale transit offering.

Conclusion

- 3.95 Following its assessment of demand and supply side factors, ComReg considers that carriage over alternative facilities is not in the same product market as wholesale transit. On the demand side, analysis indicated that few operators would use alternative facilities on a sufficient scale in place of switched/routed transit services in response to small but significant price changes. It was further noted that direct interconnection required substantial investment, commitment and planning and was likely to be a relatively long-term development and only economically justifiable if there was a significant volume of traffic on a particular route. As such, operators were unlikely to be in a position to switch to direct interconnection with sufficient immediacy or on a significant enough scale in response to small but significant price changes in switched/routed transit.
- 3.96 On the supply side, it was concluded that there would not be effective supply substitution by MNOs to the wholesale provision of fixed transit services in response to a small but significant price increase. To compete in the provision of third party transit, MNOs would likely incur further cost, risk and time delays in implementing additional network investments and in developing the relevant systems for the purposes dealing with wholesale transit customers. Such supply substitution is considered unlikely to occur with sufficient effectiveness or immediacy to be included within the relevant product market for wholesale transit.
- 3.97 As such, carriage over alternative facilities is not considered to fall within the same relevant product market as wholesale transit.

Next Generation Networks (NGNs)

3.98 Since the time of the initial review, a key area which could impact on the definition of the transit market is the development of NGNs. As such, in the

current review ComReg considered the potential impact of NGNs on the transit market. It was recognised that the shift to NGNs could enable an operator to offer existing services more efficiently, and to offer new types of service, and that ultimately, this may impact on the market definitions for interconnection products and services. However, it was ComReg's view that within the timeframe of this review, a move towards NGNs represented the use of a more efficient technology to offer services which were similar to those included in the market up to this juncture. Following the principles of market definition, and particularly the principle of technological neutrality, the competitive conditions of product and service markets were not likely to change solely due to developments in the delivery technology. ComReg therefore considered that the move towards NGNs was not likely to impact on the market definition for wholesale transit over the period of this review.

developments at the wholesale level, and may find that it was appropriate to re-assess its treatment of NGNs in the market definition if there were substantial changes in the way the relevant linked retail products were carried at the wholesale level over the timeframe of the review.

Views of respondents

3.100 One respondent discussed their views in relation to the transition to NGNs. It believed that the NGN solution suggested by eircom would significantly change the way voice services were interconnected, removing the viability of voice interconnect below a core eircom network node. This respondent reiterated its view that this market review needed to establish a clause or a trigger that major changes in the way that services were delivered had to be managed in a fair and reasonable way. The respondent welcomed the Ovum report recently conducted for ComReg in this regard; however, it believed that it was not clear how these recommendations would tie into the market regulations. The respondent noted that the market would be impacted by NGN and NGA and thus a regulatory linkage must be made. With regard to non-discrimination, the respondent noted that there was potential for eircom to argue that providing full equivalence to the OAOs was disproportionate as it was uneconomic to split its existing systems.

ComReg's Position

3.101 In relation to the respondent's comments, ComReg notes that the regulatory framework is based on the overarching principle of technological neutrality. As such, the regulatory measures should be able to adapt and evolve to accommodate significant technological developments as necessary. Further, ComReg has indicated that it will monitor the market in light of significant technological change and will revisit the market definition exercise where necessary. ComReg draws attention to the recent publication of the document "Regulatory aspects of NGNs" (ComReg Document 07/40) and the involvement on a weekly basis with industry working groups which will better inform both ComReg and industry of the potential impact of NGNs.

Conclusion

3.102 In relation to NGNs, ComReg notes that where a call is transited regardless of the underlying technology it is part of the market definition, once the call transit is providing the same service as over traditional technology and the user experience is not significantly different. In relation to recent developments, ComReg notes that it will revisit the market definition should it prove necessary arising from the development of NGNs. However, it once again emphasises the principle of technological neutrality which has been applied in carrying out this market definition exercise.

Consultation proposal

Should the transit market be segmented according to the nature of origination and/or termination?

Is the incorporation of origination and/or termination significant?

- 3.103 It was noted that one operator argued in the initial review and in subsequent submissions that a distinction could be drawn between trunk transit services (where the call either originated or terminated on the transiting network) and pure transit services (where the call neither originated nor terminated on the transiting network) and that they should be defined as separate markets. Critically, no justification or evidence was offered by this operator for making such a split, and it was not clear on what basis this operator proposed to make this distinction. However, ComReg considered, to the extent that it was possible without any supporting information being provided, whether such a distinction was justified based on cogent economic reasoning.
- 3.104 The only difference between "trunk" and "pure" transit, as defined by this operator, was that, for trunk transit, the transiting operator was also the originating or terminating network operator, whereas, for pure transit, the transiting operator neither originated nor terminated the call on its own network. However, both fixed and mobile originating operators generally did not demand a "pure" transit product, but instead demanded a transit product which also incorporated the termination stage. For example, in the trunk transit case, an operator offered a bundled transit and termination product over their own network, whereas in the pure transit case this operator offered a bundled transit and termination product, which happened to terminate on the network of another operator (although the originating operator had no relationship with the terminating operator). Where an OAO competed with eircom it was essentially providing the same service in either case. There was no functional difference between the pure transit product as defined by this operator and the trunk transit product described above, as they both represented bundled products involving conveyance of calls using similar network inputs. The only difference in each case was the relevant service provider. However, ComReg noted that it was not sufficient to justify defining separate markets on the basis of separate service providers.
- 3.105 Arising from the above analysis, it was ComReg's view that the proposed market delineation between trunk and pure transit was not valid, as functionally they represented the same product. Nonetheless, ComReg did carry out a demand-side analysis based on this definition. It was underlined that the relevant question for the purposes of market definition was whether a

hypothetical monopolist provider of trunk transit services could sustain a 5-10% increase in price above the competitive level without customers switching in significant numbers to pure transit services. Given the functional similarities between trunk and pure transit highlighted above, the choice of transit provider would generally be determined by the best price irrespective of whether the call terminated on the same network. Further factors influencing whether pure transit was capable of constraining small price changes in trunk transit could include the network coverage of pure transit providers and any switching costs that trunk customers could incur in switching to pure transit providers (e.g., interconnection). In that regard, given the functional similarities in trunk and pure transit outlined above, it appeared that customers could respond to a price increase for trunk transit services by a hypothetical monopolist by switching to obtaining pure transit services from a provider with sufficient network coverage. For the same reasons set out above, if the price of pure transit was to increase by a small but significant amount above the competitive level, pure transit customers could potentially switch to purchasing trunk transit services on a sufficient scale so as to render that price increase unprofitable.

3.106 As such, it was considered that to the extent that trunk and pure transit services were functionally similar and a significant number of customers were capable of switching relatively quickly and at relatively low cost between the two services, "trunk" and "pure" transit services should be considered part of the same market.

Views of respondents

- 3.107 One respondent did not accept ComReg's definition of a single multinetwork market. They expressed the view that there were two distinct segments within the transit market:
 - i) 'trunk' transit (traffic originating and terminating on eircom's network); and.
 - ii) 'pure' transit (traffic that terminates and originates on a third party network).
- 3.108 The respondent argued in respect of trunk transit that this market is effectively competitive as there are a variety of options for OAOs wishing to purchase transit services between two primary interconnection points:-
 - Direct interconnection with the relevant eircom primary exchanges;
 - Purchase of trunk transit services from eircom; and,
 - Purchase of transit services from OAOs with a deeply interconnected network that currently provide such wholesale services.

Conclusion

3.109 It is of note that in its response to consultation the relevant respondent did not address ComReg's assessment of the effectiveness of demand/supply-side substitution between trunk and pure transit services respectively. Rather, the respondent appeared to start its analysis from the presumption that trunk and pure transit services formed distinct segments within the transit market without any supporting evidence based on market definition principles. Indeed, in its analysis of the trunk transit segment, the respondent presented three transit options (highlighted above) suggesting that wholesale customers

could purchase transit from a variety of different networks. This would appear to suggest that it views transit as a multi-network market.

- 3.110 ComReg considers that the proposed segmentation between 'trunk' and 'pure' transit is not based on sound market definition principles. ComReg's demand side analysis indicated that given the functional similarities between trunk and pure transit they should be considered part of the same relevant market to the extent that sufficient numbers of customers were capable of switching relatively quickly between the two forms of transit. Furthermore, on the supply side there were no obvious restrictions to an operator with the relevant transit network inputs in place switching between supplying trunk and pure transit respectively, depending on the requirements of their wholesale customers.
- 3.111 As such, it is ComReg's view that the transit market should not be segmented according to the nature of origination and/or termination. It should be further noted that ComReg approaches the definition of relevant product markets by focusing on the degree of substitutability between products/services. It is not considered sufficient to define separate markets purely on the basis of separate service providers without any supporting evidence as to the substitutability of their product/service offerings.⁵¹

Are there different types of transit services?

- 3.112 As this issue was raised by one respondent in the initial review, ComReg examined the extent to which the destination of the call affected the characterisation of different types of transit. In this context it was considered appropriate to assess whether a hypothetical monopolist provider of transit to fixed geographic numbers could profitably increase prices by 5-10% above the competitive level or if providers of transit to mobile and/or non-geographic numbers would exert an effective constraint sufficient to render that price increase unprofitable.
- 3.113 There were found to be no close demand substitutes for these different types of transit service, in that a purchaser of one would not likely substitute to another in response to small price changes given that they would be making calls to each particular number type for a specific purpose. Arguably, there could be a discrete retail, and possibly wholesale, demand for fixed transit services to all different number types to be provided as a bundle, thereby warranting a possibly broader market definition. For example, it was considered that at the retail level consumers were likely to demand the ability to make calls to all number types, which could indirectly influence the supply of wholesale transit services. In that respect, where a wholesale operator had the existing interconnects in place, along with the capacity it may be unlikely to offer a niche transit service only to particular number types. Indeed, as discussed below, eircom and BT offered transit services to all number types.

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⁵¹ According to the Explanatory Memorandum to the Commission Recommendation, On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation (see footnote 59), page 18, there cannot be a presumption that some switched call conveyance (from an incumbent to an entrant's network) is automatically different to other switched call conveyance (between two entrants' networks).

- 3.114 In any case, on the supply side, an operator with the relevant transit network inputs in place could arguably switch to the supply of transit to different number types in response to a small but significant price increase.
- 3.115 As regards transit to mobile numbers, it was noted that both eircom and BT currently provided transit to both fixed geographic and mobile numbers. On that basis, it would appear that there would be no obvious obstacles to an existing provider of transit services, with relevant interconnects in place, to potentially switch existing/spare capacity between the supply of transit services to fixed geographic numbers and fixed-to-mobile numbers relatively quickly and without incurring significant additional cost; given they would have the relevant billing and administrative systems already in place. In that regard, it may be argued there would be scope for existing providers of fixedto-mobile transit to adjust existing/spare capacity for the purposes of supplying additional fixed geographic transit services relatively quickly under a SSNIP test. Similarly, the same arguments may be made in respect of supplying additional fixed-to-mobile transit services relatively quickly and without significant additional cost. In other words, the network elements used in the provision of these services were found to be broadly similar and therefore switching could take place to delivering traffic to different number types in response to end user demand.
- 3.116 As regards the potential for supply substitution from transit to non-geographic numbers to transit to fixed geographic numbers and vice versa, it was recognised that this service took place over the same infrastructure. As such, it would appear that if the price of transit to fixed geographic numbers was to increase by a small but significant amount, an existing provider of transit to non-geographic numbers, with interconnects in place, could potentially switch to supplying transit to fixed geographic numbers relatively quickly and absent significant cost (assuming the provider had the relevant billing and administrative systems in place).
- 3.117 As regards the potential for supply substitution from transit to fixed geographic numbers to transit to non-geographic numbers, certain operators noted that switching to supplying transit to non-geographic numbers may involve different billing to take account of the different transactions, a higher level of network analysis and hence further investment in IN⁵² platforms. However, as stated above, an existing provider of national transit would have much of this functionality in place and any additional cost of investment could be recovered across the whole network, which may render this less significant. For example, it was noted that BT supplied transit to non-geographic numbers as well as transit to mobile and geographic numbers. Taking the fact that the same network elements could be used, it was ComReg's view that suppliers of transit to fixed geographic numbers would be able to switch to the supply of transit to non-geographic numbers and vice versa given a small but significant price increase above the competitive level.
- 3.118 It was noted that certain operators suggested that the available margins may also be another factor potentially limiting supply-side substitution to transit to particular number types. If this were the case, then ComReg considered that this could be addressed through the implementation of appropriate remedies

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⁵² Intelligent Network.

in the market. As discussed above, ComReg was of the view that it was possible to use the same network elements to supply transit services to all number types and the costs were recoverable across the whole network. As such, ComReg believed that there was sufficient scope for an existing supplier of transit services to switch within a relatively short timeframe between the provision of transit services to different number types. Further, ComReg noted that it would consult on the implementation of a wholesale price cap and that issues such as cost recovery may be more appropriately considered in the context of that review.

Views of respondents

- 3.119 The respondent referred to in the preceding section (regarding the proposed market segmentation between trunk and pure transit) also argued that its pure transit market definition was further characterised by three different subsegments based on the varying nature of traffic conveyance and the characteristics of the charging regimes associated with each. These 'submarkets' comprise:
 - Transit to mobile numbers (including mobile to mobile);
 - Transit to geographic numbers; and,
 - Transit to NTC.
- 3.120 In respect of transit to mobile the respondent noted that the capability to provide transit to mobile numbers between third party operators was available to all OAOs who operated switched networks and no IN platform or complex data analysis was required. It noted further, however, that the bad debt risk associated with this call type and the cash flow required to operate in a cascade accounting environment were very different to that of transit to geographic numbers given that mobile termination rates are higher than that of geographic termination rates.
- 3.121 In terms of transit to geographic numbers, the respondent noted that given that digit analysis on geographic numbers was more complex than that of mobile numbers due to the number of digits that must be analysed, the use of IN platform or complex data analysis may be required to transit these calls. It stated further that the relatively high network capability requirement and low commercial risk associated with this type of transit service differentiated it from the other two market segments.
- 3.122 As regards transit to NTC, the respondent argued that the level of network analysis incurred in routing a call to an NTC code was generally high, it required significant use of an IN platform which added additional conveyance costs, there was a high level of bad debt risk and a reversal of the charging arrangements compared with transit to geographic and mobile numbers. It was argued that all of these factors differentiated this market segment and justified its treatment and consideration for regulation as an individual market.

Conclusion

3.123 ComReg has carried out a thoroughgoing examination of whether the destination of the call affected the characterisation of different types of transit as argued above. Arising from this analysis, ComReg's conclusion is that

there is a single market for national transit irrespective of the destination of the traffic.

- 3.124 On the supply side, the same fixed network infrastructure/capacity can be used in the provision of transit services to each of the above call types. Furthermore, the presence of economies of scale and scope associated with such network infrastructure is likely to provide transit operators with commercial incentives to provide multiple services using a single set of network inputs. While transit to each call type might involve differing levels of network analysis, varying use of IN platforms, etc. a fixed transit provider with the relevant infrastructure already in place will arguably seek to exploit economies of scale and scope by increasing the number and range of services provided over the same infrastructure. In addition, it could arguably recover any incremental costs associated with switching supply to different call types across the whole of its transit network.
- 3.125 Given that the same network elements are used to provide transit to mobile, geographic and NTC numbers and economies of scale and scope are an important feature, it is not apparent that the degree of network analysis, conveyance or charging arrangements would act as a sufficient deterrent to fixed transit providers switching between each of these number types in response to small but significant price changes above the competitive level.
- 3.126 Furthermore, in respect of the varying levels of bad debt risks noted by the respondent above, ComReg notes that the level of the charge associated with a particular call type may not be sufficient to render them in separate product markets. Rather, the volume of the calls may be a key determinant of exposure to commercial risk which may be relevant to all three number types. In any event, it would appear standard commercial practice to implement credit control mechanisms that would limit exposure to such commercial risk and which may be invoked for each of the different number types above.
- 3.127 As such, ComReg considers that the transit market should not be further differentiated by call type.

Consultation proposal

Is self-supply of transit services included in the relevant product market?

- 3.128 ComReg proposed in the initial review that self-supply should be included in the relevant wholesale market for fixed transit services, together with wholesale services provided to third party retail service providers.
- 3.129 In the current review in order to examine the issue further, it was suggested that self-supply should be included where there was the potential to offer transit services on a merchant basis. This would apply to operators who were currently self-providing transit services to their own retail arm and had spare capacity or could use existing self-supply capacity to handle additional wholesale traffic on their networks and would not have to make significant investments or incur significant time delays in making that capacity available for providing services to third parties, (e.g., in network infrastructure, wholesale billing and/or account management). It was noted that their networks would need to be sufficiently rolled out and of sufficient coverage

so as to comprise a viable alternative to the switched/routed transit services of existing operators. Transit customers would also need to be in a position to switch to these alternative suppliers without incurring significant costs (e.g., in terms of physically connecting to the alternative suppliers' networks). It was proposed that where these conditions were fulfilled it would appear appropriate to include self-supply by operators currently supplying transit services to their retail arm.

- 3.130 It was recognised that the above conditions were likely to be fulfilled in the case of eircom, as eircom used substantially the same network capacity to self-supply transit services as it did to supply transit services to third party operators. Further, it would appear unlikely that eircom would have to incur significant costs in making that capacity available to additional customers in a relatively short period. Further, its network had the greatest level of interconnect and build-out in the country which suggested that it would also be able to make such additional capacity available on a sufficient scale so as to constrain small price increases by a hypothetical non-integrated monopolist provider of switched/routed transit services.
- 3.131 Nonetheless, it was noted that few OAOs would appear to be in a position to readily convert existing self-supply or spare capacity for the purposes of supplying additional transit customers should the price of switched transit services increase by 5-10% above the competitive level. Only those who already provided services to third party customers would have the relevant billing and account management systems in place. However, even those who were already operating in the merchant market may not be able to make additional transit services available on a scale which would be sufficient so as to constrain small price increases by a hypothetical monopolist. It was suggested that this would depend in large part on the size of their network.
- 3.132 Notwithstanding the above paragraph, ComReg included self-supply of traffic carried over own network inputs for those OAOs active in the merchant market, as its inclusion had no bearing on the SMP assessment in this instance even though it was more likely to understate eircom's position rather than to overstate it. However, ComReg noted that were the inclusion/exclusion of OAO self-supply to have had a more significant impact on the overall finding of SMP, ComReg would have to consider in greater detail whether such self-supply would be more appropriately dealt with under the competition assessment rather than in market definition. To do otherwise could result in an incorrect finding of effective competition in the market.

Views of respondents

- 3.133 One respondent maintained that the inclusion of self-supply in the wholesale transit market resulted in a flawed market analysis and unreasonably inflated the size of the national transit market as measured by ComReg. The respondent made three key arguments as follows:
 - i) On-net calls cannot be defined as transit as no interconnection between networks and no third party operator is involved in these calls;
 - ii) The combined capacity of OAOs' networks available for the provision of a merchant transit service is relatively small with respect to the capacity

of eircom's entire network and the proportion of traffic originating and terminating on eircom's network that could conceivably be transported by any or all OAOs is very small. The respondent argued further that as there exists no alternative to the current self-supply arrangement available to eircom, it follows that the traffic so carried cannot form part of the transit market; and,

iii)The respondent claimed that ComReg used an indirect retail pricing constraint model to evaluate whether self-supply should be included in the relevant market. It argued that as the level of the transit charge is minimal compared to the level of the retail charge, an integrated retail operator would not have a competitive advantage over a non-integrated retail operator.

Conclusion

- 3.134 In response to the three arguments made by the above respondent in relation to self-supply, ComReg notes the following:
- 3.135 *First*, the fact that no interconnection is involved for self-supplied calls does not automatically preclude the capacity used for carrying these calls from exerting a competitive constraint on the wholesale provision of transit. For example, if it is the case that operators have sufficient self-supply/spare capacity available which can be readily converted for wholesale supply and wholesale customers can switch to using those additional services at relatively low cost, self-supply can impose a direct pricing constraint on existing transit services. Thus, where a firm's self-provided inputs can be readily marketed as wholesale services to third parties and customer switching costs are relatively low, self-supply can impose a sufficient constraint to be included as part of the relevant market definition.
- 3.136 Second, in respect of the respondent's suggestion that it would not be commercially viable to utilise another network for the transit of calls originating and terminating on eircom's network, it should be noted that ComReg's assessment did not argue to the contrary. Rather, ComReg's analysis suggested that as eircom's self-supply/spare capacity could be converted reasonably quickly for the purposes of supplying additional wholesale transit services, it imposed an important competitive constraint on existing providers of transit. ComReg did not suggest that such self-supplied calls should be carried by another transit operator. Furthermore, the respondent's argument regarding the capacity of OAOs' networks effectively supports ComReg's suggestion in the current review that OAO self-supply capacity may not be sufficiently ubiquitous or of a sufficient scale capable of constraining small but significant price changes in the wholesale provision of transit. Notwithstanding, ComReg has included self-supplied minutes for those OAOs currently active in the merchant market as their self-supply had a negligible effect on the SMP assessment in this instance and was more likely to understate eircom's position rather than to overstate it.
- 3.137 *Third*, the respondent's claim that ComReg presents an argument based on potential substitution at the retail level to evaluate whether self-supply should be included is inaccurate. In the current review, ComReg considered the constraint posed by potential wholesale supply substitution, not retail demand substitution. While retail demand substitution was considered in the initial

review, ComReg considered in the current review whether integrated wholesale transit providers could switch their self-supply/spare capacity relatively quickly for the purposes of supplying additional wholesale services. ComReg's assessment indicated that eircom's self-supply capacity was sufficiently ubiquitous to impose a direct competitive constraint at the wholesale level. It was therefore considered appropriate to include eircom's self-supply capacity in the transit market definition. While the competitive constraint posed by OAO self-supply capacity was less clear, ComReg included it for those OAOs who were supplying their own retail arm and were currently active in the merchant market as their inclusion had no bearing on the SMP assessment in this instance. Indeed, as noted above, it was more likely to understate eircom's position rather than to overstate it.

3.138 Further to the above, ComReg considers that self-supply should be included for eircom given that it has the network capacity and ubiquity to supply additional wholesale transit services relatively quickly and without incurring To exclude its self-supply would significant additional cost or risk. understate the volumes of traffic that it could potentially carry for wholesale purposes. ComReg also considers that self-supply should be included for those OAOs currently supplying their retail arm based on own network inputs and who are currently active in the merchant market. While some of these OAOs may not have sufficient capacity to provide a direct constraint on other wholesale transit providers, ComReg included their self-supply of traffic as it had no bearing on the SMP assessment in this instance and was more likely to understate eircom's position rather than to overstate it. As noted above, however, were the inclusion of OAO self-supply to be determinative in relation to the issue of SMP, ComReg would have to carry out a more detailed assessment.

Consultation proposal

Is the relevant market a multi-network market?

- 3.139 In the initial review, ComReg considered that the relevant product market was a multi-network market.
- 3.140 It was noted in the current review that arising from the above discussion purchasers of transit services perceived different network operators as potential substitutes in the provision of wholesale transit services depending on their price and respective network coverage, and that suppliers of wholesale transit services potentially competed with one another in the provision of such services. Unlike the market for wholesale call termination, calls could be conveyed on any transit provider's network once they had the requisite network elements in place. ComReg, therefore, proposed that the relevant market for wholesale transit services represented a multi-network market.

Views of respondents

- 3.141 One respondent agreed that the relevant market was a multi-network market.
- 3.142 As noted in paragraph 3.107 a second respondent did not accept ComReg's definition of a single multi-network market. They expressed the view that there were two distinct segments within the transit market:-

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- i) 'trunk' transit (traffic originating and terminating on eircom's network); and,
- ii) 'pure' transit (traffic that terminates and originates on a third party network).

Conclusion

- 3.143 ComReg noted in paragraph 3.109 above that the relevant respondent did not base its proposed market segmentation on cogent market definition principles. Rather, the respondent appeared to start its analysis from the presumption that trunk and pure transit services formed distinct market segments without any supporting evidence based on demand/supply-side principles. Indeed, in its analysis of the trunk transit market segment, the respondent presented three transit options for wholesale customers which suggested they could purchase transit from a variety of different networks. This would appear to suggest that it viewed transit to be a multi-network market.
- 3.144 Arising from the above analysis, ComReg considers that the relevant market is properly delineated as a multi-network market.

Additional issues raised by respondents

3.145 Another issue raised in the responses to consultation concerned the inclusion of 'non-discretionary' transited minutes in the transit market. The respondent noted that under regulation where a CPSO originated traffic, eircom was obliged to deliver that traffic to the closest point of interconnection defined by the CPSO. If the chosen point of interconnection was not at the originating primary exchange, the originating operator had no option but to transit the traffic over its network to the closest (or chosen) point of interconnection. The respondent noted that, since the originating operator in that instance had no discretion about how this traffic could be routed, it was inappropriate that the traffic be considered as part of the transit market for the purpose of this analysis.

Conclusion

- 3.146 ComReg notes that the scenario presented by the respondent above would appear to describe the essence of a transit service, i.e., the conveyance/transit of calls on behalf of wholesale customers to various points of interconnect. The transit operator effectively provides a commercial service to wholesale customers enabling them to provide an end-to-end calls service to their retail customers. The fact that the relevant point of interconnection is chosen by the wholesale customer depending on their network requirements should not exclude those minutes from the transit market definition as they are still purchasing a commercial service and are billed accordingly depending on the network level at which they interconnect with the transit operator.
- 3.147 As such, ComReg does not accept that traffic should be excluded from the transit market definition on the basis that the wholesale customer determines the point of interconnection to which the call must be routed. The fact that the originating operator has no discretion over how this traffic might be routed and must respond to the network requirements of its wholesale customers would appear integral to the nature of a commercial transit service.

It is therefore appropriate to include this traffic as part of the transit market for the purposes of this analysis.

Geographic market

Consultation proposal

3.148 It was noted that the scope of the geographic market definition for the transit market had not changed since the time of the initial review. Transit services continued to be offered to and by all operators in Ireland on terms that did not differentiate by reference to geographic location. ComReg thus proposed that there was a single national market for supply of wholesale national transit services.

Views of respondents

3.149 One respondent agreed that the scope of the market defined was national as the conditions of competition (pricing behaviour, marketing etc.) were essentially homogeneous throughout the country.

Conclusion

3.150 Since transit services continue to be offered and marketed on uniform terms nationally, ComReg concludes that the relevant market is national in scope.

Overall Conclusions on Wholesale Call Transit Market Definition

3.151 Arising from its detailed analysis as presented above, ComReg concludes that there is a national wholesale market for call transit services on the public telephone network provided at a fixed location

Are international transit services in the same market as national transit services?

3.152 In the initial review, ComReg proposed that international transit services did not fall within the same wholesale market as national transit services. In terms of the current review, ComReg noted that it had received no evidence in the intervening period to suggest that these were not separate markets. However, ComReg carried out further analysis of the dynamics of international transit services to ensure that this market definition remained appropriate. In particular, it considered whether international transit services could be further subdivided on the basis of incoming or outgoing traffic. Through a Data Direction issued in 2005, ComReg obtained further substantive information on the workings of the international transit market.

Consultation proposal

• Are incoming and outgoing international transit services in the same product market?

3.153 Considering the demand side, it was suggested that incoming and outgoing international transit services were unlikely to be close enough substitutes from the wholesale customer's perspective such as to constrain small price

increases in either service type. For example, customers were unlikely to consider an incoming international call to be an effective substitute for an outgoing call. While some limited demand-side substitution could occur at the retail level in respect of certain communities of interests (e.g., families), it would be difficult to organise large-scale substitution by end users in this way and was unlikely to take place on a significant scale in response to small price changes.

- 3.154 On the supply side, the relevant question considered was whether suppliers of incoming international transit services could switch to supplying outgoing international transit services and vice versa with immediacy and at relatively low cost in response to small but significant price changes. It was further considered how likely they would be to switch in practice. To that end the following considerations were evaluated:
 - It was noted that the necessary requirements for supplying outgoing international transit services included an international gateway switch, international transmission capability and agreements with terminating operators in other countries. The necessary requirements for supplying incoming international transit services included an international gateway switch, interconnection to a national network of sufficient geographic coverage and agreements with originating operators in other countries.
 - The ease with which suppliers could switch from supplying incoming to outgoing international transit services in response to small price changes would therefore depend on the costs/time involved in accessing international transmission capability and signing agreements with foreign terminating operators.
 - The ease with which suppliers of outgoing international transit services could switch to supplying incoming international transit services would likely depend on the costs/time involved in having widespread interconnection with a national network of sufficient reach and in concluding agreements with foreign originating operators.
- 3.155 It was determined that significant costs and time delays would arise in switching from supplying outgoing international transit services to incoming international services due to the need to interconnect on a significant scale with a nationwide network. As such, providers of outgoing international transit services were found to be unlikely to pose an immediate competitive constraint on providers of incoming international transit and as such were likely to fall into a separate relevant market. As regards switching from supplying incoming international transit services to supplying outgoing international transit services, arguably the cost and time involved in accessing or implementing international transmission capability would limit immediate or effective supply-side substitution, although entry may be possible over a longer timeframe.

Views of respondents

3.156 One respondent agreed that there was a separate market for outgoing international transit services. A second respondent maintained that this market review consultation and process was unwarranted and inefficient. They noted that the European Commission did not consider the wholesale

market for outgoing international transit services to constitute a relevant market susceptible to *ex ante* regulation in its Recommendation on Relevant Markets and that no other NRA had found it necessary to conduct a separate market review for this specific type of service.

ComReg's Position

3.157 In relation to the second respondent's comments, ComReg notes that as outlined above, there are differing characteristics between outgoing and incoming international transit services which justify their differentiation and the consideration of incoming international transit services within the market for national transit (as detailed below). In relation to whether the market for outgoing international transit services should be susceptible to ex ante regulation, this has been considered in section 4 by applying the three criteria test which is the appropriate procedure for markets not included in the Recommendation on Relevant Markets. In that respect the Recommendation on Relevant Markets states that national regulatory authorities may identify markets that differ from those of the Recommendation, provided that they act in accordance with Article 7 of the Framework Directive and that any market identified by NRAs should be based on competition principles and satisfy the three criteria test.⁵³ ComReg has accordingly defined the outgoing international transit services market in line with competition principles above and has assessed below whether this market satisfies the three criteria test.

Conclusion

3.158 Following its examination of the extent to which they constitute effective supply or demand-side substitutes as detailed above, ComReg is of the view that incoming and outgoing international transit through an international gateway exchange are in separate markets.

Consultation proposal

- Are incoming international transit services in the same market as national transit services?
- 3.159 The current consultation examined the extent to which incoming international transit services were more appropriately included in the same market as national transit services, considering demand-side and supply-side substitutability factors as detailed below.
- 3.160 On the demand side, it was considered that incoming international transit services and national transit services were unlikely to represent effective demand-side substitutes. For example, a wholesale customer was unlikely to consider transit from New York to Dublin to be an effective substitute for transit from Galway to Dublin.
- 3.161 On the supply side, the relevant question examined was whether suppliers of national transit services could switch to transiting incoming international traffic and vice versa with immediacy and at relatively low cost in response

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⁵³ Commission Recommendation of 11/02/2003 On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation, paragraph 19.

to small but significant price changes. Further, the likelihood of such switching occurring in practice was evaluated. To that end the following considerations were taken into account:

- There appeared to be obvious functional similarities between the provision of transit for incoming international calls and national transit for domestic calls as once the incoming international call reached the international gateway exchange it was transited to the relevant end user using the same network inputs as for national transit. Thus, there appeared to be little obvious functional difference between the provision of bundled domestic (transit + termination) services sold to domestic operators and an incoming international (transit + termination) service sold to foreign operators.
- As regards switching from supplying national transit services to supplying transit services for incoming international calls, it was recognised that an ordinary tertiary switch used for the purposes of transiting national calls could also be used as an international gateway exchange for transiting incoming international calls. In that regard, there were unlikely to be significant costs/time delays involved in enabling a tertiary switch to act as an international gateway for the purposes of receiving international calls. Furthermore, once an incoming international call was routed into an international exchange, it was conveyed in the same way as national transit.
- There would also be similar costs involved in a provider of transit services for incoming international traffic switching to supplying national transit services. The key element required by a transit provider of incoming international traffic was access to a national network of sufficient geographic coverage to ensure that the call could be conveyed and terminated. This represented the same requirement as for a provider of national transit.
- 3.162 In light of the functional similarities between the transit services provided for national and incoming international calls respectively, the fact that both require widespread access to a national network and that the same network elements could be used for each service type, it was ComReg's view that effective supply-side substitution was possible between these two types of transit services.

Views of respondents

3.163 No comments were made by respondents with regard to the analysis presented on this issue.

Conclusion

3.164 ComReg carried out an assessment of the degree to which transit for incoming international traffic and national transit represented effective demand and supply-side substitutes. In light of this analysis, ComReg concludes that transit for incoming international traffic is in the same relevant market as national transit.

Consultation proposal

Is there a single market for outgoing international transit services?

- 3.165 In the initial review, ComReg considered that there was a single market for the provision of international transit services. In the current review, ComReg considered whether the outgoing international transit market should be more narrowly defined, and examined, in particular, the possibility of demand and supply-side substitution on a route by route basis.
- 3.166 On the demand side, the relevant question addressed was whether wholesale customers of outgoing international transit services would be likely to switch in significant numbers between purchasing transit on one route to purchasing transit on another route in response to small but significant price changes. ComReg's assessment of the market suggested that the overall cost of transit was the significant factor for operators. This meant that while there was obviously no demand-side substitution relating to the actual destination (i.e. transit to one destination could not generally be substituted by transit to a different destination), operators appeared unconcerned in general as to how the call was routed. Operators' responses to the Data Direction suggested they operated on a least cost routing basis. This implied that operators would switch between carriers using different (indirect) routes to reach a particular end-destination in response to a small but significant price increase on the direct route. This was found to be consistent with defining the outgoing international transit market as comprising a bundle of routes rather than a series of separate route-based markets.⁵⁴
- 3.167 In terms of the supply side, the relevant question considered was whether suppliers of outgoing international transit services could switch between supplying various international routes with immediacy and at relatively low cost in response to small but significant price changes and how likely they would be to switch in practice. If, for example, a hypothetical monopolist supplier of outgoing international transit services on a particular route increased its price by 5-10% above the competitive level, how easy would it be for existing suppliers of outgoing transit services on another route to switch to supplying the route in question? It was determined that the answer to this question was likely to be very route specific and only capable of being answered on a case-by-case basis. However, in view of the fact that the majority of international calls to/from Ireland were transited through the UK which operated a sort of hubbing role for international traffic, arguably existing suppliers with transmission capability to/from the UK could switch relatively cheaply and quickly to supplying additional routes if the relevant agreements could be signed quickly.

⁵⁴ This is also consistent with the European Commission's approach in various air transport cases where it considered the issue of defining geographic markets on the basis of individual routes or a bundle of routes (e.g., M/JV-19 *KLM/Alitalia*). Defining markets on a route-by-route basis was considered appropriate where there was limited scope for demand substitution between two particular destinations or city-pairs and insufficient scope on the supply side for airlines to switch to servicing and marketing particular routes in the short term without incurring significant additional costs or risks. However, in some instances the Commission also considered it appropriate to define broader relevant markets where, for example, indirect flights to the relevant end-destinations were sufficiently substitutable for the direct flights. In such instances, the relevant markets were defined as comprising a bundle of routes.

3.168 Where wholesale customers purchased their outgoing international transit services on a least cost routing basis and/or there were no obvious supply-side constraints to operators switching between servicing various international routes, ComReg considered that it was unnecessary to define separate route-based markets for outgoing international transit services.

Views of respondents

3.169 No parties commented on ComReg's assessment on this aspect of the analysis.

Conclusion

3.170 ComReg investigated whether the outgoing international transit market should be further delineated on a route-by-route basis. Such an exercise is considered to be unwarranted where wholesale customers opt for these services on a least cost routing basis and/or where no clearly identifiable supply-side constraints exist in relation to servicing various routes. As such, ComReg concludes that there are not separate route-based markets for outgoing international transit services.

Consultation proposal

Should self-supply be included in the outgoing international transit market?

3.171 In the initial review ComReg included self-supply in the international transit market. In the current review, the relevant question posed was whether should a hypothetical (non-integrated) monopolist provider of outgoing international transit services increase its price by a small but significant amount for a sustained period could a firm that currently self-supplies its international services switch to supplying additional wholesale customers on a sufficient scale so as to constrain that small price increase and would it be reasonably likely to do so in practice. ComReg was of the initial view that an operator that offered outgoing international transit services would probably be in a position to switch its self-supply to the supply of wholesale outgoing international transit services in response to a price increase, in a timely manner and without incurring significant cost. This was because the relevant domestic network requirements, international transmission capability and agreements with foreign terminating operators were already likely to be in place and could presumably be readily converted for the purposes of wholesale supply. In addition, they would have already implemented the relevant billing, marketing and other administrative systems required to constrain a small but significant (5-10%) price increase above the competitive level.

Views of respondents

3.172 No views were expressed by respondent with regard to this analysis.

Conclusion

3.173 ComReg considers that an operator currently providing outgoing international transit services could possibly switch/use its self-supply capacity to provide additional wholesale services in response to a small but significant price increase within the period of a year and at relatively

insignificant costs given that it would have the relevant network and commercial inputs already in place. As such, ComReg's conclusion is that self-supply of outgoing international transit services is part of the outgoing international transit market.

Overall Conclusions on Wholesale International Transit Market Definition

3.174 Incoming international transit services form part of the national transit market. There is a single wholesale market for outgoing international transit services on the public telephone network provided at a fixed location. Self-supply should be included for those operators currently providing outgoing international transit services.

Overall Conclusions on Market Definition

3.175 Arising from its detailed analysis as presented above the following conclusions are made in relation to the relevant market definitions for wholesale call origination and wholesale transit services:

3.175.1 Wholesale call origination

- Construction of alternative facilities and/or purchased and/or leased network connections is not in the same relevant product market as fixed origination services.
- Wholesale metered and unmetered call origination services fall within the same relevant market.
- There is a single relevant product market for wholesale origination services for calls to end users and calls to service providers.
- Wholesale broadband access should not be considered an effective substitute for wholesale call origination services used for the purposes of providing narrowband services to customers at the retail level over the timeframe of the review.
- Self-supply by all operators currently supplying their own retail arm based on their own network inputs should be included in the market, where certain conditions are met.
- The relevant geographic market is Ireland

3.175.2 Wholesale transit

- The relevant market is a multi-network market.
- The transit market should not be segmented according to the nature of origination and/or termination.
- Self-supply of transit is part of the national transit market, where certain conditions are met.
- Carriage over alternative facilities is not in the same relevant market as wholesale transit.
- Incoming and outgoing international transit through an international gateway exchange are in separate markets.

- Transit for incoming international traffic is in the same relevant market as national transit services.
- There is a single market for outgoing wholesale international transit services, encompassing all routes.
- Self-supply should be included in the market for those operators providing outgoing international transit services.
- The geographical scope of the market is Ireland.

Consultation Question

Q. 2. Do you agree with the above preliminary conclusions regarding the market definition exercise? Please provide a reasoned response, and refer to the relevant paragraph number(s) when submitting comments.

Views of Respondents

- 3.176 Two of the respondents agreed with ComReg's preliminary conclusions regarding the market definition exercise. In addition, one of those respondents noted that in the next period the technologies available to the market would bring changes to how services are delivered, such as VoIP and the use of the NGN. However, it believed that as regulation was agnostic to technology these replacement technical platforms should have little impact on the market definition.
- 3.177 Another respondent expressed the view that it did not agree with ComReg's preliminary conclusions regarding the market definition exercise. First, the respondent considered that the definition of wholesale call origination needed to be augmented to include "exclusive" network access to end users by OAOs in private property development for residential and commercial premises. This has been discussed in section 3 above.
- 3.178 Secondly, the respondent maintained that it did not accept ComReg's definition of the single multi-network transit market. The respondent considered there were two separate transit markets, i.e., 'trunk' and 'pure' transit. Following on from this approach to market definition, the respondent asserted that there would be effective competition in elements of the national transit market in Ireland in conducting a market analysis of each. The respondent also noted that the inclusion of self-supply in the wholesale transit market results in a flawed market analysis.

ComReg's Position

- 3.179 In respect of the reference by one respondent to possible technological change, ComReg notes that it has addressed this issue in the sections dealing with WBA and NGNs above. (See paragraphs 3.50-3.59 and 3.98-3.102 above).
- 3.180 In relation to the other respondent's comments, ComReg notes that the respondent's concerns regarding "exclusive" access have been considered in full in paragraphs 3.60-3.83 above.⁵⁵

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⁵⁵ Further detailed analysis of this issue is included in Market Analysis – Retail Fixed Narrowband Access Markets, Response to Consultation, ComReg Document 07/26, 4 May 2007, pages 36-42.

- 3.181 ComReg has also addressed the respondent's views in relation to its proposed segmentation of the transit markets into 'trunk' and 'pure' transit. (See paragraphs 3.103-3.127 and 3.139-3.144). In that regard ComReg considers that it has carried out a detailed and evidence-based analysis on the delineation of the transit market. This is based on an economically justified examination, involving a rigorous evaluation of all potential demand and supply-side substitutes in line with the approach as set out in the SMP Guidelines and the Commission's Notice on Market Definition. ComReg notes that it is not appropriate to infer the existence of separate markets purely on the basis of separate service providers without a rigorous evaluation of demand and supply-side substitutability factors in respect of the products/services concerned.
- 3.182 In respect of the respondent's claim that the inclusion of self supply in the wholesale transit market results in a flawed market analysis, ComReg has addressed this argument in paragraphs 3.128-3.138 above.

Conclusion

- 3.183 Arising from its detailed analysis, ComReg defines three markets as follows:
 - 1. National wholesale market for call origination services on the public telephone network provided at a fixed location;
 - 2. National wholesale market for call transit services on the public telephone network provided at a fixed location; and
 - 3. Wholesale market for outgoing international transit services on the public telephone network provided at a fixed location.

4 Relevant Market Analysis

Introduction

- 4.1 Having defined the scope of the relevant product and geographic markets, ComReg must assess the level of competition within each market. An undertaking will be deemed to have SMP if it is in a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.
- 4.2 In the initial review, ComReg presented a detailed analysis of the relevant markets, and assessed the level of competition on the relevant markets. In this document, the focus is on any development in the markets since the time of the initial review.

Background

- 4.3 Wholesale call origination, transit and termination services are the wholesale inputs used to provide retail calls to end users and service providers in Ireland. Wholesale call origination services are either self-supplied by operators or purchased directly from eircom. eircom is the only undertaking that provides wholesale call origination services to third parties based on own network inputs in Ireland, through Indirect Access services such as Carrier Pre Select (CPS), Carrier Select, and Carrier Access. Although some OAOs may self-supply small quantities of wholesale call origination services based on their own network inputs to their respective retail arms, at the wholesale level they are effectively confined to reselling eircom's wholesale call origination service to third party providers.
- 4.4 There are a number of OAOs currently offering wholesale transit services to third parties in Ireland. The OAOs actively offering transit services to third parties are BT (which is the second largest transit provider), Colt, NTL and Verizon (although a number of these providers represent only a small proportion of the overall market). Otherwise, transit services are either to some extent self-supplied or purchased from eircom in the form of switched minutes.

Market Analysis: Wholesale Call Origination

Existing Competition

Market share

4.5 In the SMP Guidelines, it is clear that although a high market share alone is not sufficient to establish that an undertaking(s) enjoys a position of SMP; it is unlikely that a firm will be dominant without a large market share. The SMP Guidelines note further that:

"...very large market shares – in excess of 50% - are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position" ⁵⁶.

⁵⁶ SMP Guidelines, paragraph 75.

- 4.6 However, ComReg recognised that large market shares were not in themselves sufficient to form the basis of a finding of SMP and that other factors that contribute to SMP (and indeed potentially offset it) must also be taken into account. Therefore, ComReg did not view the existence of large market shares as being determinative of the question of whether or not SMP existed in the relevant market.
- 4.7 It is important to examine a range of factors which are further outlined below. In addition, any changes to market shares over time will need to be examined, as this will indicate trends in the market and will contribute to an assessment of whether or not the market may tend towards effective competition over the period of this review. Accordingly, ComReg analysed market share data over the four periods from H1 2004 to H2 2005 and also provided updated market share analysis for 2006 and Q1 2007. The market shares from 2004 to Q1 2007 are illustrated below in figure 4.1. In the initial review ComReg considered the market shares for eircom to be lower than in the current review, i.e. 85%, but these shares overestimated the share of OAOs due to the inclusion of resold call origination minutes and CPS minutes. This is further explained in paragraph 4.8 below.

Market Shares in the Wholesale Call Origination Market (minutes) 100% 90% 80% 94% 94% 93% 93% 94% 95% 70% 60% 50% 40% 30% 20% 6% 7% 7% 6% 6% 10% 5% 0% H₁ 2004 H1 2005 H₂ 2005 H1 2006 H₂ 2004 H₂ 2006 Q1 2007 ■ eircom ■ OAO

Figure 4.1: Market Shares in Wholesale Call Origination Market

Source: ComReg

4.8 To be consistent with the market as defined in section 3, this market share data excluded resold wholesale call origination traffic, i.e., traffic which was carried over the eircom network and sold onwards by an OAO to another OAO who had the retail relationship with the end user (i.e. a reseller). Such wholesale traffic was already captured in the eircom traffic share. This resold traffic was excluded mainly because it had no bearing on an OAO's ability to effectively constrain the pricing of a hypothetical monopolist in the provision of call origination services. Instead, this wholesale service served to enhance

competition at the retail level rather than in the wholesale call origination market. The inclusion of such traffic would amount to double-counting (artificially inflating the overall size of the wholesale market) and would undermine the relevance of market share as an indicator of dominance by understating the market share of the largest undertaking, i.e., the fixed incumbent.

- 4.9 As discussed in the market definition section, there did not appear to be a strong justification for the inclusion of self-supply of call origination by any operator other than eircom. This would mean that eircom's market share would in fact be closer to 100%. However, with the inclusion of self-supply by OAOs in the market share calculation, the impact on eircom's market share was to reduce it from 100% to 94% at the end of 2006.
- 4.10 Even taking OAO self-supply into account, eircom had consistently provided over 90% of wholesale call origination traffic. This share had remained almost static over the last three years. eircom's high share of call origination minutes was consistent with their ownership of a high percentage of narrowband access paths (over 90% as of Q1 2007). As expected, eircom's share of call origination minutes, with the inclusion of self-supply, was found to be lower than their share of narrowband access paths, as OAO access paths were generally connected to business customers who would be expected to have higher traffic volumes than residential customers. As a result, OAOs' share of call origination volumes, in terms of self-supply, was over twice that of narrowband access paths, although this was still negligible when compared with eircom's share.
- 4.11 ComReg noted that eircom had consistently enjoyed a very high share of wholesale call origination minutes and that, save in exceptional circumstances, such high shares were evidence of the existence of a dominant position. Notwithstanding, ComReg considered a range of other relevant factors before coming to an overall view on its assessment of SMP as detailed below.⁵⁷

Market Concentration

- 4.12 It is generally considered that there is a direct relationship between the degree of concentration in a market and the degree of market power, and that high concentrations raise potential competitive concerns. However, as for the market shares section above, high levels of concentration were not in themselves considered to be determinative of dominance. Additional factors such as the strength of potential competition and any buyer power in the relevant market were also considered before an overall view on SMP was made. Notwithstanding, measuring market shares and concentration levels was considered to be a useful first step in determining where potential concerns about market power may arise.
- 4.13 The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration⁵⁸. It is calculated by the sum of the squares of market shares of the firms in the market and ranges between 0, when the market is entirely fragmented (i.e. each firm has a market share close to 0) and 10,000

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⁵⁷ In addition, Annex E sets out ComReg's review of all the SMP criteria enumerated in the Guidelines in relation to the wholesale origination and wholesale transit markets.

⁵⁸ For example, the HHI is used in the US Merger Guidelines.

points, where there is only one firm which has 100% of the market. It is generally accepted that markets in which the HHI is in excess of 1800 points are highly concentrated. As illustrated in Figure 4.2 below, the concentration of the wholesale call origination market based on volumes was found to be over 8,800 as of the end 2006. This is compared to a HHI of over 8,600 at the end of 2005. It is highly unlikely that the HHI would decline to anywhere below 1,800 points (which would indicate that the market is moderately concentrated rather than highly concentrated) within the timeframe of the review (see section on barriers to entry and potential competition below). Thus, the market was considered to be highly concentrated and likely to remain so over the timeframe of the review.

Wholesale Call Origination Volumes - HHI 10000 9000 8000 7000 6000 5000 (1.800) point above which 4000 market is highly concentrated 3000 2000 1000 0 H1 2004 H₂ 2004 H1 2005 H2 2005 H1 2006 H₂ 2006 Q1 2007 ◆ HHI

Figure 4.2: Levels of Concentration in Wholesale Call Origination Market

Source: ComReg

Lack of Existing Competition

4.14 In the current review, it was outlined that eircom remained the only operator supplying wholesale call origination services to third party customers based on its own network inputs and not as a resold product. Further, given that the only market entry (based on resold wholesale products) to date was a result of regulatory intervention, it appeared unlikely that any operator would consider entering this market on an appreciable scale to provide a wholesale call origination service to third parties over its own network over the period of the review. Although some OAOs may be able to self-supply small quantities of wholesale call origination services based on their own network inputs to their respective retail arms; at the wholesale level they were effectively confined to reselling eircom's wholesale call origination service to providers who in turn supplied their end customers. Thus, it was considered that as the service provided by these OAOs was a resold product, it was difficult to envisage how it could appreciably affect eircom's ability to act independently of its competitors at the wholesale level. This was because any increase in the price of eircom's wholesale product would likely translate into a corresponding increase in the price of the resold wholesale product. Further, as demonstrated by the market

share figures above, even if the OAOs' self-supply network capacity was made available on the wholesale market on a commercial basis, this was unlikely to have any significant impact on eircom's ability to set its commercial terms and conditions independently of its competitors. As further outlined in the section on barriers to entry and potential competition below, it was considered that this situation was unlikely to change significantly over the period of this review.

Ability to price independently

- 4.15 It was noted that in some instances, pricing behaviour would be indicative of the exercise of market power. However, it was recognised that in this instance eircom's prices were subject to regulation. The forward looking costing model used allows for recovery of the cost of capital in addition to the costs of an efficient operator. In essence, it allowed for a margin above the cost of provision, reflecting the cost of capital.
- 4.16 As such, eircom's origination charges, both those charged to CPS operators (CPSO) and those charged to terminating operators, were subject to regulation under the cost model described above. eircom's charges reflected its costs of conveyance (i.e., the transmission and switching required for call origination), together with other costs such as carrier billing and administration.
- 4.17 Where eircom provided call origination services to a CPSO's customer, the CPSO paid eircom for that service. The CPSO raised the retail charge (if any) on/from the calling party (in the case of a call to an end user) and then either paid for termination/transit. In the case of calls to service providers the CPSO retained a portion of the retail charge to cover its costs of billing, bad debt management, credit control, cash collection and conveyance (i.e. routing and transmission) and passed the balance to the next operator along the route for termination or transit as appropriate. In this latter case the CPSO's costs were 'deemed to be' equal to eircom's costs of providing the equivalent origination services. If eircom's call origination charges were to increase in the absence of regulation, this would clearly have a significant impact on a CPSO's ability to compete in the retail market given its significant dependence on the eircom access network.
- 4.18 ComReg took the view that, in the absence of regulation and with no obvious existing competitive constraints, it was highly unlikely that an originating operator with a market share of approximately 94% would be constrained in setting prices in negotiating with CPS operators. This view was further supported by the discussion on barriers to entry, potential competition and countervailing buyer power as outlined below. In the absence of constraints from existing or potential competitors and/or strong buyers in the relevant market, there was found to be convincing evidence that eircom would, in the absence of regulation, have the ability to set prices above the competitive level and as such that it was not subject to a significant competitive constraint.

Consultation Question

Q. 3. Do you agree with ComReg's preliminary assessment and conclusions on existing competition in the market for wholesale call origination? Please provide a reasoned response, supported with economic, technical and/or legal advice where relevant?

Views of Respondents

4.19 It should be noted that all respondents agreed with ComReg's preliminary assessment and conclusions on existing competition in the market for wholesale call origination. One respondent noted that there was no viable alternative in the market to origination on the eircom wholesale platform and that a significant change was not foreseen in the next period. A second respondent pointed to the very high and static market share held by eircom and the fact that OAOs were essentially confined to reselling eircom's wholesale call origination services to other providers which meant that there was no material constraint on the SMP operator's ability to act to a significant degree independently of its competitors at the wholesale level.

Conclusion

- 4.20 ComReg has analysed market share data over six periods from H1 2004 to H2 2006 and also for Q1 2007 and eircom's share of wholesale call origination traffic has remained relatively static at 94% over the period reviewed, with a HHI market concentration of over 8800 at the end of Q1 2007. This is not surprising given eircom's control of a ubiquitous local access network and its consistently high share of overall fixed narrowband access paths over the same period at approx (98-99%). eircom's position of strength in this market is underlined by the fact that it is currently the only operator supplying wholesale call origination services to third party customers based on its own network inputs and its share of wholesale call origination traffic remains at such a high level even where OAO self-supply is included.
- 4.21 An assessment of existing competition would indicate that, to a sufficient extent, eircom is in a position to act independently of its existing competitors. This view is further supported by ComReg's assessment as outlined below of the scope for potential competition and countervailing buyer power in this market.

Barriers to entry and potential competition

Consultation proposal

- 4.22 In the initial review, ComReg analysed actual and potential barriers to entry in the call origination market. In the current review, ComReg developed this analysis further to take account of developments in the market during the intervening period.
- 4.23 In the current review, in order to assess the potential for a new entrant to come into the call origination market and constrain eircom's commercial behaviour, ComReg analysed barriers to entry associated with economies of scale, scope and density, control of infrastructure not easily replicated, and vertical integration. It concluded that barriers to entry were significant and potential competition was unlikely to take place on a significant scale over the period of the review.

Sunk costs, Economies of scale, scope and density

- 4.24 According to the Explanatory Memorandum accompanying the Relevant Markets Recommendation:
 - "...high structural barriers may be found to exist when the market is characterised by substantial economies of scale, scope and density and high sunk costs. Such barriers can still be identified with respect to the widespread deployment and/or provision of local access networks to fixed locations." ⁵⁹
- 4.25 Economies of scale generally refer to the cost advantage which a large-scale operator may have over a smaller operator in the situation where the marginal cost of production decreases as output quantity increases. Economies of scope refer to the potential efficiencies which may be gained through supplying a range of goods and services, while economies of density refer to potential efficiencies associated with supplying customers who are geographically concentrated. In United Brands v. Commission the ECJ⁶⁰ explicitly referred to economies of scale and irrecoverable costs of entry as factors indicating dominance.⁶¹
- 4.26 Control over local access is an essential pre-requisite for offering call origination services. However, should an operator decide to enter the market via direct access, it would require significant investment in an electronic communications network. Most of this will be sunk costs, as such costs will largely not be recoverable if the entrant decides to, or is forced to, exit the market. According to a 2002 report prepared for the European Commission, investments in civil works and underground plant can only be sold *in situ* and as they have few other uses, tend to have limited resale value such that a substantial proportion of these investments are unlikely to be recouped on exit. It states further that the local loop would appear to satisfy this criterion where the proportion of expenditure on trenches, ducts and underground plant is particularly high and sunk.⁶²
- 4.27 Significant sunk costs create an asymmetry in the market. In that regard, the OECD's 2005 report on Barriers to Entry notes that in some circumstances it is more difficult for new entrants to break into a market than it was for the incumbent that was the first firm to enter and that "when a market is already occupied by an incumbent potential entrants might face an entrenched brand or brands, as well as demand that is insufficient to permit efficient operation". ⁶³ A potential entrant has to consider whether ex post entry prices would be high enough to recover sunk costs. Furthermore, in addition to high sunk costs the

⁵⁹ Commission Recommendation, On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services page 10.

⁶⁰ European Court of Justice.

⁶¹ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, para. 122.

⁶² Squire, Sanders & Dempsey LLP, May 2002, "Market Definitions Regulatory Obligations in Communications Markets", A Study for the European Commission, Executive Report, Brussels, p. 14.

⁶³ OECD, (DAF/COMP(2005)42), March 2006, Barriers to Entry, Paris, p. 22.

prospect of having to achieve economies of scale, scope and density combined may further act as a disincentive to new entry.

- 4.28 It can be noted that the theoretical economic literature generally agrees that there are economies of scale, scope and density in the access network under monopoly or close to monopoly supply conditions. Discussing the economies of established national networks, they note that for some network elements, in particular the local loop, the cost of duplicating an incumbent's facility may be prohibitively high. Further, a new entrant must often cover a much higher long-run total service incremental cost, which has to be recovered from a smaller customer base. Another advantage arises from vertical integration, where the incumbent can achieve economies of scope through its ownership of local, national and international networks, and from areas such as network planning, operations and maintenance. In addition, economies of density may be achieved by having customers that are concentrated or located close together in particular areas/routes.
- 4.29 There is a general consensus from quantitative analysis that network size can reach a point where additional participation does not increase the value to participants, and beyond this point, increases in scale are no longer advantageous to the operator. This suggests that there are decreasing returns to scale. It should be noted that several empirical studies on economies of scale have been carried out in different countries⁶⁵, but are generally beset with methodological and data problems. ComReg was therefore aware in carrying out its assessment that quantitative analysis on this subject may not always be conclusive. A study which was carried out recently attempted to quantify the point at which scale economies dropped off. This study suggests that the relative impact of size is greater for smaller operators, and proposed that economies of scale started to have a reduced impact at around one million lines.⁶⁶ This means that, for example, the relative cost difference for operators with between one million and two million lines is not as significant as the difference between a quarter of a million and one million.
- 4.30 Placing this analysis in the context of the Irish market, it would suggest that eircom would not achieve significant economies of scale above one million lines, but would achieve economies of scale up to that level. In terms of OAOs, the largest of which has just over 43,500 direct access channels, and would therefore be nowhere near to being able to achieve economies of scale comparable to eircom. In other words, in the size band in which OAOs would be operating, eircom was able to achieve considerable economies of scale, whereas OAOs could not.
- 4.31 ComReg's conclusions were therefore that eircom enjoyed significant economies of scale, scope and density in the provision of wholesale call origination services

⁶⁴ See for example, the World Bank's "Telecommunications Regulation Handbook" by McCarthy Tetrault.

⁶⁵ For example, Armstrong, M., Cowan, S. and Vickers, J. (1998), Fuss, M. A. and Waverman, L. (2002) M. E., Majumdar, S. K., and Vogelsang, I. (eds.) Elsevier Science B.V, Fuss, M. A. and Waverman, L. (1977) Fuss, M. A. and Waverman, L. (1981) Fuss, M. A. and Waverman, L. (1981); Elixmann, D. (1990) Bad Honnef, Germany, April, Ida, T. (2002) 'Cave, M.E., Majumdar, S.K., and Vogelsang, I. (2002) S. K., and Vogelsang, I. Liebowitz, S. J. and Margolis, S. E. (2002) Chou, D. and Shy, O. (1990) Church, J. and Gandal, N. (1993) Katz, M. L and Shapiro, C. (1986) 'Farrell, J. and Saloner, G. (1992)

⁶⁶ Applying the EU Regulatory Framework in Microstates, Ovum and Indepen, 2005.

which acted as a barrier to entry in this market. Further, it was not anticipated that this would change within the lifetime of the review.

Control of infrastructure not easily replicated and lack of potential competition

- 4.32 This indicator refers to a situation in which certain infrastructure is:
 - Necessary to produce a particular product/service;
 - Exclusively or overwhelmingly under the control of a certain undertaking; and
 - There are high and non-transitory barriers to substituting the infrastructure in question.
- 4.33 According to the SMP Guidelines, a network operator can be in a dominant position if the size or importance of their network affords them the possibility of behaving independently from other network operators.⁶⁷ Ownership of a significant infrastructure may confer an absolute cost advantage on the incumbent and, as demonstrated in the previous section, the cost and time involved in new entrants replicating the infrastructure in question may pose a significant barrier to new entry. In that regard, it was noted that eircom exercised control over infrastructure that was not easily duplicated. Wholesale call origination services over the eircom network were essential for operators wishing to provide retail calls to end users. Analysis indicated that eircom was the only operator which offered a wholesale call origination product over its own network inputs, controlled over 90% of narrowband access paths⁶⁸ and provided over 90% of all wholesale call origination traffic in Ireland. Furthermore, there were found to be high and non-transitory barriers to replicating the infrastructure in question which was further reflected by the limited scope for potential competition from alternative infrastructures to emerge over the period of this review, as outlined further below.
- 4.34 It was considered that there was limited potential for significant competition to emerge from alternative access facilities (e.g. wholesale broadband access, NGNs, unbundled local loops, FWA, direct build, cable etc.) and, further, this situation was unlikely to change over the current review.
 - It was noted in the market definition section above (paragraphs 3.50-3.53), that despite recent relatively high growth rates in the take up of broadband in Ireland⁶⁹, this had not given rise to significant use of VoB⁷⁰ which suggested that **wholesale broadband access** was unlikely to exercise sufficient constraint over eircom's control of the access infrastructure over the period of this review. It was noted further that

⁶⁷ SMP Guidelines, paras 81-82.

⁶⁸ Quarterly Report data Q3 2006.

⁶⁹ The latest available data shows that in terms of broadband penetration growth, Ireland achieved the fifth highest growth rate in the OECD (5.8%), fifteen places above the OECD average (3.4%) at the end of December 2006. In terms of broadband penetration (on a per capita basis) Ireland is five places below the OECD average (with a rate of 12.5% compared to the OECD average of 16.9%); ComReg Doc 07/34 - Quarterly Key Data Report – June 2007, pages 24-25.

 $^{^{70}}$ ComReg's latest market research shows that only a small proportion of broadband users (10% at the end of 2006) actually use VOIP services and only a subset of those use VOB. Source: ComReg Trends Survey Q4 2006, amárach Consulting.

when obtaining a broadband connection end users might prefer to keep their telephone line for voice calls and use the broadband connection in a complementary way also limiting the extent to which wholesale broadband access may pose a competitive constraint over the period of this review.

- It was not yet clear what impact NGNs would eventually have on the existing means of accessing end users, although it was not expected to have any significant effect on the existing access infrastructure over the lifetime of the review. While it is evident from the current NGN forums that this rollout is happening, it was not clear that the wholesale call origination services provided to OAOs over that infrastructure would be significantly different to those currently provided over the PSTN. While the underlying technology may eventually change, the services which facilitate OAO access to end users may remain similar. There was no evidence to suggest that NGNs would give rise to a significantly different access service for OAOs to that already provided or that it was likely to pose a significant competitive threat to eircom's control of infrastructure over the next two to three years. Should OAOs wish to find alternative means of accessing the end user so as to bypass the incumbent, they would still likely have to engage in the costly and timely exercise of building fibre out to the end user. In any case, ComReg proposed to keep the deployment of next generation networks and services under review. Further, ComReg draws attention to the recent publication of the document "Regulatory Aspect of NGNs" (ComReg Document 07/40) and the involvement on a weekly basis with industry working groups which will better inform both ComReg and industry of the potential impact of NGNs.
- As eircom continued to control over 90% of narrowband access paths and 94% of call origination minutes and, as outlined above, there were significant costs and constraints involved in replicating eircom's access network, **OAO** network build was unlikely to pose a significant competitive threat over the review timeframe. This was further underlined by OAOs' continued reliance on eircom's wholesale call origination service and the fact that no other OAO provided a wholesale call origination service to third party customers based on its own network inputs. Furthermore, as outlined above, even if the OAOs' self-supply network capacity was made available on the wholesale market on a commercial basis, this was unlikely to have any significant impact on eircom's ability to set its commercial terms and conditions independently of its competitors.
- Take up of **LLU** also continued to be minimal (1.18% of access paths as at Q1 2007)⁷¹ which when compared with eircom's share of over 90% of narrowband access paths suggested LLU was unlikely to exercise a sufficient constraint over the period of the review.
- Fixed Wireless Access (FWA) and Cable Networks also needed to be considered as a potential source of competition. However, as demonstrated by the following analysis they were found to be unlikely to

⁷¹ Quarterly Report Questionnaire to Fixed Operators, Q1 2007.

> have a significant impact over the course of the review. It was noted that as suggested by some operators (see paragraphs 3.20-3.28 above) FWA was considered to be an uneconomic technology for large-scale deployment, and as such was unlikely to exercise a sufficient competitive constraint on eircom's call origination services over the period of the review. In relation to cable networks, there were under 1000 cable narrowband access paths as of Q1 2007,72 representing only a tiny proportion of overall access paths. While the integration of the two cable networks (Chorus and NTL) was underway to offer triple play services (including voice services), the gradual introduction of this product was unlikely to pose a significant competitive threat over the review timeframe.

4.35 ComReg's conclusion was that eircom controlled infrastructure that was not easily replicated and which acted as a barrier to entry. Furthermore, alternative competing infrastructures were not likely to pose a significant threat to eircom's control of the access network over the period of this review.

Vertical integration

- 4.36 Vertical integration, while normally efficient, can make new market entry harder where the presence of a firm at multiple levels in the production or distribution chain increases the possibilities for it to foreclose one or more markets and/or where prospective new entrants may perceive the need to enter two or more markets simultaneously to pose a viable competitive constraint to the integrated operator. In *United Brands v Commission* the ECJ referred to the fact that UBC was vertically integrated to a high degree from production through to transport and marketing and stated that this provided it with a significant competitive advantage, namely commercial stability.⁷³
- 4.37 It was noted at the outset that eircom was vertically integrated in that, while it acted as an important undertaking in the upstream interconnection markets, it also had a significant presence in downstream retail markets. As such, in the absence of regulation, eircom could have an incentive to cease supplying wholesale call origination services or to supply such services on less favourable terms to its competitors which could detrimentally affect competitive conditions in downstream markets. In turn, a failure or a lessening of competition at the downstream level, with its associated negative impact on OAO revenue streams, would limit the ability and incentives of OAOs to invest in infrastructure and enter the upstream call origination market.
- 4.38 In addition, eircom, as a vertically integrated operator, could enjoy significant efficiencies arising from its presence in the upstream and downstream markets. This could in turn constitute a barrier to entry in that a new entrant may perceive a need to enter both the wholesale and retail markets in order to pose a viable competitive threat.
- 4.39 ComReg concluded that, in the absence of regulation, eircom's vertical integration combined with its control of an infrastructure that was not easily

⁷³ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, paras 69-81, 85-90.

replicated could act to deter entry to the call origination market and possibly affect competition in downstream markets.

Consultation Question

Q. 4. Do you agree with ComReg's preliminary assessment and conclusions on barriers to entry and potential competition in the market for wholesale call origination? Please provide a reasoned response, supported with economic, technical and/or legal advice where relevant.

Views of Respondents

- 4.40 Two respondents agreed with ComReg's assessment and conclusion on barriers to entry and potential competition in the market for wholesale call origination. One of these noted that the introduction of VoIP services in Ireland was still in its infancy and that the lack of progress in negotiating a fit for purpose LLU product was stifling competition using this avenue. The respondent did not foresee any significant change in the coming period. A second considered that in particular with regard to barriers to entry it would be very difficult for OAOs to feasibly replicate the SMP operator's access network given the high sunk costs that would have to be incurred, and because these costs would have to be recovered in charges from a likely much smaller customer base than that currently held by eircom. Further, they considered that there was very considerable uncertainty about the prospects for potential competition using alternative platforms (e.g., FWA and cable). While the respondent considered that it was unlikely that competition through alternative platforms would act as a significant competitive constraint on the SMP operator in the current review period, the fact that some alternative access facilities offered much lower entry barriers than current entry via direct access meant that developments in respect of potential competition must be continuously monitored by ComReg.
- 4.41 A third respondent disagreed with ComReg on the basis that they believed that the definition of wholesale call origination needed to be augmented to include "exclusive" network access to end users by OAOs in private property development for residential and commercial premises. This has been discussed in section 3 above.

ComReg's Position

- 4.42 With regard to the second respondent's comments regarding alternative access facilities, ComReg considers that alternative competing infrastructures are not likely to pose a significant competitive threat to eircom over the period of the review. Nonetheless, ComReg will continue to monitor developments.
- 4.43 ComReg notes that the third respondent's concerns regarding "exclusive" access have been considered in full in section 3 above. In that respect, ComReg does not consider that the definition of wholesale call origination needs to be augmented.

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⁷⁴ Paragraphs 3.60-3.83. Further detailed analysis of this issue is included in Market Analysis – Retail Fixed Narrowband Access Markets, Response to Consultation, ComReg Document 07/26, 4 May 2007, pages 36-42.

Conclusion

- 4.44 ComReg has reviewed the potential barriers to entry in the market for wholesale call origination constituted by high sunk costs, economies of scale, scope and density, control of infrastructure not easily duplicated and vertical integration.
- 4.45 ComReg's conclusion is that the high sunk costs of entry associated with building a local access network of a sufficient size to constrain eircom and the significant scale economies enjoyed by eircom by virtue of its control of a ubiquitous access network constitute a significant barrier to entry. Furthermore, the empirical evidence shows that alternative competing infrastructures are not likely to pose a significant threat to eircom's control of the access network over the period of this review. To complete its analysis ComReg considers below the scope for any strong buyers to exert a possible constraint on eircom's behaviour over the period of the review.

Countervailing Buyer Power

Consultation proposal

- 4.46 One of the potential constraints on a supplier's market power is the strength of buyers and the structure of the buyers' side of the market. This could occur, for example, if a particular purchaser were sufficiently important to its supplier to influence the price it was charged. The conditions where it might be expected to observe countervailing buyer power (CBP) could be when a customer accounts for a large proportion of the supplier's total output, and is well-informed about alternative sources of supply, and is able to switch to other suppliers at little cost to itself. It may even be that the customer is able to self-supply the relevant product. ComReg noted that it must assess the effect that these potential alternatives had in constraining eircom's pricing behaviour.
- 4.47 ComReg was of the view that there was insufficient CBP in the wholesale call origination market due to eircom's control of the vast majority of access lines and the difficulty in accessing a credible alternative means of infrastructure for OAOs wishing to access end users. As a result, OAOs were unlikely to be in a position to credibly threaten to respond to changes in eircom's commercial terms and conditions by self-providing and/or commercially supplying wholesale call origination services based on their own network inputs. Indeed, it was noted that eircom was the only operator supplying wholesale call origination services based on its own network infrastructure and not as a resold product. This suggested that significant numbers of wholesale customers would be unlikely to have a viable alternative to eircom's wholesale call origination service available to them over the period of this review. It was also noted above that OAO self-supply based on own network inputs has been relatively limited to date and given the substantial sunk costs associated with network build, was unlikely to increase significantly over the period of this review. Further, one OAO indicated that it would be unlikely to switch to another method of origination unless the price increase was substantial (e.g. multiples of 100%), as the capital cost and cash flow implications of building their own infrastructure were too severe. This suggested that self-provision was unlikely to pose a viable alternative to eircom's call origination service for a sufficient number of wholesale customers over the period of this review.

4.48 Absent regulation, eircom would also be unlikely to have an incentive to offer a wholesale call origination product, thereby further undermining the OAOs' bargaining position. Furthermore, even if eircom were to supply a wholesale product, in the absence of regulation OAOs would have no choice but to accept eircom's price and other terms and conditions in order to access end users in Ireland thereby further limiting their buyer power.

Consultation Question

Q. 5. Do you agree with ComReg's preliminary conclusions on countervailing buyer power in the wholesale call origination market? Please provide a reasoned response supported by empirical and/or technical and economic evidence.

Views of Respondents

4.49 All respondents agreed with ComReg's preliminary conclusion on CBP in the wholesale call origination market. One respondent commented that eircom Retail was the only organisation with CBP and it was unlikely that they would seek services elsewhere. A second noted that there was insufficient CBP as eircom was the sole supplier of wholesale call origination services using its own network and it was not financially feasible, given the high sunk costs and existing technology, for OAOs to develop their networks to self-provide or to offer wholesale call origination services themselves.

ComReg's Position

4.50 Arising from the above analysis, ComReg concludes that there is insufficient CBP in the wholesale call origination market in order to constrain the exercise of SMP by eircom. This derives primarily from the fact that eircom is the sole supplier of wholesale call origination services using own network inputs. Furthermore, given the high sunk costs associated with alternative network build and the limited scope for potential competition noted above, it is not anticipated that there will be an effective alternative to eircom's call origination service for a sufficient number of wholesale customers over the lifetime of the review. In addition, the substantial costs associated with self-build further renders it unlikely that wholesale customers would switch to self-supply for a sufficient volume of their origination needs as to constrain eircom's commercial behaviour over the review period.

Conclusion

4.51 There is insufficient CBP in the wholesale call origination market

Overall Conclusion on market analysis: call origination

Consultation Proposal

- 4.52 In this updated review, ComReg analysed developments in the structure of the market since the initial review, and re-examined factors such as CBP and the level of barriers to entry in assessing eircom's ability to act independently of its competitors and customers.
- 4.53 ComReg has noted that eircom's market share remained high and stable in excess of 90%, and had not been appreciably mitigated by other factors such as CBP or a lowering of barriers to entry. Despite regulation, eircom's dominance

of the market persisted. The continuing high barriers to entry in this market coupled with the empirical evidence showed that alternative competing infrastructures were not likely to pose a significant threat to eircom's control of the access network over the period of this review. As a result, ComReg concluded that eircom enjoyed a position of SMP in the market for wholesale call origination and that this was not expected to change over the lifetime of the review.

Consultation Question

Q. 6. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response.

Views of Respondents

4.54 Two of the respondents agreed with ComReg's preliminary conclusion. One of these respondents noted that experience in this market suggested that there were no commercially viable alternatives. A second commented that the very high market share held by eircom in the context of high barriers caused by the prohibitive costs of replicating the SMP operator's network indicated that, in the absence of regulation, it was in a position to act to a significant degree independently of its suppliers, customers and competitors in the relevant market. Further, the respondent noted that while there was considerable uncertainty around the prospects for potential competition on the basis of alternative access facilities, it was currently reasonable to conclude that potential competition was unlikely to act as a significant competitive constraint on eircom within the timeframe of the review. A third respondent re-iterated its view that the wholesale call origination definition needed to be augmented to include "exclusive" network access to end users by OAOs in private property developments for residential and commercial premises.

ComReg's Position

4.55 ComReg notes that the third respondent's concerns regarding "exclusive" access have been considered in full in section 3 above.⁷⁵

Conclusion

4.56 Based on its detailed analysis of the relevant SMP criteria (i.e., the level of existing competition; barriers to entry and potential competition; and CBP), ComReg considers that eircom enjoys a position of SMP in the market for wholesale call origination. That is to say that eircom can act to an appreciable extent independently of its competitors (both existing and potential) and its customers in the relevant market.

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⁷⁵ Paragraphs 3.60-3.83.

Market Analysis: Wholesale National Transit

Existing Competition

Market share

- 4.57 In the SMP Guidelines, it is clear that, although a high market share alone is not sufficient to establish the possession of significant market power, it is unlikely that a firm will be dominant without a large market share. The SMP Guidelines further note that:
 - "...very large market shares in excess of 50% are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position". ⁷⁶
- 4.58 However, in carrying out its analysis ComReg recognised that large market shares were not in themselves sufficient to form the basis of a finding of SMP and that other factors that contribute to SMP (and indeed potentially offset it) must also be taken into account. Therefore, ComReg did not consider the existence of large market shares as in themselves being determinative of the question of whether or not an undertaking(s) enjoyed a position of SMP in the relevant market.
- 4.59 It is important to examine a range of factors which are further outlined below. In addition, any changes to market shares over time will need to be examined, as this will indicate trends in the market and will contribute to an assessment of whether or not the market may tend towards effective competition over the period of this review. Accordingly, ComReg analysed market share data over four periods from H1 2004 to H2 2005 and also analysed market shares for 2006 and for Q1 2007. The market shares over this period are illustrated below. In the initial review, ComReg considered the market shares for eircom to be lower than in the current review, i.e. 70%, but these shares overestimated the share of OAOs due to the incorrect inclusion of all CPS minutes. In the current review, only self-supply by those OAOs that also offer a merchant transit service was included. It was noted, however, that the even inclusion of this self-supply was likely to overestimate the share of OAOs. This is explained further in paragraph 4.60 below.

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⁷⁶ SMP Guidelines, paragraph 75.

Market Shares in the Wholesale Transit Market (minutes) 90% 80% 70% 60% 76% 75% 74% 73% 74% 76% 50% 40% 30% 19% 18% 20% 15% 14% 15% 15% 14% 11% 10% 10% 9% 9% 8% 8% 10% 0% H1 2004 H2 2004 H1 2005 H₂ 2005 H1 2006 H₂ 2006 Q1 2007 ■ eircom ■ BT □ OAOs

Figure 4.3: Market Shares in Wholesale National Transit Market

Source: ComReg

- 4.60 The above market shares included self-supply of transit traffic for all operators who offer a competing transit product in the merchant market, despite the fact that it was unlikely that many of these OAOs could or would use their self-supplied capacity to constrain a price increase by a hypothetical monopolist. Instead, the inclusion of their self-supply was likely to serve to underestimate the true size of eircom's market share. However, ComReg included such self-supply in order to illustrate the important position occupied by eircom in this market irrespective of whether self-supply is included.
- 4.61 ComReg noted that eircom had consistently enjoyed a very high and stable share of transit traffic (73% or over for 2004 and 2005) and that, save in exceptional circumstances, such high shares were evidence of the existence of a dominant position. An updated market share analysis was also obtained for 2006 and Q1 2007 and highlighted that the transit market shares remained high and stable increasing between H1 2006 and H2 2006 from 74% to 76% respectively and then decreasing to 74% for the first quarter in 2007. Notwithstanding these high market shares, ComReg considered a range of other factors below before coming to an overall conclusion on SMP.

Market Concentration

4.62 It is generally considered that there is a direct relationship between the degree of concentration in a market and the degree of market power, and that high concentrations raise potential competitive concerns. However, as for the market shares section above, high levels of concentration were not in themselves considered to be determinative of dominance. Additional factors such as the strength of potential competition and any buyer power in the relevant market were also considered before an overall view on whether an undertaking(s) enjoyed a position of SMP was made. Notwithstanding, measuring market

- shares and concentration levels represents a useful first step in determining where potential concerns about market power arise.
- 4.63 As outlined above, the Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration.⁷⁷ As illustrated in Figure 4.4 below, the concentration of the transit market based on volumes was just under 6,000 at the end of 2005 and remained static at the end of 2006 and for Q1 2007. Over the six periods the HHI actually rose and it was found to be unlikely that it would decline below 1,800 points (which would indicate that the market is moderately concentrated rather than highly concentrated) within the timeframe of the review (see section on barriers to entry/expansion and potential competition below). Thus, the market was considered to be highly concentrated and likely to remain so over the period of the review.

Wholesale Transit Volumes - HHI 10000 9000 8000 7000 6000 5000 (1,800) point above which market is highly concentrated 4000 3000 2000 1000 0 H1 2004 H₂ 2004 H1 2005 H₂ 2005 H1 2006 H₂ 2006 Q1 2007 - HHI

Figure 4.4: Levels of Concentration in National Transit Market

Source: ComReg

Lack of Existing Competition

- 4.64 It was noted from the data received that there were currently five operators other than eircom offering transit services in Ireland. These were BT, Verizon, NTL, TNS and Colt Telecom. However, it was noted that two of those operators had a market share of under 3%. With the exception of BT, no transit operator had a share greater than 10%, even when self-supply was included.
- 4.65 As such, BT was eircom's next biggest competitor with a market share of 15% at both H2 2005 and H2 2006. This market share had, however, declined over previous periods from 19% in H1 2004 to 14% in both H2 2004 and H1 2005 rising only slightly to 15% in H2 2005 (eircom's market share started at 73% in H1 2004 and was 75% in H2 2005 and 76% in H2 2006 with a decline to 74% in Q1 2007). BT's market share was not expected to increase significantly over the period of the review. This was because a large proportion of BT's wholesale

⁷⁷ See paragraph 4.13.

traffic was transit for mobile carriers and it was anticipated that this would decline as Meteor aligned with its parent company. In addition, the increasing direct interconnection by MNOs for mobile-to-mobile traffic could further reduce the traffic volumes available to BT and other fixed operators going forward. Further, as eircom had ubiquitous coverage representing over 90% of all fixed lines and with the majority of traffic terminating on its network it was considered likely that many operators would continue to use eircom for the majority of their fixed traffic rather than transiting via other fixed networks. Furthermore, as is discussed in the section on barriers to entry/expansion and potential competition below, the market was considered to be relatively mature and in the presence of barriers to switching it was not anticipated that BT's market share would grow significantly over the period of the review.

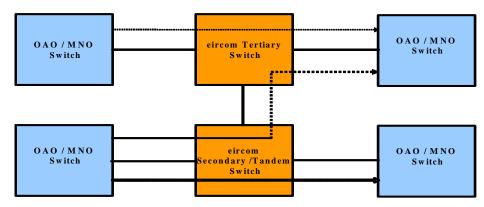
4.66 As such, ComReg was of the view that existing competition in the transit market was relatively weak and, absent regulation, would be unlikely to have any significant impact on eircom's ability to set its commercial terms and conditions independently of its competitors.

Ability to price independently

- 4.67 Traditionally, transit is understood to be the conveyance of calls handed over for termination on other networks within Ireland (see figure 4.5 below). eircom accepts transit traffic destined for OAO geographic number ranges and for mobile networks at both the Secondary and Tertiary switches and hands off the call to the OAO/MNO at either the Secondary or Tertiary level, depending on where the OAO/MNO has interconnect. Non-geographic transit traffic (e.g. NTC and 1891/1892) and transit to network specific codes (e.g. DQ⁷⁸) other than mobile numbers can only be delivered to the eircom network at the Tertiary switches, but can be handed off at the Secondary or Tertiary level depending on where the OAO has interconnect.
- 4.68 Currently, eircom call origination and termination services (including Primary, Tandem and Double Tandem call routing) are subject to regulation and charged to third parties based on cost recovery principles. Rates are derived from a top-down LRIC model. eircom transit charges (as set out below) are also derived using the same model, on the basis of the appropriate routing characteristics. Some pricing elements that eircom has previously included as components of call origination and termination (i.e. Tandem and Double Tandem) will now fall into the transit market arising from the relevant market definition set out in section 3.

⁷⁸ Directory Enquiries.

Figure 4.5: Carriage of calls over the eircom network that fall within the traditional understanding of transit



Source: ComReg

4.69 The following graph shows the price of national transit services for a three minute call (at peak, off-peak and weekend rates) and illustrates the high level of stability in eircom's transit pricing over the past seven years. This pricing stability would appear consistent with an absence of any obvious competitive pressure being exerted by OAOs over that period.

Figure 4.6: eircom National Wholesale Transit Rates for a 3 Minute Peak Call

eircom National Transit rates 1.4 1.2 Price of a 3 minute call 0.4 0.2 March '00 '01 '01 '02 '02 '03 '03 '04 '04 '05 '05 '06 '06 '07 '07 Off Peak Weekend Source: ComReg⁷⁹

79 Transit rates as set out in Service Schedule 104 of the eircom RIO Price List, version 2.08, 12/7/07.

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4.70 ComReg was of the view that, in the absence of regulation, it was unlikely that a transit operator with a consistently high market share of over 70% and with no obvious competitive constraint being exerted by existing competitors would be constrained in setting its transit prices. This view was further supported by consideration of barriers to entry/expansion and the scope for potential competition and countervailing buyer power (as outlined below). In the absence of significant constraints from either existing or potential competitors and/or strong buyers in the relevant market, there was convincing evidence that eircom would, in the absence of regulation, have the ability to set prices above the competitive level since there was insufficient competitive constraint on eircom's pricing behaviour.

Views of Respondents

4.71 None of the respondents commented in relation to ComReg's individual assessment of these factors although all respondents commented on the conclusions of the market analysis as presented in 4.111 below.

Conclusion

- 4.72 ComReg analysed market share data over six periods from H1 2004 to H2 2006 and also updated the market share data for Q1 2007. eircom's share of transit traffic has remained relatively stable above 70% over this period, with a HHI market concentration of just under 6000. This is not surprising given eircom's high share of call origination traffic. eircom's position of strength in this market is underlined by the fact that its share of transit traffic remains high despite the fact that self-supply by OAOs is included, effectively inflating the OAO market share.
- 4.73 An assessment of existing competition would indicate that, to a sufficient extent, eircom is in a position to act independently of its existing competitors. BT's market share has remained relatively low (declining from 19% in H1 2004 to 14% in H2 2004 and H1 2005 and rising to only 15% over the next three periods and to 18% in Q1 2007) and is not likely to experience a significant increase over the current review period in light of the changes in transit of mobile traffic as outlined above (paragraph 4.65) and the findings of the barriers to entry/expansion and potential competition section below. Furthermore, no obvious pricing pressure has been exerted by OAOs to date.

Barriers to entry/expansion and potential competition

Consultation proposal

- 4.74 In the initial review, ComReg analysed actual and potential barriers to entry in the transit market. In the current review, ComReg developed this analysis further taking account of developments in the market over the intervening period.
- 4.75 In the current review in order to assess the potential for a new entrant or for smaller existing operators to constrain eircom's commercial behaviour, ComReg analysed both barriers to new entry and barriers to existing operators expanding in the relevant market (i.e., barriers to expansion). This involved looking at economies of scale and scope, control of infrastructure not easily replicated, the level of market maturity and barriers to switching, vertical integration and the

overall scope for potential competition over the period of review. It concluded as detailed below that barriers to entry and expansion were significant and as such potential competition was unlikely to occur on a significant scale over the period of the review.

Sunk costs, Economies of scale and scope

- 4.76 According to the Explanatory Memorandum to the Relevant Markets Recommendation:
 - "...high structural barriers may be found to exist when the market is characterised by substantial economies of scale, scope and density and high sunk costs. Such barriers can still be identified with respect to the widespread deployment and/or provision of local access networks to fixed locations".80
- 4.77 Economies of scale generally refer to the cost advantage which a large-scale operator may have over a smaller operator in the situation where the marginal cost of production decreases as output quantity increases. Economies of scope refer to the potential efficiencies which may be gained through supplying a range of goods and services. In *United Brands v. Commission* the ECJ explicitly referred to economies of scale and irrecoverable costs of entry as factors indicating dominance.⁸¹
- 4.78 It was noted that there were significant costs associated with entry into the transit market. Most of these would be sunk costs, as such costs would not be recoverable if the entrant decided to, or was forced to, exit the market. Significant sunk costs would serve to create an asymmetry in the market. In that regard, the OECD's 2005 report on Barriers to Entry notes that in some circumstances it is more difficult for new entrants to break into a market than it was for the incumbent that was the first firm to enter and that "when a market is already occupied by an incumbent potential entrants might face an entrenched brand or brands, as well as demand that is insufficient to permit efficient operation". 82 A potential entrant has to consider whether prices would be high enough ex post entry to recover sunk costs.
- 4.79 In order for a new entrant to offer transit services it must first achieve interconnect with the primary exchanges of other operators. While it may be relatively feasible to interconnect with a number of fixed OAOs whose primary exchanges are primarily located in Dublin, the wide dispersion of the eircom primary nodes requires significant sunk costs for an OAO to achieve widespread interconnection at the local level. In addition, to date, only one OAO (BT) has achieved direct interconnection with the MNOs. An OAO would likely be first required to negotiate widespread interconnection with eircom and OAO primary nodes incurring the associated significant sunk costs, to render it worthwhile for a MNO to negotiate a direct interconnect agreement with that OAO. The significant sunk costs associated with such entry mean that marginal costs per

⁸⁰ Commission Recommendation, On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services page 10.

⁸¹ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, para. 122.

⁸² OECD, (DAF/COMP(2005)42), March 2006, Barriers to Entry, Paris, p. 22.

unit of output fall with increasing production. By producing above the level that a new entrant might be able to produce at, eircom could ensure lower unit costs than the entrant. As a result a new entrant's cost disadvantage vis-à-vis eircom is likely to be significant as the new entrant could not enjoy the economies of scale enjoyed by the incumbent. The mature nature of the market further reinforces the extent to which economies of scale pose a barrier to entry as entry is less likely in a static or declining market. New entry and expansion by smaller existing operators is more difficult in a mature or declining market as those operators would need to entice customers away from the established incumbent. This is further hampered where barriers to switching also exist as is considered further below.

- 4.80 Further, in relation to economies of scope, there may be significant overlap in wholesale and retail call products that could be provided by the incumbent using the same infrastructure, (e.g. at the wholesale level the network could be shared across origination, transit and termination of calls to fixed lines, calls to mobiles and calls to NTCs). This could serve to deter entry into the wholesale transit market where new entrants could face the prospect of entering several markets simultaneously in order to achieve similar cost savings to the incumbent.
- 4.81 ComReg's conclusion was that eircom enjoyed significant economies of scale and scope in the transit market which acted as a barrier to entry to this market. In addition, it was more difficult for new entrants or smaller existing operators to exploit the relevant economies of scale or scope since other barriers to entry or expansion existed. For example, as discussed below, the mature nature of the market and the existence of barriers to switching reinforced the extent to which economies of scale and scope hindered new entry and expansion.

Control of infrastructure not easily replicated

4.82 This indicator refers to a situation in which certain infrastructure is:

- Necessary to produce a particular product/service,
- Exclusively or overwhelmingly under the control of a certain undertaking, and
- There are high and non-transitory barriers to substituting the infrastructure in question.
- 4.83 According to the SMP Guidelines, a network operator can be in a dominant position if the size or importance of their network affords them the possibility of behaving independently from other network operators. Ownership of a significant infrastructure may confer an absolute cost advantage on the incumbent and, as demonstrated in the previous section, the cost and time involved for new entrants to replicate the infrastructure in question may pose a significant barrier to new entry. In that regard, ComReg noted that eircom had control over infrastructure that was not easily duplicated and its transit network was used by the vast majority of purchasers of fixed transit services in Ireland for the provision of retail calls to end users. It was noted, however, that two fixed operators had built out to more than half of the eircom primary exchanges;

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⁸³ SMP Guidelines, paras 81-82.

although the next largest fixed operator had only three exchanges compared to eircom's 15 tandem exchanges.

- 4.84 It is also important to note that one of the fixed operators referred to above has achieved relatively deep interconnect with eircom's primary exchanges which suggests that a certain level of replication has taken place. However, ComReg's assessment indicated that the high sunk costs and time involved in network build rendered it unlikely that further significant build by new or existing operators would take place over a two year timeframe at a minimum. Although some alternative operators did have limited spare capacity (in certain geographic areas), they would not have spare capacity to meet the needs of all OAOs due to the costs of keeping such capacity spare. Thus, physically moving large volumes of traffic from one provider to another is problematic. In addition, one relatively large alternative operator believed that it would take 6 months delivery time to augment its capacity to provide additional transit services and was unlikely to do so unless there was a large non-transitory increase in available margins. Furthermore, as noted in paragraphs 4.57-4.66 above, despite a relatively significant level of interconnection with eircom's exchanges by an alternative provider, eircom's transit network continues to be used by the vast majority of purchasers of fixed transit services in Ireland. As shown further in paragraphs 4.86-4.92 below, it was also not considered that customers would switch significant volumes to alternative transit providers over the period of this review.
- 4.85 ComReg's conclusion was that eircom controlled infrastructure that was not easily replicated and which acted as both a barrier to new entry and to existing transit operators expanding in the transit market. While it is recognised that one alternative operator has achieved relatively deep interconnect with eircom's exchanges, its network coverage and capacity still does not match the ubiquity of eircom's and would need to be augmented to meet a significant increase in demand. Furthermore, as discussed in the following section, it was not anticipated that wholesale customers would switch significant volumes of their fixed transit purchases to alternative transit providers over the period of this review.

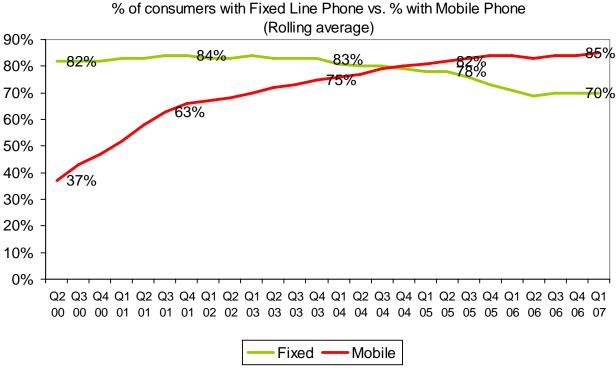
Market maturity and Barriers to switching

4.86 It was noted that the level of market maturity and switching costs were also relevant factors in assessing the question of whether an undertaking(s) enjoyed a position of SMP in the relevant market. As outlined above, entry and expansion is more likely to be feasible in a growing or expanding market⁸⁴. Where, however, a market is relatively mature or declining, then entry and expansion will be more difficult as the new entrant's customer base will have to be won from a firmly established or entrenched incumbent. The presence of customer switching costs is further likely to reinforce the extent to which the level of market maturity acts as a barrier to entry and expansion.

⁸⁴ In *Meridian v Eircell*, for example, Justice O'Higgins considered that in a growing market there will be particularly strong incentives on the part of firms to acquire more market share in the expectation that they will subsequently be able to benefit from that market share. High Court Judgment O'Higgins, J., 05 April 2001.

4.87 It was found that fixed line ownership appeared to be declining in more recent years. Consumer survey data indicated that since 2003 there had been a trend towards reduced fixed lined subscriptions within the home (see Figure 4.7).

Figure 4.7: Percentage of Consumers with a Fixed Line Phone in Ireland



Source: ComReg Doc 7/32

- 4.88 The extent to which the mature nature of the market acted as a barrier to entry was further underlined by the empirical evidence. As discussed below, a key factor cited by some respondents (in their response to the data gathering exercise⁸⁵) in deciding not to enter the fixed wholesale transit market was the maturity of the market. As volumes were declining they did not consider it good commercial strategy to enter the market. The static or reducing level of demand in this market also implied that existing operators had to win significant volumes from eircom's customers in order to expand in this market.
- 4.89 In addition to the fact that demand was experiencing a downward trend, consumers' reluctance to switch suppliers could further act as a potential barrier to new entry and expansion by smaller existing rivals. In the transit market, since most wholesale customers were already connected to eircom, they would have to be located at or near an alternative transit provider to be able to switch. Otherwise the costs of directly interconnecting with an alternative provider could be prohibitive. Some operators stated that in certain instances the required build-out of extra capacity to alternate providers could outweigh the potential cost-saving. In addition, the wide dispersion of the eircom primary nodes would act as a barrier to switching because the purchaser would be required to seek alternative providers who could offer connectivity in diverse locations around the country. Furthermore, an operator noted that when switching provider there

⁸⁵ See paragraph 2.3 above for further details of ComReg's data gathering exercise.

- would be a need to consider the resultant idle capacity already built out to eircom. To overcome this, in some cases OAOs have had to provide free interconnect paths to the customer.
- 4.90 It was also noted that agreements were typically 12 months in duration and as such were unlikely in themselves to significantly inhibit switching. However, where there was no existing commercial relationship, the need to negotiate new interconnect/service level agreements could also constitute a barrier to switching and changing provider could take a number of months.
- 4.91 Further, given eircom's widespread interconnection and that it represented over 90% of all fixed lines one operator indicated in its response to the data gathering exercise that it may be reluctant to reduce its reliance on eircom for the provision of fixed wholesale transit services. In addition, that operator noted that as the volumes to other fixed networks were smaller, it made commercial and practical sense to let eircom do the onward routing where necessary. Furthermore, as transit represented only a small proportion of the overall cost of a call the operator considered there was less commercial incentive to actively seek alternative providers. Two other operators also noted that since the majority of fixed traffic terminated on eircom's network, it was more efficient to send fixed traffic to eircom rather than use other operators to transit calls destined to be terminated on eircom's network.
- 4.92 ComReg concluded that the mature nature of the market rendered new entry and expansion by smaller existing rivals considerably more difficult. ComReg also found that there were barriers to wholesale customers switching provider in this market, which further contributed to the barriers to entry and expansion for new and smaller existing suppliers of transit services. A number of operators contacted as part of ComReg's data gathering exercise indicated that they had no plans to significantly reduce their use of eircom's fixed transit service. This was largely attributable to eircom's widespread interconnection with other fixed and mobile networks, the fact that it represented over 90% of all fixed lines with the majority of fixed traffic terminating on its network, the time and cost involved in building extra capacity out to alternative providers, and the need for wholesale customers to consider the capacity already built out to eircom. Furthermore, given that transit only accounted for a small proportion of the overall cost of a call the commercial incentive for wholesale transit customers to seek alternatives to eircom was further reduced.

Vertical integration

4.93 Vertical integration, while normally efficient, can make new market entry harder. This is where the presence of a firm at multiple levels in the production or distribution chain increases the possibilities for it to foreclose one or more markets and/or where prospective new entrants may perceive the need to enter two or more markets simultaneously to pose a viable competitive constraint to the integrated operator. In *United Brands v Commission* the ECJ referred to the fact that UBC was vertically integrated to a high degree from production through to transport and marketing and stated that this provided it with a significant competitive advantage, namely commercial stability. ⁸⁶

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⁸⁶ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, paras 69-81, 85-90.

- 4.94 It was noted that eircom was a vertically integrated utility in that, while it represented an important undertaking in the upstream interconnection markets, it also had a significant presence in downstream retail markets. In the absence of regulation, eircom could have an incentive to cease supplying transit services or to supply such services on less favourable terms which could affect competitive conditions in downstream markets. In turn, a failure or a lessening of competition at the downstream level, with its associated negative impact on OAO revenue streams, would limit the ability of OAOs to invest in infrastructure and enter the upstream transit market.
- 4.95 In addition, eircom, as a vertically integrated operator, may enjoy significant efficiencies arising from its presence in the upstream and downstream markets. This may constitute a barrier to entry in that a new entrant may perceive a need to enter both the wholesale and retail markets in order to pose a viable competitive threat.
- 4.96 ComReg concluded that, in the absence of regulation, eircom's vertical integration could act to deter entry to the transit market and possibly affect competition in downstream markets.

Overall scope for entry/expansion (i.e., potential competition) over timeframe of review

- 4.97 It was considered important to take into account the likelihood that undertakings not currently active on the relevant product market may in the medium term decide to enter the market. It was also viewed as necessary (particularly in the context of the wholesale transit market where there are a number of smaller existing transit providers) to determine whether existing providers were likely to expand or grow to such an extent as to pose a viable competitive alternative over the period of the review. This was because the ability of an undertaking to act independently could be constrained by the potential for new competitors to enter or for smaller existing competitors to grow on a sufficient scale so as to pose a viable competitive alternative over the medium term. However, the absence of any obvious effective constraint from either new or existing operators over the period of this review would suggest that eircom had the ability to act independently suggesting the existence of a dominant position.
- 4.98 As regards the scope for any further new entry into this market, it was noted that there were significant sunk costs and economies of scale, scope and density associated with entry. As such, a number of operators indicated their unwillingness to enter this market. The fixed calls market was characterised as mature and while OAOs may have billing systems in place, transit represented only a small portion of the overall cost of a call, and there would need to be a significant increase in margins before they would consider offering third party transit. As volumes were falling they did not consider it good commercial strategy to enter this market.
- 4.99 In respect of direct interconnection, MNOs were increasingly interconnecting with each other for mobile-to-mobile traffic and as such were reducing their reliance on fixed network operators for transit of such calls. However, they did typically continue to use fixed network operators for mobile transit overflow purposes and they still required interconnection with fixed network operators for mobile-to-fixed transit. This tendency towards direct interconnection for

mobile-to-mobile calls was considered unlikely to have a significant effect on competition in the fixed transit market. It may reduce the overall size of the revenues available to fixed transit operators such as eircom and BT who have agreements with the mobile operators. However, it was considered unlikely to have a significant impact on eircom's position in this market vis-à-vis other fixed transit providers given that they would all be potentially receiving lower mobile-to-mobile traffic volumes.

- 4.100 As regards the scope for existing transit providers to expand on a significant scale over the period of this review, it was noted that in the transit market no fixed network operator other than eircom could provide general connectivity to all networks in Ireland. The mature nature of the market suggested that to grow or expand in the wholesale transit market, existing operators must win significant volumes of traffic from eircom's customers. However, the presence of barriers to switching from eircom suggested that alternative transit providers were unlikely to grow or expand on a significant scale over the timeframe of the review. The ubiquity of eircom's network was cited as a key factor by a number of respondents to the data gathering exercise making it unlikely that operators would switch in significant numbers to alternative providers over the review period. The majority (94%) of fixed line calls originated on eircom's network which afforded it a significant advantage in fixed-to-fixed and fixed-to-mobile transit reducing the commercial incentive to use other transit operators. Further, the fact that transit only accounted for a small proportion of the overall cost of a call and the limited cost savings in comparison with the cost of the required build-out of capacity to alternative providers also served to reduce the commercial incentive for wholesale transit customers to seek alternatives to eircom's transit service. As a result, a significant number of operators indicated they had no plans to reduce their use of eircom's transit service for fixed calls significantly in the foreseeable future.
- 4.101 ComReg's view was that there appeared to be limited scope for further new entry or expansion in the relevant market over the period of the review. The lack of a viable existing or potential competitive alternative in the transit market over the timeframe of the review suggested that, in the absence of regulation, eircom would be in a position to act independently when determining its commercial behaviour. This was characteristic of the existence of a dominant position. However, to complete the analysis ComReg also examined the scope for any strong buyers to exert a possible constraint on eircom's behaviour over the period of the review.

Views of Respondents

4.102 None of the respondents commented in relation to ComReg's individual assessment of these factors although all respondents commented on the conclusions of the market analysis as presented in 4.111 below.

Conclusion

4.103 Arising from the above detailed analysis, ComReg's conclusion is that significant barriers to entry/expansion exist in the wholesale market for transit services. eircom is unlikely to be effectively constrained by either a new entrant or a smaller existing competitor over the timeframe of the current market review. This is because of barriers to entry/expansion associated with economies of scale and scope, control of infrastructure not easily replicated, the

mature nature of the market, barriers to customers switching from eircom, and eircom's vertically integrated structure. As such, there is limited prospect of a viable competitive alternative to eircom emerging over the period of the review.

Countervailing Buyer Power

Consultation proposal

- 4.104 The existence of customers with a strong negotiating position, which is exercised to produce a significant impact on competition, can potentially restrict the ability of providers to set their prices and/or other commercial terms independently of their customers. It was recognised that this could occur in the transit market if, for example, a particular purchaser were sufficiently important to eircom to influence the price it was charged. It was noted that the conditions where one might expect to observe CBP could be when a customer accounted for a large proportion of eircom's total output, was well-informed about alternative sources of supply, and was able to switch to other suppliers at little cost to itself. It may even be that the customer was in a position to self-supply the relevant product. ComReg assessed the effect that these potential alternatives could have in constraining eircom's pricing behaviour.
- 4.105 In the transit market it appeared that no one purchaser was sufficiently large to influence the price that eircom could charge. Furthermore, absent regulation, OAOs could not credibly threaten to respond to a price increase from eircom via self-build or switching to an alternative provider for the provision of a significant portion of their transit needs without incurring significant sunk costs in network build. In addition, a number of operators indicated that they did not have any plans to significantly reduce their use of eircom's transit services in the foreseeable future. This was linked to eircom's unrivalled ability to offer a ubiquitous transit service connecting to all fixed and mobile networks in Ireland. Further, as outlined above in paragraphs 4.89-4.92, a number of switching costs were identified that would reduce the likelihood that significant numbers of wholesale transit customers would switch from eircom over the review period.
- 4.106 Finally, the presence of strong buyers could only serve to counter a finding of dominance if it was likely that, in response to prices being increased above the competitive level, the buyers in question would pave the way for effective new entry or lead existing suppliers in the market to significantly expand their output so as to mitigate against the price increase. In fact, a number of the respondents to the data gathering exercise indicated a general reluctance to reduce their reliance on eircom for the provision of their fixed wholesale transit services over the timeframe of this review.

Views of Respondents

4.107 It is of note that no comments were received from respondents with regard to this analysis.

Conclusion

4.108 Following on from its assessment as outlined above, ComReg's conclusion is that there is insufficient CBP in this market to restrict the ability of eircom to set its prices and/or other commercial terms to an appreciable extent independently of its customers.

Overall Conclusion on market analysis: National Transit

Consultation Proposal

- 4.109 In this updated review, ComReg has analysed developments in the structure of the market since the initial review, and has re-examined factors such as CBP and the level of barriers to entry and expansion in assessing eircom's ability to act independently of its competitors and customers.
- 4.110 ComReg noted that eircom's market share had remained high and stable in excess of 70%, and had not been appreciably mitigated by other factors such as CBP or a lowering of barriers to entry/expansion. Despite regulation, eircom's dominance of the transit market was seen to have persisted. ComReg's analysis showed that the barriers to entry/expansion in the wholesale transit market remained high and non-transitory and were expected to remain so over the timeframe of the review. The empirical evidence also showed that further new entry was unlikely to occur on a significant scale nor was there likely to be a significant switch to existing alternate providers or reduction in the use of eircom's transit services in the foreseeable future. As a result, ComReg's conclusion is that eircom has SMP in the market for wholesale transit services in Ireland.

Consultation Question

Q. 7. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response.

Views of Respondents

- 4.111 Two of the three respondents agreed with ComReg's findings in relation to the market analysis exercise. One of these respondents expressed the view that eircom's dominance of the market was entrenched and would not change in the foreseeable future without a significant structural change to the market. A second noted that the very high market share held by eircom in the context of high entry barriers caused by the wide dispersion of the eircom primary nodes and the prohibitive costs of replicating the SMP operator's network indicated that, in the absence of regulation, eircom was in a position to act to a significant degree independently of its suppliers, customers and competitors in the relevant market. Further, they commented that while BT had extensive but incomplete connectivity to the majority of the eircom primary nodes they considered that this was not likely to act as a significant competitive constraint on eircom in the time period of the current market review.
- 4.112 However, one of the respondents disagreed on a number of points as follows. In respect of the 'trunk' transit market definition advanced by the respondent (see paragraph 3.107) they claimed that this market is already effectively competitive as there are a variety of options for OAOs wishing to purchase transit services between two primary interconnection points:-
 - Direct interconnection with the relevant eircom primary exchanges;
 - Purchase of trunk transit services from eircom; and,
 - Purchase of transit services from OAOs with deeply interconnected networks that currently provide such wholesale services.

- 4.113 In terms of the proposed 'pure' transit market definition the respondent reiterated its view that the transit market is made up of a number of different services characterised by very different levels of competition. According to the respondent, the main categories are:
 - Transit to fixed domestic;
 - Transit to mobile; and,
 - Transit to NTC.
- 4.114 The respondent noted further that the last two were clearly competitive in that several new entrants have built substantial interconnect capacity to the MNOs and to international transit and termination. Such operators offer service below the blended cost oriented rate charged by eircom. In addition, they noted that the competitive environment for transit to fixed domestic networks is much more mixed and there are a number of smaller domestic operators that can only be reached for call termination by transiting over the eircom network.

Conclusion

- 4.115 ComReg notes firstly that it does not agree with the 'trunk' transit market definition proposed by the respondent above (see paragraphs 3.103-3.111). Notwithstanding this, ComReg has reviewed the three options advanced by the respondent for OAOs purchasing transit services between two primary interconnection points to see if they have implications for the broader transit market. In that regard, the respondent's conclusion that the market is effectively competitive because there are alternatives to routing a call through eircom relies on two key presumptions. First, that OAOs are likely to engage in widespread direct interconnection with eircom's primary exchanges over the period of this review so as to reduce their use of eircom's transit service to a sufficient degree. Second, that there are OAOs who are already deeply interconnected with eircom's primary exchanges and to whom transit customers could switch with relative ease and would be reasonably likely to switch for a significant volume of their transit needs. The respondent has, however, not provided any supporting evidence to show that either of these two key presumptions hold in practice, i.e., it has not demonstrated that OAOs would actually avail of these alternative routing options to a sufficient extent such as to exert a significant competitive constraint on eircom over the forthcoming review period.
- 4.116 The first routing option (i.e., direct interconnection with eircom's primary exchanges) fails to address ComReg's analysis above (paragraphs 3.91-3.92) where it highlighted that direct interconnection required substantial investment, commitment and planning. ComReg's analysis indicated further that the costs involved in replacing switched/routed transit with direct interconnection or point-to-point capacity were generally prohibitive and only feasible on a few individual routes where high traffic volumes would justify the expense. As noted further in ComReg's analysis (paragraph 4.79), the wide dispersion of the eircom primary nodes requires significant sunk costs for an OAO to achieve widespread interconnection at the local level. Given the substantial costs and time associated with such direct connections, they are unlikely to pose an effective competitive alternative for the purchase of transit services over the period of this review. Furthermore, information from a number of operators in response to the data gathering exercise indicated that they did not see their demand for fixed transit services falling significantly in the foreseeable future

- nor did they view direct interconnection as an effective alternative to the purchase of transit services (paragraph 3.91).
- 4.117 The second routing option (i.e., purchasing trunk transit services from eircom) involves eircom as the relevant transit provider. It does not therefore represent an alternative for transit customers.
- 4.118 The third routing option (i.e., purchasing transit services from OAOs with deeply interconnected networks) fails to address the ubiquitous nature of eircom's network and the potential barriers to customers switching to alternative transit providers over the period of this review. While BT is the next largest transit operator, its network does not match the ubiquity of eircom's network and substitution to BT's network for wholesale transit purposes has been moderate to date. This is reflected in the fact that its market share has averaged 15% over the period H1 2004 - H2 2006 (see paragraphs 4.57-4.61). Furthermore, ComReg's analysis indicated that it did not expect this market share would increase significantly over the period of this review (paragraph 4.65). ComReg's assessment considered further the mature nature of the transit market and that in order to grow or expand in this market, BT would have to win significant volumes from eircom's customers going forward (paragraphs 4.86-4.92). It found, however, that there were barriers to wholesale customers switching from eircom to alternate providers over the review period. On the basis of eircom's widespread interconnection, the fact that it represented over 90% of all fixed lines and that transit accounted for only a small proportion of the overall cost of a call, it was considered unlikely that customers would switch sufficient transit volumes to OAOs over the forthcoming review period. The limited cost savings in comparison with the cost of the required build-out to alternative providers reduced the commercial incentive for transit customers to seek alternatives to eircom. Furthermore, in response to the data gathering exercise some operators appeared reluctant to reduce their reliance on eircom for the provision of their fixed transit services (paragraphs 4.89-4.92).
- 4.119 Further to the above analysis, ComReg does not consider that transit customers will switch to a sufficient extent from transiting via eircom to the alternative routing options presented above such as to appreciably constrain eircom over the period of this review. While there may be some scope for replacing their purchases of transit from eircom with direct interconnection and/or transit via OAOs, ComReg does not consider that this will take place to a sufficient extent as to constrain eircom from acting independently of its competitors and customers over this review.
- 4.120 In respect of the 'pure' transit market definition advanced by the respondent above and its claim that this should be further segmented according to the call type and that the transit to mobile and transit to NTC market segments were clearly competitive (see paragraphs 4.113-4.114 above), ComReg notes firstly that it does not accept the pure transit market definition as proposed by the respondent (see paragraphs 3.112-3.127 above). Notwithstanding this, ComReg has examined the respondent's statement that transit to mobile numbers and transit to NTCs were clearly competitive in that several new entrants have built substantial interconnect capacity to the MNOs and to international transit and termination. It is not clear how building interconnect capacity to international transit and termination influences the provision of transit to NTCs. Thus,

ComReg focused its assessment of the response on the claim that several new entrants have built substantial interconnect capacity to the MNOs.

- 4.121 In that regard, ComReg's assessment above (see paragraph 4.79) indicated that only one OAO (BT) had achieved direct interconnection with the MNOs. An OAO would likely be first required to negotiate widespread interconnection with eircom and OAO primary nodes incurring significant sunk costs to render it worthwhile for a MNO to negotiate a direct interconnect agreement with that OAO. Furthermore, as eircom had ubiquitous coverage with the majority of traffic terminating on its network and there were obstacles to customers switching to alternative transit providers, it was considered likely that many operators would continue to use eircom for a significant portion of their fixed traffic rather than build extra capacity to other fixed networks. Indeed, substitution to BT's network for wholesale transit purposes has been moderate to date as reflected by its market share. In addition, as noted in the section on market maturity and barriers to switching above, some transit customers appeared reluctant to significantly reduce their use of eircom's transit service over the period of this review (see paragraphs 4.89-4.92).
- 4.122 Finally, ComReg notes the respondent's claim that the competitive environment for transit to fixed domestic networks is much more mixed and there are a number of smaller domestic operators that can only be reached for call termination by transiting over the eircom network. This would appear consistent with ComReg's assessment of the ubiquitous nature of eircom's transit network above.

Conclusion

4.123 Following on from its analysis of the relevant SMP criteria (i.e., existing competition, barriers to entry/expansion and potential competition, and CBP), ComReg is of the view that eircom enjoys a position of SMP in the national transit market.

Market analysis: Wholesale International Transit (susceptibility to ex-ante regulation)

- 4.124 In the initial review, ComReg proposed that international transit services did not fall within the same relevant market as national transit services. ComReg noted that all respondents agreed that the markets were separate. ComReg also proposed that the market was not susceptible to *ex ante* regulation. However, additional material which had been provided during the consultation process prompted ComReg to revisit its overall conclusions on the level of competition in the international transit market. ComReg therefore indicated its intention to carry out a further national consultation.
- 4.125 In the current review, ComReg defined a wholesale market for outgoing international transit services. As the proposed market was not listed in the Relevant Markets Recommendation, the Explanatory Memorandum of the Recommendation stated that it was necessary that ComReg assess the market under three criteria to establish whether it should be subject to *ex ante* regulation.⁸⁷ Such an assessment focuses on the general structure and

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⁸⁷ See pages 9 - 12.

characteristics of the market in order to identify those markets the characteristics of which suggest that they might be potentially susceptible to *ex ante* regulation.

4.126 The three criteria are:

- 1. Whether a market is subject to high and non-transitory entry barriers. To meet this criterion, there must be significant barriers to entry;
- 2. Whether a market has characteristics such that it will not tend over time towards effective competition. To meet this criterion, it must be proven that the market does not tend towards effective competition; and
- 3. The sufficiency of competition law by itself (absent *ex ante* regulation). To meet this criterion, it must be shown that competition law cannot adequately address any potential market failure.
- 4.127 The market must meet all three criteria to justify regulation.
- 4.128 Given that an assessment of the three criteria referred to in the Relevant Markets Recommendation must be a prospective one and as it would constitute a preliminary step in the full market analysis of the outgoing international transit market, ComReg must conduct its assessment within a set review period. ComReg was of the view that it was appropriate to adopt at a minimum a two year period for its prospective assessment.
- 4.129 In carrying out its analysis ComReg adopted a 'modified greenfield approach' in that (i) all regulations which were unrelated to SMP were assumed to be maintained, (such regulations included specific obligations imposed on the universal service provider (USP), such as a uniform tariff requirement); and (ii) all SMP related regulations which were unrelated to the outgoing international transit market were assumed to be in place. As such, the analysis was carried out in the presence of some wholesale regulation including, USP regulation and SMP regulation in adjacent markets.

First Criterion: Barriers to entry and to the development of competition

Consultation proposal

4.130 In the new draft Recommendation on Relevant Markets ("the Draft Recommendation"), the European Commission expands on its views in relation to establishing each criterion. The first of the three criteria that must be established by NRAs in order for a market to be potentially susceptible to *ex ante* regulation is that, in the absence of regulation, the market is subject to high and non-transitory entry barriers.

 $^{^{88}}$ http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review/recommendation_final.pdf - Pages 7-12

- 4.131 The Commission identifies two types of barriers to entry and to the development of competition in the electronic communications sector: (a) structural barriers; and (b) legal or regulatory barriers.⁸⁹
- 4.132 A structural barrier to entry exists when, given the level of demand, the state of the technology and its associated cost structure are such that they create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter.
- 4.133 For instance, high structural barriers may be found to exist when the market is characterised by:
 - Substantial economies of scale, scope and density; and
 - High sunk costs.
- 4.134 The Draft Recommendation notes that legal or regulatory barriers are not based on economic conditions, but result from legislative, administrative or other state measures that have a direct effect on the conditions of entry and/or the positioning of operators on the relevant market⁹⁰. One example is access to spectrum. ComReg is not aware of any legal or regulatory barriers (such as the availability of spectrum or other non-SMP obligations), which act as a barrier to entry into the outgoing international transit market.
- 4.135 ComReg therefore analysed structural barriers under the following headings:
 - a) Level of sunk costs required for entry;
 - b) Economies of scope, scale and density;
 - c) Control of infrastructure not easily duplicated;
 - d) Technological advantages or superiority; and
 - e) Barriers to switching for customers.
- 4.136 In this respect ComReg therefore examined whether the industry was likely to/had experienced new entry and whether such entry had been or was likely in the future to be sufficient to limit any market power.

(a) Level of sunk costs required for entry

- 4.137 ComReg analysed actual and potential barriers to entry in the outgoing international transit market.
- 4.138 An initial analysis carried out by ComReg found that there were barriers to entry in international transit services although they were not insurmountable.⁹¹

⁸⁹ Ibid, pages 9-10; It is also possible that certain (strategic) barriers to entry may arise as a result of the actions and reactions of the incumbent to new entry. Where the incumbent engages in behaviour directly aimed at retaliating against and/or deterring new entry this may also need to be taken into account when examining the height of entry barriers. The scope for such strategic behaviour to arise and to negatively affect existing or potential competition is, however, taken into account in the discussion on the third criterion below.

⁹⁰ See page 10 of the Commission Recommendation in accordance with Directive 2002/21/EC.

⁹¹ See ComReg Document No. 04/106a, p.38

- 4.139 From the data collected as part of this current market review, there was evidence to suggest that while there were some structural barriers to entry into this market, they were not so substantial so as to significantly deter entry. It was noted that since liberalisation, a number of competitors had entered the outgoing international transit market. At the time of the publication of the consultation paper, there were nine operators active in the outgoing market, with six active in the merchant market.
- 4.140 In order to enter the outgoing international transit services market an operator needed an international gateway, international transmission capability and agreements with terminating operators in foreign countries. Interconnection required with the relevant national network may be minimal and it appeared possible to operate using just one international gateway switch. In addition, many providers of outgoing international transit services connected their Irish operations with their UK operations using a leased line, for example, from where they could then use their existing infrastructure to transit calls to international destinations. These requirements would not appear to pose an insurmountable barrier to entry, particularly for those operators who already had an international presence.

(b) Economies of scope, scale and density

- 4.141 Economies of scale generally refer to the cost advantage which a large-scale operator may have over a smaller operator in the situation where the marginal cost of production decreases as the output or quantity produced increases. Economies of scope refer to the potential efficiencies which may be gained through supplying a range of goods and services, while economies of density refer to potential efficiencies associated with supplying customers who are geographically concentrated.
- 4.142 The theoretical economic literature generally agrees that there are economies of scale, scope and density in the access network under monopoly or close to monopoly supply conditions. Discussing the economies of established national networks, it can be noted that for some network elements, in particular local loop, the cost of duplicating an incumbent's facility may be prohibitively high. Further, a new entrant must often cover a much higher long-run total service incremental cost, which has to be recovered from a smaller customer base. Another advantage arises from vertical integration, where the incumbent can achieve economies through its ownership of local, national and international networks, and from areas such as network planning, operations and maintenance.
- 4.143 ComReg's conclusion was that economies of scale, scope and density did not act as a major constraint such as to prevent entry into the outgoing international transit market.
- 4.144 For example, there were a number of operators active in the outgoing international transit market, which had a global presence and may be in a

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 $^{^{92}}$ See for example, the World Bank's "Telecommunications Regulation Handbook" ed by McCarthy Tetrault.

position to gain a viable customer base (i.e., a minimum efficient scale) within a sufficiently short period of time so as to benefit from economies of scale. In addition, a number of respondents to the Data Direction considered that no one international access provider had a significant competitive advantage over other providers.⁹³ Further, the number of operators active in the outgoing market suggested that the minimum efficient scale was not so considerable as to pose a significant barrier to new entry into this market (as can be seen below, there were four OAOs accounting for over 50% of the outgoing international transit market).

(c) Control of infrastructure not easily duplicated

- 4.145 As outlined above, in order to enter the outgoing international transit services market an operator needed an international gateway, international transmission capability and agreements with terminating operators in foreign countries. Interconnection required with the relevant national network may be minimal and it appeared possible to operate using just one international gateway switch.
- 4.146 As such, ComReg considered that control of infrastructure not easily replicated did not act as a significant structural barrier to entry in this market.

(d) Technological advantages or superiority

4.147 With regard to the operation of the outgoing international transit market, ComReg indicated that it had no reason to believe that any entity possessed a significant technological advantage.

(e) Barriers to switching for customers

- 4.148 ComReg examined whether barriers to entry/expansion existed in the market as a result of switching barriers among users.
- 4.149 Examples of costs that a customer may incur as a result of switching provider could include: the threat of a penalty clause in a long-term contract, an upfront connection fee, the time/effort required to switch, possible service interruption etc.
- 4.150 However, evidence from operators (in response to the Data Direction) suggested that switching barriers did not present a significant difficulty in the context of this market.
- 4.151 A number of users of third party outgoing international transit services indicated that they had a choice of operator and were able to switch from one operator to another with relative ease. Indeed, some operators purchased from a number of different international transit providers at any one time. One operator stated further that it determined its carriers for particular routes on a monthly basis which would suggest low switching costs.

Consultation Question

Q. 8. Do you consider that the outgoing international transit services market is not subject to high and non-transitory entry barriers (in the presence of regulatory measures in other wholesale markets)? Please substantiate your response.

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⁹³ Operator responses to the International Transit Data Direction issued by ComReg, 18 July 2005

Views of Respondents

4.152 It should be noted that all respondents agreed with ComReg's view that the outgoing international transit services market was not subject to high and non-transitory entry barriers. One of these respondents noted that the market was already served by a number of players and that this demonstrated that the market did not pose insurmountable barriers to entry. A second stated that no significant structural barriers to entry were present. The infrastructural and other elements required for entry were modest and could be readily replicated. Further, they agreed that from the perspective of buyers of outgoing international transit services, switching costs were low.

Conclusion

4.153 ComReg concludes that while barriers to entry exist, the evidence suggests that they are not insurmountable. Therefore the view is that the market does not pass the first criterion of the three criteria test and as such should not be subject to *ex ante* obligations.

Second criterion: Dynamic aspects – is there a tendency toward effective competition

Consultation proposal

- 4.154 In the event that it was found that the market was subject to high and non-transitory barriers to entry, the second criterion to be examined is whether the market has characteristics such that it will tend towards effective competition without the need for *ex ante* regulatory intervention.
- 4.155 The application of this criterion involves examining the state of competition behind any barriers to entry, taking account of the fact that even when a market is characterised by high barriers to entry, other structural factors or market characteristics may mean that the market tends towards effective competition.
- 4.156 This is the case for example, in markets with a limited, but sufficient, number of undertakings already present in the market having diverging cost structures and facing price-elastic market demand.
- 4.157 In such markets, market shares may change over time and/or falling prices may be observed. It is this structural dynamic element which may push the market to an effectively competitive outcome.
- 4.158 ComReg assessed the second criterion under the following headings:
 - a) Market share;
 - b) Existing competition;
 - c) Price developments; and
 - d) Barriers to expansion.

(a) Market Share

- 4.159 ComReg examined market shares in the international transit market. It noted that it was important to consider the behaviour of market shares over time, as this would indicate trends in the market and as such contribute to an assessment of whether or not the market may tend towards effective competition over the lifetime of the review.
- 4.160 ComReg obtained traffic information from operators in July 2005. Accordingly ComReg analysed market share data for H1 2002 to H1 2005 initially but market data was also obtained for 2006 and Q1 2007 and the view of market developments was therefore based on a period of over three years.
- 4.161 As shown by the figure below, eircom's market share of outgoing international traffic (by volume) steadily declined from 68% in H2 2002 to 39% at end of Q1 2007. It was noted that these market shares included self-supply by all operators active in the merchant market.

Wholesale International Transit (Outgoing) - Market Shares (by Volume) 80% 68% 68% 70% 61% 60% 60% of traffic Volume 52% 50% 45% 40% 39% 39% 37% 40% 36% 32% 32% 30% 20% 10% 0% H1 H2 H1 H2 H1 H2 H1 H2 H1 Q1 H₂ 2003 2003 2004 2004 2005 2005 2006 2006 2007 2002 2002 ■ eircom ■ OAOs

Figure 4.8: Market Shares in Outgoing International Transit Market

Source: ComReg

4.162 It is useful to place these market share figures in context. It should be noted that the evolution of the international traffic market since the late 1990s has seen a change from the traditional model of bilateral agreements between the originating operator and its correspondent operator in the destination country. Under this system, international carriers - largely incumbent operators - previously shared the cost and revenue for cross-border calls in line with the costly 'accounting rate regime' (i.e., for an outbound call a carrier would route

the signal onto its own international "half circuit" then transfer the call onto the matching network of its foreign partner for termination). This system was more suited to a period when carriers were typically monopolies and traffic on routes remained roughly in balance. As competition increased, many carriers have sought means to offset high settlement costs by "bypassing" the international accounting rate system, e.g., via Direct Interconnection or Voice over IP.⁹⁴

4.163 This has seen an effectively global approach taken in traffic delivery arising from some international carriers being in a position to leverage their wholly owned international infrastructure and in-country operations in their international negotiations. As such, BT Ireland, Cable & Wireless, Verizon and large international carriers have been afforded an opportunity to leverage their level of bilateral agreements and traded volumes from multiple markets in their rate negotiations.

(b) Existing Competition

4.164 The analysis of market share indicated that eircom's share of the outgoing international transit market at the end of H1 2005 was 43% by volume which represented a considerable decline from 68% in H2 2002. Updated market share data for 2006 showed a further decline from 43% in H1 2005 to 38% in H2 2006. The main competitors in the outgoing international transit services market were BT Ireland, Verizon, Cable & Wireless and Colt Telecom. It was noted that the increased level of consumer choice, relatively low customer switching costs and evidence of increasing switching activity would also appear consistent with a tendency towards effective competition in this market.

(c) Price developments

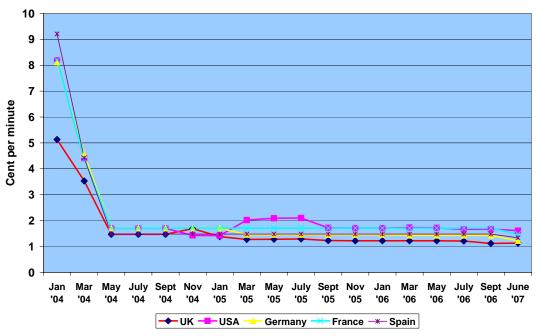
4.165 ComReg considered price developments for outgoing international transit services since January 2004 to June 2007. This analysis is illustrated in figure 4.9 below for a fixed, peak call to the five most popular destinations for outgoing international traffic from Ireland (i.e. the UK, USA, Germany, France and Spain).⁹⁵

⁹⁴ Telegeography, Global Traffic Statistics and Commentary, 2006, pp.24-7

⁹⁵ TeleGeography, Global Traffic Statistics and Commentary, 2006, p.150; for the period 2004-5 the UK accounted for 58.1% of all outgoing international traffic from Ireland, with USA traffic representing 12.1% and 2.4%, 3.2% and 2.2% for Germany, France and Spain respectively, p.150.

Figure 4.9: Development in eircom Wholesale International Access Prices

Movement in eircom Wholesale International Access Prices



Source: ComReg⁹⁶

- 4.166 ComReg noted that all such data should be considered in light of the impact of existing regulatory pricing constraints. eircom's prices were subject to regulation and any proposed price change needed to be notified to ComReg.
- 4.167 Pricing developments appeared to indicate significant adjustments in response to competitors in the outgoing international transit services market over the period Q1 2004-Q2 2007. On average the cost of international access to the five destinations declined by over 80% during this period. As such, a high degree of competitive pressure may have been exerted on prices.

(d) Barriers to expansion

- 4.168 There may be more active competition where there are lower barriers to growth and expansion. While growth and expansion is easier to achieve for individual firms (and in particular for new entrants) in growing markets, it might be inhibited in mature, saturated markets, where customers are already locked in with a certain supplier and have to be induced to switch. The higher the barriers to entry into the market, the more significant barriers to expansion will be in assessing the potential for competition, because, with high barriers to entry, competition will largely be limited to existing market players.
- 4.169 As outlined above, evidence would suggest that barriers to switching may not be significant over the period of the review. Based on OAOs' increasing market shares over time and the evidence from operators' responses to the Data Direction which indicated relatively low customer switching costs and an

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⁹⁶Source: Analysis eircom reference Interconnect Offer (RIO) Price List, Service Schedule 119 International Access, January 2004 - June 2007.

increasing level of customer switching activity, As such, ComReg concluded that there were no significant barriers to providers of outgoing international transit services growing or expanding in this market.

Consultation Question

Q. 9. Do you consider that the outgoing international transit services market has characteristics such that it will tend over time towards effective competition? Please substantiate your response.

View of Respondents

4.170 All three respondents agreed with ComReg's preliminary view that the outgoing international transit services market had characteristics such that it would tend over time towards effective competition. One respondent considered that the market was demonstrating characteristics towards effective competition as demonstrated by the existence and sustainability of multiple players with their own global connectivity in the market. Nonetheless, they considered that even though the market was tending towards effective competition there was merit in continuing to monitor the market to ensure it was working properly. A second noted that the clearly evident trend towards a decline in eircom's market share and the large magnitude of its market share decline since 2002 strongly supported this conclusion. The large decline in the price of outgoing international transit services and their current level further indicated a market that was characterised by effective competition. Further, they agreed that barriers to expansion in terms of switching costs for purchasers were low. A third believed that it would be appropriate for the regulator to remove all existing regulatory obligations regarding the provision of international transit services (including the requirement to publish a RIO).

ComReg's Position

4.171 With regard to one respondent's comment, ComReg notes that should regulation be withdrawn in any market it will continue to monitor the market to ensure that it operates effectively and that the withdrawal of regulation does not lead to unintended consequences which hamper the development of effective competition. Since the market would not be subject to *ex ante* regulation such issues would need to be addressed by the *ex post* instrument of competition law – the adequacy of this is considered below.

Conclusion

4.172 In summary, ComReg has examined market shares, existing competition, pricing developments and the issue of potential barriers to expansion in the international transit market. Data appears to indicate that this market is tending towards effective competition. As such, the market does not meet the second criterion which indicates that it should not be subject to *ex ante* regulation.

Third Criterion: Relative efficiency of competition law and complementary ex ante regulation

Consultation proposal

- 4.173 ComReg noted that if it was found to be the case that the international transit market met the first two criteria set out above, the final decision as to whether *ex-ante* regulation was appropriate would depend on an assessment of the sufficiency of competition law by itself (absent *ex ante* regulation) in reducing or removing potential competition problems/market failures should they arise.
- 4.174 For the purposes of assessing the third criterion it was assumed, without prejudice to the earlier discussion under the first two criteria above, that there were certain high and non-transitory entry barriers to this market and the market had characteristics such that it would not tend over time towards effective competition. That is, it was assumed that the first two criteria were fulfilled although this had not been shown to be the case. It was therefore considered whether competition law would be sufficient to redress any potential market failures that may arise under these assumed market conditions.
- 4.175 Where an integrated operator is active in multiple markets at an upstream and/or downstream level and has market power in one or more of these markets, a number of possible competition problems may arise. These potential competition problems typically fall under three broad categories although some overlap may occur:
 - i) **Exploitative Behaviour** an undertaking with SMP may engage in textbook monopoly behaviour exploiting its consumers via practices such as excessive pricing and/or productive inefficiencies.
 - ii) **Leveraging** an undertaking may attempt to leverage or extend SMP from one market into adjacent vertically or horizontally related markets via practices such as outright or constructive refusals to deal, margin squeeze, anti-competitive tying, predatory pricing facilitated by cross-subsidisation, etc.
 - iii) Other Exclusionary Practices an undertaking with SMP in a particular market may engage in practices directly aimed at defending its existing market power in that market by increasing barriers to entry and/or raising rivals' costs and foreclosing potential competition in the market concerned, e.g., via predatory pricing.
- 4.176 The sufficiency of competition law to deal with such potential competition problems *ex post* is considered below.
- 4.177 The Draft Recommendation notes that *ex ante* regulation may be considered an appropriate complement to competition law in circumstances where the application of competition law would not adequately address the market failures concerned.⁹⁷ Competition law may be insufficient, for example, where the regulatory obligation necessary to remedy a market failure could not be imposed under competition law, where the compliance requirements of an intervention

Available from:

 $\underline{http://europa.eu.int/information_society/policy/ecomm/doc/info_centre/public_consult/review/recommen_dation_final.pdf}$

needed to redress a market failure are extensive, where frequent/timely intervention is required or creating legal certainty is paramount such that *ex ante* regulation may be justified.

- 4.178 In respect of the potential for **exploitative behaviour** in the outgoing international transit market, it was suggested that competition law may be sufficient to deal with any such potential market failures going forward. For example, it had not been shown that there was dominance of such magnitude in this market that would require ongoing or extensive monitoring such that ex ante regulation would be clearly preferable to ex post competition law. If it were the case, however, that intervention was required to redress any particular market failure, it was further suggested that competition law would have the relevant instruments to potentially deal with any such exploitative behaviour ex post For example, Section 5(2)(a) of the Competition Act, were it to arise. 2002/Article 82(a) of the EU Treaty gives as an example of an abuse: the imposition of unfair purchase or selling prices or other unfair trading conditions. In addition, Section 5(2)(b) of the Competition Act, 2002/Article 82(b) of the EU Treaty gives as an example of an abuse: the limitation of production, markets or technical development to the prejudice of consumers.
- 4.179 It could also be argued that **leveraging or exclusionary practices** such as predatory pricing may be foreseen as a potential problem in the relevant market. A firm with a strong position in the outgoing international transit services market and with SMP in related markets, such as national transit, may be in a position to engage in exclusionary behaviour in the outgoing international transit market by virtue of its position in adjacent markets. For example, it may be possible for the firm in question to sustain a strategy of predatory pricing in the outgoing international transit market by way of cross-subsidisation from related markets where it enjoyed a position of SMP. It could be argued, however, that were such anti-competitive behaviour to emerge, competition case law and practice on predatory pricing is well-established.⁹⁸ It could be argued further that there has been a pattern of entry/expansion in the relevant market to date such that pre-emptive action in this respect may not be justified and applying competition law remedies *ex post* would suffice should such problems emerge.
- 4.180 Further examples of potential leveraging or exclusionary behaviour could potentially involve a firm with SMP on adjacent markets, e.g., wholesale call origination and/or national transit, bundling those services with outgoing international transit in a predatory manner which competing operators in the outgoing international transit market may not be in a position to replicate and could as a result be potentially foreclosed. However, it was not clear that *ex ante* intervention was required to prevent such behaviour emerging, particularly where there was SMP regulation in related markets. Were such anti-competitive behaviour to arise, it may be noted that it is an established principle in competition case law and practice that it is not necessary for the dominance, the abuse and the effects of the abuse all to be in the same market for the prohibition under Section 5 of the Competition Act, 2002/ Article 82 of the Treaty to apply.⁹⁹ Thus, it is considered that competition law is equipped to deal with

 $^{^{98}}$ AKZO Chemie BV v Commission; Compagnie Maritime Belge Transports v Commission; and Deutsche Post AG.

⁹⁹ Commercial Solvents v Commission or Tetra Pak II.

- potential restrictions of competition arising in one market as a result of market power held in associated markets.
- 4.181 The above analysis suggested that competition law may be well placed to address any potential market failures in the outgoing international transit market going forward. It was not clear that the nature of competition in this market to date was such as to warrant *ex ante* intervention and competition law may have the appropriate instruments to deal with any potential market failures *ex post*. Alternatively, however, it could also be argued that were such competition problems to arise, competition law may be insufficient where it was shown that the compliance requirements of an intervention needed to redress a market failure are extensive and/or where frequent/timely intervention is required such that *ex ante* regulation may be justified. Following its analysis, in particular its view that the market is tending towards effective competition as outlined above, ComReg does not consider that such considerations arise in relation to the outgoing international transit market

Consultation Question

Q. 10. Do you envisage any potential competition problems/market failures in the outgoing international transit market? If so, please state clearly the nature of any such potential problems and outline whether you believe competition law is sufficient of itself (absent ex ante regulation) to address any such potential market failures? Please substantiate your response.

Views of Respondents

4.182 Two of the respondents did not envisage any potential competition problems/market failures in the outgoing international transit market and considered that *ex post* competition law was appropriate to address single abuses. A third respondent argued that it was the continued unjustified regulation of eircom's wholesale international transit charges that were resulting in actual competition problems in the market.

ComReg's Position

4.183 ComReg is of the view that competition law is well placed to address any potential market failures in the outgoing international transit market going forward and that as such *ex ante* regulation is not required.

Conclusion

4.184 ComReg considers arising from the above analysis that the outgoing international transit market does not satisfy the third criterion in that it is considered that competition law could adequately address any potential market failure.

Overall Conclusion on Market Analysis Wholesale International Transit

Consultation Proposal

- 4.185 In this review, ComReg presented its assessment as to whether the outgoing international transit services market was susceptible to *ex ante* regulation. In respect of the first criterion above, ComReg considered that entry barriers did not appear to deter entry significantly in this market.
- 4.186 In relation to the second criterion, whether this market tended towards effective competition, ComReg examined the nature and extent of existing competition, market shares, pricing trends and any barriers to expansion. Evidence indicated that the outgoing international transit market was tending towards effective competition.
- 4.187 As regards the third criterion, ComReg identified some potential restrictions of competition, for example, through possible predatory or exclusionary behaviour that may be facilitated by eircom's strong position on other markets. However it was considered that competition law may be well placed to address any potential market failures in the outgoing international transit market going forward.

Consultation Question

Q. 11. Do you believe that the outgoing international transit services market meets all three criteria and as such existing SMP obligations applying to this market should be removed? Or, is it your view that one/some of the criteria are not met. Please substantiate your response.

Views of Respondents

4.188 All three respondents believed that the outgoing international transit services market did not meet the three criteria and as such existing SMP obligations applying to this market should be removed. One of these respondents outlined that it did not believe in regulation where it was not required. Further, the respondent noted that *ex post* competition law was available for single abuses and if the market became non-competitive there was a route for a new market review in time.

Conclusion

4.189 Arising from the above analysis, ComReg concludes that the outgoing international transit services market does not satisfy the three criteria and as such existing SMP obligations applying to this market should be removed.

5 Designation of Undertakings with Significant Market Power

5.1 Having regard to the sections above, particularly sections 3 and 4, ComReg is of the view that, in accordance with the Framework Regulations:

eircom Ltd. should be designated as having SMP in the following markets:

- Wholesale call origination, and
- Wholesale national call transit.
- 5.2 A reference in this section to any given undertaking shall be taken to include any and all undertakings which are affiliated with, or controlled by, the undertaking in question.

6 Market Remedies

Regulatory background

- 6.1 The initial consultation¹⁰⁰ and response to consultation¹⁰¹ outlined the basis for the setting of remedies proposed by ComReg.
- 6.2 ComReg is obliged, under Regulation 9(1) of the Access Regulations¹⁰², 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*, to impose on such an operator one, or more of the obligations set out in Regulations 10 to 14 of the Access Regulations as ComReg considers appropriate, justified and proportionate.
- 6.3 In the initial review ComReg noted that additional obligations from those set out in the Access Regulations could be proposed, for example, to ensure end-to-end connectivity. These non-SMP obligations could be applied with the permission of the European Commission under Regulation 6 of the Access Regulations.
- 6.4 In determining the appropriateness of SMP obligations, ComReg is guided by the objectives set out in Section 12 of the Communications Regulation Act, 2002 and those set out in Regulation 6 of the Access Regulations.
- 6.5 In this review, ComReg has revisited its analysis of the wholesale interconnection markets, and has taken into account changes in the market since the time of the last review. This section goes on to assess any changes in the scope for the possible competition problems which were previously identified to arise, and in the light of this assessment, has set out remedies to guard against any potential market failures or anti-competitive practices.

Potential competition problems in the interconnection markets

6.6 In the initial review, ComReg outlined potential competition problems in the interconnection markets. The approach taken to the assessment of competition problems was forward-looking, and followed the recommendations of the SMP Guidelines. ComReg must carry out the assessment of potential competition problems in the absence of SMP regulation in the market concerned. 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 was unconstrained by regulation. Therefore, ComReg considers that the justification for considering ex ante remedies must be broader than if solely based on demonstrable acts of past behaviour. ComReg instead has to identify the possibility of a particular competition problem because of the ability and incentives of an SMP undertaking to engage in such behaviour, which in turn will be based on the findings of the market analysis (see section 4 above). ComReg suggests that this is a key difference in approach between ex ante and ex post analysis and ComReg notes that its approach is similar to that of other NRAs, as evident from their notifications to the European Commission.

¹⁰⁰ Market Analysis: Interconnection markets (04/106)

Market Analysis: Interconnection markets, Response to Consultation and Draft Decision (05/37a)
 S.I. No 305 of 2003 – European Communities (Electronic Communications Networks and Services)
 (Access) Regulations 2003.

6.7 The initial review proposed that eircom should be designated with SMP in the markets for wholesale call origination and wholesale national call transit. In the current review, the concern is to examine developments in the markets since the time of the initial review, and to consider whether the types of potential competition problems identified are still likely to occur, in the absence of SMP regulation in those markets.

6.8 According to settled case law:

"The dominant position thus referred to [by Article 82] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers" 103.

- 6.9 An undertaking which has SMP in an electronic communications market has the potential ability to influence a range of competition parameters, including prices, innovation, output and the variety or quality of goods and services. Absent regulation, a dominant firm would rationally have the incentive to raise prices, as there would be no appreciable competitive pressure to prevent this. In addition, a firm which was dominant in an upstream market could also have the ability/incentives to use its market power to leverage into a downstream market in which it may also be active. A firm with dominance in one market could also attempt to leverage power into a horizontally related market, i.e., a market at the same level in the production or distribution chain.
- 6.10 It is, however, important to note that in any discussion of possible competition problems and of the scope for an operator to exert SMP, it is not necessary for ComReg to point to examples of actual abuse that may have occurred. While such examples if clearly identified could be corroborative of a finding of SMP, the nature of *ex ante* regulation is that it is concerned with guarding against this in advance. Thus, ComReg assesses in advance potential competition problems that it considers likely to materialise in the relevant markets based on the ability and incentives of the SMP undertaking.
- 6.11 Generally, the types of competition problems likely to arise in the interconnection markets in the absence of regulation are associated with possible exclusionary behaviour such as vertical and horizontal leveraging, as well as possible exploitative behaviour, such as excessive pricing.
- Possible Exclusionary Behaviour
- 6.12 Vertical leveraging arises where an operator has dominance at a wholesale level and can potentially transfer this market power into related retail markets where it is also active. In the interconnection markets, an SMP operator has control of the wholesale inputs necessary for downstream competitors to offer a retail calls service. Accordingly, it has the ability to control the use of these important inputs and so affect the competitive conditions in the downstream retail markets via such practices as refusal to deal (whether outright refusal or constructive refusal through delay, etc) or supplying access on discriminatory or unreasonable terms. In addition, a vertically-integrated operator with SMP at the wholesale level is likely to have incentives to impede competition in

¹⁰³ Case 27/76 United Brands v Commission [1978] ECR 207, para. 65.

downstream retail markets where it is also active as such behaviour could increase its retail market share and profits. Further incentives to impede downstream competition are likely to be present where there is a risk that entrants or competitors at the retail level will subsequently expand and pose a competitive threat in related upstream or wholesale markets. In addition, where existing upstream competitors require access to the SMP firm's wholesale input to supplement their own wholesale offering and offer a ubiquitous service to their customers, the SMP firm will have considerable incentives to engage in exclusionary behaviour aimed at foreclosing/impeding such alternative upstream suppliers.

6.13 Horizontal leveraging involves an undertaking which is dominant in one market using its market power to exert undue influence in other markets at the same level in the value chain. Examples may include an SMP operator using its position in the call origination market to potentially exert influence/reinforce its market power in the wholesale transit market via such practices as cross-subsidisation/predatory pricing or anti-competitive tying/bundling.

Possible Exploitative Behaviour

- 6.14 Exploitative behaviour such as excessive pricing arises where, absent SMP regulation, price levels are likely to be persistently high with no effective pressure (e.g., from new entry/expansion or innovation) to bring them down to competitive levels over the period of the review. In light of the fact that barriers to entry/expansion in the wholesale call origination and wholesale transit markets are high and non-transitory, there is limited scope for potential competition and/or for expansion by existing rivals and there is insufficient countervailing buyer power (see section 4 of this document), an SMP operator in these markets would have the ability and incentives to sustain prices above competitive levels for the period of the review. This is because such high prices would not be undermined by significant new entry or expansion in the markets over the review period.
- 6.15 Additional incentives to charge excessive prices also derive from eircom's integrated position and the fact that such high prices may restrict competition/raise rivals' costs in downstream retail markets. This may also further reinforce entry barriers/delay investment at the upstream level, e.g., where firms tend to initially enter and establish a customer base in downstream markets using resold wholesale inputs, before gradually investing in their own infrastructure and subsequently entering upstream markets. As noted above, eircom may also have incentives to charge excessive wholesale prices where existing upstream competitors require access to its wholesale service to provide an end-to-end service to their own wholesale customers.
- 6.16 A firm with SMP in a relevant market may also, by virtue of the lack of effective competition in that market, be insulated from the need to innovate and improve efficiency to stay ahead of rivals. Where an undertaking is not exposed to sufficient competitive pressure it might have fewer incentives to produce efficiently and might incur excessive costs, fail to take efficient investments and/or provide a low quality service. This may lead to costlier and less efficient methods of production and consequently higher prices for customers than might otherwise exist under competitive market conditions.

Principles to be applied when selecting obligations

- 6.17 In the initial review, ComReg noted its obligations under the Framework Regulations, the Access Regulations and the Universal Service Regulations in relation to market analysis and the imposition of remedies to address SMP. Given the potential competition problems arising from SMP in the interconnection markets, ComReg is obliged to impose one or more obligations on undertakings identified as having SMP in those markets. ComReg does not believe that, within the period of this review, there will be developments which will prevent eircom from acting independently from its competitors and its customers. Accordingly, ComReg will impose appropriate obligations on the SMP operator that it believes will encourage efficient investment and innovation, protect consumers and furthermore, promote competition in the interconnection markets.
- 6.18 Where potential problems have been identified in specific markets and an undertaking(s) has been designated as having SMP, ComReg is obliged to select remedies based on the nature of the potential competition problem identified and ensure that they are proportionate and justified. Where possible, consideration will be given to a range of remedies so that the least burdensome but effective remedy can be selected, thus conforming to the principle of proportionality. In the initial consultation ComReg presented alternative regulatory options to address identified potential competition problems. This included a discussion of less onerous alternatives and why these would not achieve ComReg's objectives and a discussion of more onerous alternatives and why they would be disproportionate or overly burdensome. In that response to consultation, ComReg suggested a preferred option. The current review focuses upon this preferred option and assesses whether market conditions justify a modification of these proposals.
- 6.19 In choosing remedies, ComReg has also taken account of their potential effects on related markets. As part of the process of selecting appropriate remedies, ComReg has conducted, *inter alia*, Regulatory Impact Assessments (see sections 8 and 9 below) in accordance with the Ministerial Direction (issued by the Minister for Communications, Marine and Natural Resources in accordance with section 13 of the Communications Regulation Act, 2002) published on 21 February 2003 and 26 March 2004.
- 6.20 The remedies chosen will be incentive compatible. This means that the remedies will be selected and designed in a manner that ensures that compliance with regulation outweighs the benefits of evasion. As outlined above, remedies must be based on the nature of the problem identified, be proportionate and justified in light of the objectives set out in S.12 of the Communications Regulation Act, 2002.
- 6.21 ComReg is obliged, where there is a designation of SMP, to impose at least one obligation 104. Therefore, some form of *ex ante* regulation is required.

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¹⁰⁴ See SMP Guidelines paragraphs 21 and 114.

Consultation Question

Q. 12. Do you agree with the principles ComReg proposes to adopt when selecting obligations in this market?

Views of Respondents

6.22 One respondent agreed with the principles ComReg proposed to adopt when selecting obligations in this market. A second respondent agreed with the principles ComReg proposed but did not believe that ComReg actually followed these principles. It further added that it did not accept that the Regulatory Impact Assessment ("RIA") presented by ComReg in section 8 of the consultation paper would ensure that ComReg selected remedies based on the nature of the potential competition problem identified or that the remedies were proportionate and justified. A third respondent agreed with the principles that ComReg proposed to adopt, however, it did not consider that these principles were applied to the remedies proposed. It considered the current remedies to be weak in a number of areas.

ComReg's Position

6.23 ComReg wishes to underline that it has identified a number of potential competition problems and that it selects remedies based on the nature of the potential competition problem identified in the market under consideration. Further, ComReg's evaluation of each proposed remedy below ensures that each remedy is proportionate, justified and that it represents the least onerous means to resolve the potential competition problem it is intended to address. These principles are also applied in the RIA in relation to ComReg's evaluation of the regulatory options open to it (see sections 8 and 9 below for further details of the respondents' views regarding the RIA and ComReg's response). In respect of the third respondent's general view that the remedies are weak in a number of areas, ComReg deals with that respondent's specific criticisms in the discussion of the individual remedies below. ComReg would note, however, that in line with the SMP Guidelines ComReg must ensure that each obligation is proportionate to the problem to be remedied. Thus, it has approached the setting of remedies by ensuring the means used attains a given end/addresses a potential problem and is no more than what is appropriate and necessary to achieve that particular objective.

Conclusion

6.24 ComReg considers that these principles are appropriate in order for ComReg to identify remedies which need to be put in place in the relevant market in order to address the potential competition problems identified.

Remedies to address potential competition problems

- 6.25 In the following sections, ComReg outlines the potential competition problems which it considers could arise in the relevant markets on which eircom has SMP in the absence of regulation.
- 6.26 ComReg then sets out the detailed remedies that it will impose on the SMP operator to address the potential competition problems identified. ComReg has selected remedies that it considers to be appropriate at this time and in the

prevailing market conditions. It is important that the selection of remedies encourages efficient investment and innovation. This could include, for example, some of the following:

- Seeking to ensure that OAOs have sufficient access, and on reasonable terms, to the facilities that they need to offer the services which are capable of competing with eircom at the retail level.
- Ensuring that there are incentives for competitors to invest in alternative facilities that will secure more competition at upstream and downstream levels in the long-term.
- Seeking to promote a competitive environment, where competition is not solely price based.
- 6.27 This analysis is repeated for each identified relevant market.

Wholesale Call Origination Market

Potential competition problems in the wholesale call origination market

- 6.28 In this current review, ComReg has arrived at the conclusion that eircom has SMP in the call origination market, and that this may give rise to a range of problems associated with single market dominance, including potentially exploitative behaviour such as excessive pricing and potentially exclusionary behaviour, such as vertical and horizontal leveraging.
- 6.29 ComReg's overall approach to identifying and analysing potential competition problems was discussed above. Specific problems associated with the market for wholesale call origination could include the following:

Possible Exploitative Behaviour

- 6.30 In light of ComReg's finding that eircom has a position of SMP in the market for wholesale call origination; it is considered that eircom has the ability and incentives to engage in behaviour that exploits its wholesale customers via such practices as excessive pricing.
- 6.31 Concerns about pricing arise where, absent SMP regulation, price levels are likely to be persistently high with no effective pressure (e.g., from new entry/expansion or from strong buyers) to bring them down to competitive levels over the period of the review¹⁰⁵. In that regard, eircom's *ability* to charge excessive prices derives from the fact that such high prices would not be undermined by significant new entry or expansion over this review. eircom has consistently enjoyed a very high market share in excess of 90% and is currently the only operator supplying wholesale call origination services based on own network inputs (see paragraphs 4.5-4.14). In addition, there are substantial sunk costs associated with replicating eircom's ubiquitous access network (see paragraphs 4.22-4.33), limited scope for potential competition via alternative access platforms (see paragraphs 4.34-4.35) and insufficient countervailing buyer power over the timeframe of this review (see paragraphs 4.46-4.51). Thus, in the absence of regulation, eircom has the ability to sustain excessive

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¹⁰⁵ See OFT (April 2004) OFT 414a, Draft Guideline on Assessment of Conduct, para. 2.6.

- prices for wholesale call origination without significant downward pressure from competitors, or strong buyers over the period of this review.
- 6.32 eircom's *incentives* to charge excessive prices derive largely from its ability to make excessive profits by virtue of the high barriers to entry and the absence of significant competitive pressure over the timeframe of this review. Further incentives to charge excessive prices also derive from eircom's vertically integrated position and the fact that (as discussed in paragraph 6.15 above and paragraph 6.233 below), such high prices could restrict competition/raise rivals' costs in downstream retail calls markets thereby enabling eircom Retail to gain market share at the expense of its rivals. In addition, excessive input prices could further reinforce entry barriers and eircom's dominance at the upstream level, where entry tends to take place progressively from downstream retail markets into upstream wholesale markets.
- 6.33 As noted above (see paragraph 6.16), a firm with SMP in a relevant market might also have fewer incentives to produce efficiently due to an absence of sufficient competitive pressure and might incur excessive costs, fail to take efficient investments and/or provide a low quality service. This may lead to costlier and less efficient methods of production and consequently higher prices for customers than might otherwise exist under competitive market conditions.

Possible Exclusionary Behaviour/Leveraging

- 6.34 Vertical leveraging may arise when a firm with SMP in an upstream wholesale market controls an input that is necessary for a potentially competitive downstream market in which it is also active. Leveraging can have the effect of restricting competition on downstream markets on which the SMP operator competes with its wholesale customers and/or reinforcing dominance in upstream markets if entry tends to be sequential, e.g. where firms tend to enter and gain a foothold in downstream markets first, before subsequently entering upstream markets where barriers to entry may be more significant.
- 6.35 As is clear from section 4, it is ComReg's view that to compete effectively in downstream retail calls markets OAOs are heavily dependent on eircom for its upstream wholesale call origination service. This dependence arises because there is currently no effective alternative to eircom (see paragraphs 4.5-4.14). Furthermore, given the substantial barriers to entry in this market and the limited scope for potential competition via alternative platforms, this significant dependence is unlikely to change appreciably over the period of this review (see paragraphs 4.22-4.35). Thus, eircom's control over a necessary input for downstream retail markets gives eircom significant scope and *ability* to influence competitive conditions on downstream retail markets.
- 6.36 Furthermore, as eircom's wholesale customers are also its downstream competitors, eircom would, in the absence of regulation, have considerable *incentives* to raise rivals' costs or impede competition on downstream markets to increase its own retail profits. Additional incentives to engage in exclusionary behaviour would also derive from the fact that restricting competition at the downstream retail level could also reinforce entry barriers and delay investment at the upstream wholesale level.
- 6.37 The main types of vertical leveraging that could potentially arise due to eircom's control of a necessary input for the downstream retail calls markets include:

- An outright refusal to deal/denial of access: In the absence of regulation, eircom would have the ability and incentives to engage in an outright refusal to deal or denial of access to downstream competitors that rely on its wholesale call origination service thereby significantly impeding competition on the downstream calls markets and potentially further delaying upstream investment.
- Constructive refusal to deal/discriminatory behaviour: In the absence of regulation, eircom would also have the ability and incentives to engage in a constructive refusal of access to its wholesale call origination service or to supply it on inferior terms and conditions thereby raising downstream rivals' costs and/or restricting their sales while also potentially delaying investment and competition at the upstream level. For example, such behaviour could include delaying tactics such as protracted negotiations for new entrants, discriminatory use or withholding of information, quality discrimination, strategic design of product characteristics to place downstream competitors at a disadvantage, disproportionate entry criteria as well as unreasonable terms and conditions associated with access, etc.
- Leveraging by price means: In the absence of regulation, eircom could also leverage its dominance from the upstream wholesale call origination market into downstream retail markets via such practices as excessive pricing of the wholesale input (see paragraph 6.32) or a price squeeze, whereby an SMP operator sets a price for a wholesale input such that the buyer of the input, who is equally as efficient as the wholesale provider in the related downstream market, is unable to operate profitably and is squeezed out of the related potentially competitive downstream market. As downstream rivals require the use of eircom's wholesale call origination service to compete in the retail calls markets, eircom has significant scope and incentives to raise its downstream rivals' costs and squeeze their margins via the wholesale price it sets.
- 6.38 Horizontal leveraging concerns may also arise where an undertaking which is dominant in one market uses that market power to exert undue influence on existing or potential competition in other related markets that are at the same level in the production or distribution chain. Examples of possible horizontal leveraging can include certain tying/bundling practices and/or predatory type behaviour in horizontally associated markets facilitated by way of crosssubsidisation from the SMP market. For example, in the absence of regulation, eircom would have the ability to use its SMP position in the wholesale call origination market to reinforce its market power on related interconnection markets such as wholesale national transit via possible predatory behaviour facilitated by way of cross-subsidisation or tying/bundling from the call origination market. Incentives to foreclose competition/reinforce dominance on adjacent markets could derive from the possibility that competitors on those markets might gradually extend their networks and provide a competing wholesale call origination service over the longer term. Furthermore, practices such as tying/bundling of call origination with other interconnection services could also potentially raise downstream rivals' costs where they are required to purchase products they may not need.

Consultation Question

- Q. 13. Do you agree that in the absence of ex ante regulation eircom would have little of no incentive to offer reasonable access to call origination services to OAOs competing against eircom's retail businesses?
- Q. 14. In your opinion have there been any developments since the original response to consultation which may have an impact on ComReg's conclusion as stated above?

Views of Respondents

- 6.39 One respondent agreed that in the absence of *ex ante* regulation, eircom would have little or no incentive to offer reasonable access to call origination services to OAOs competing against eircom's retail business. Another respondent disagreed with this on the basis that eircom had an incentive to maximise the utilisation of its fixed network and to offer commercially attractive access to call origination services to OAOs. A third respondent stated that it was clear that without fit for purpose *ex ante* regulations eircom would have little or no incentive to offer reasonable access to call origination services. This same respondent commented on the fact that even with the current *ex ante* obligations in place it did not consider that eircom had much of an incentive to offer fair access to call origination services.
- 6.40 One respondent believed that there had been no developments since the original response to consultation which may have had an impact on ComReg's findings as presented above. A second respondent stated that the progress in the Local Loop Unbundling ("LLU") forum was having a major impact on the perception of eircom Wholesale as an independent operation. Another respondent commented that for the first time since market liberalisation the prospect of infrastructure competition was real and included such developments as Intramodal competition via LLU (Smart at retail level and BT Ireland at retail and wholesale levels), fibre to the premises ("FTTP") e.g. Magnet, Cable e.g. UPC, fixed wireless access ("FWA") e.g. Irish Broadband, wireless/mobile e.g. Vodafone and alternative national backbone infrastructure providing connectivity for the above i.e. the Department of Communications, Energy and Natural Resources' revived plans for an alternative national network to rival eircom's.

ComReg's Position

- 6.41 ComReg is of the view that it must ensure that the conditions of access are reasonable and that operators who request access have an intermediary such as ComReg, to refer any instances where access is not provided on a timely basis or indeed, where terms and conditions are not both fair and reasonable.
- 6.42 It is evident that there have been a number of developments since the original consultation as noted by the respondent. Such developments have been fully taken into account by ComReg in its updated analysis. Please refer to paragraph 4.34 above.

Conclusion

6.43 It is evident to ComReg (and recognised by a number of respondents) that in the absence of *ex ante* regulation eircom may have little or no incentive to offer reasonable access to call origination services to OAOs.

Appropriate Obligations: wholesale call origination market

- 6.44 As demonstrated in section 4 above, eircom is the only network operator currently in a position to offer ubiquitous wholesale call origination products in the Irish market. ComReg is therefore of the view that appropriate *ex ante* regulation of eircom's wholesale call origination products is essential to lay the foundations for establishing sustainable competition in fixed wholesale and retail telecoms markets.
- 6.45 In establishing an *ex ante* regulatory framework designed to facilitate sustainable competition, ComReg needs to ensure that obligations applied on eircom in this market are proportionate to the potential problems identified above. In assessing what is proportionate, ComReg takes account of the effectiveness of obligations for dealing with the problems identified, and takes account of the costs associated with the obligations.
- 6.46 In this market, ComReg has considered whether it would be possible to remedy potential problems by establishing a 'light-handed' *ex ante* regulatory framework that would oversee commercial wholesale call origination negotiations. Such regulation would tend to impose a low cost on the SMP operator eircom. However, while the burden on eircom would be relatively light, at the present time, ComReg believes that eircom would have little incentive to offer fair and reasonable interconnection terms to OAOs it competes against in related downstream markets.
- 6.47 ComReg is therefore of the view that at a minimum, the appropriate suite of obligations needed to remedy potential problems in this market requires measures directed towards facilitating access to and the use of facilities. The appropriate form of access needs to be considered by ComReg.
- 6.48 In discussing the appropriate application of obligations in this market, ComReg also needs to adopt a forward-looking perspective. While it is recognised that mandating some form of access to wholesale call origination services is required to deal with potential problems over the duration of this review, in the future ComReg may rely on other, less onerous, obligations.
- 6.49 If the wholesale call origination market were, for example, to become more competitive, ComReg may not need to rely upon mandated access obligations. However, it may still be necessary for ComReg to apply measures directed against the application of discrimination by SMP operators. Hence, transparency and non-discrimination obligations may still be required to further promote competition.

Remedies: wholesale call origination

6.50 Given the finding of SMP in the call origination market, ComReg is obliged to impose obligations which ensure that operators can interconnect appropriately with the eircom network. As noted in section 4, eircom is the only network operator currently in a position to offer ubiquitous wholesale call origination

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products in the Irish market. Appropriate obligations in terms of call origination were addressed in detail in the initial review, and the principles behind the selection of remedies were discussed earlier in this current review.

- 6.51 ComReg's consideration of appropriate remedies in the wholesale call origination market is discussed below in terms of:
 - Access to and use of specific network elements and associated facilities
 - Transparency
 - Non-discrimination
 - Price control and cost accounting
 - Accounting separation

<u>Access to and use of specific network elements and associated</u> facilities

i) Access obligation Consultation Proposal

- 6.52 ComReg proposed that eircom should continue to interconnect networks and network facilities on the basis of a reasonable request. It was outlined that obligations could be imposed 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 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.' 106
- 6.53 ComReg's analysis of the potential competition problems strongly suggested that wholesale access obligations were necessary so as to promote more effective competition in retail markets. Absent regulatory intervention, it was highly unlikely that eircom would offer sufficient wholesale products on reasonable terms through commercial negotiations with OAOs. In addition, without appropriate access obligations, eircom would have an incentive to apply unreasonable contractual terms on other operators, and to exercise non-price forms of discrimination that would likely delay the offering of access to other operators. eircom's incentive would derive from the negative impact such actions would have on competition at the retail level, where eircom was also an active player which may in turn delay competition at the wholesale level. Such behaviour could be construed as denial of access and could lead to the foreclosure of sustainable competition.
- 6.54 It was noted that currently eircom was obliged to offer access at the wholesale interconnect level for all the services listed in the RIO. All of these services were also provided to the retail arm of eircom at prices incorporating charges for the utilisation of the same network elements at the same wholesale price, but reflecting the different utilisation of those elements by eircom Retail and

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¹⁰⁶ Article 12(1) of Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities

- interconnected calls. The RIO was not a static document. It evolved to reflect the introduction of new products and services, and ComReg noted that any regulation should incorporate the ability of the RIO to develop in parallel with changes in the market.
- 6.55 ComReg has considered two possible approaches to ensuring that other operators had access to wholesale call origination products. One option was that ComReg could mandate access to, and use of, all of eircom's call origination facilities. ComReg considered this option to be overly interventionist and prescriptive.
- 6.56 Another option was that ComReg could require eircom to offer access to and use of its wholesale call origination services on a reasonable request basis. Under this option, OAOs could specify the particular access and/or interconnection arrangements that they required. Such an access obligation would require eircom to meet reasonable requests for access to, and use of, specific network elements and associated facilities.
- 6.57 ComReg considered the latter option to be preferable, as it afforded OAOs the flexibility to request products according to their needs, and required eircom to only develop products for which there was interest.
- 6.58 ComReg therefore proposed that it was appropriate to impose an obligation on eircom to meet reasonable requests from OAOs, pursuant to Regulation 13 (1) of the Access Regulations for such products. In cases where commercial negotiations were not successful, any such request would be reviewed in the context of Regulation 13 (4) of the Access Regulations.
- 6.59 For these reasons and given the nature of the competition problems which may arise in this market, ComReg proposed that an access obligation was necessary.

Consultation Question

Q. 15. Do you agree with the access obligation for call origination should be imposed on eircom? Please provide details in support of your answer.

Views of Respondents

6.60 All three respondents agreed that the access obligation for call origination should be imposed on eircom. One respondent further added that the access obligation should be on a reasonable request basis and that OAOs should specify the particular access arrangements that they required.

ComReg's Position

6.61 ComReg concludes that it is appropriate for it to impose an access obligation on eircom and this should include a requirement whereby eircom should interconnect networks and network facilities on the basis of a reasonable request, which must be addressed in a timely manner.

Conclusion

6.62 The access obligation for call origination should continue to be imposed on eircom.

ii) Obligation to interconnect networks/network facilities

Consultation Proposal

6.63 Pursuant to Regulation 13(2) (i) of the Access Regulations, ComReg proposed that eircom should be required to continue to interconnect networks or network facilities. This obligation was considered necessary to maintain eircom's obligation to interconnect with existing and new OAOs and to ensure that the market functioned effectively. It was recognised that eircom may suggest that it would have an incentive to interconnect. In this case, this obligation should impose no significant burden on eircom, while ensuring *ex ante*, that any possible harmful exercise of dominance was prevented.

Consultation Question

Q. 16. Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please provide details in support of your answer.

Views of Respondents

6.64 All three respondents agreed that ComReg should require eircom to interconnect networks or network facilities. One respondent further added that it required both physical interconnection of eircom's network as well as interconnections with network facilities, so that it would be in a position to offer the same set of services that eircom Wholesale provides to eircom Retail and on the same terms and conditions, processes and timescales.

ComReg's Position

6.65 ComReg is of the view that eircom should be required to continue to interconnect networks, or network facilities.

Conclusion

6.66 eircom should continue to interconnect networks or network facilities as part of its Access obligation.

iii) Withdrawal of access

Consultation Proposal

- 6.67 ComReg proposed that eircom should continue to have an obligation pursuant to Regulation 13(2)(c), not to withdraw access to facilities already granted, unless this had been approved by ComReg. If the withdrawal had a significant impact on the market ComReg may then decide that a public consultation was necessary prior to approval (or withdrawal of such approval) for withdrawal of the facility.
- 6.68 ComReg proposed that this obligation was necessary to ensure that OAOs had the certainty to provide retail services to the marketplace and compete with eircom.
- 6.69 In addition, ComReg noted that the gradual migration to next generation network technology may well give rise to an increase in possible cases where eircom may wish to withdraw access to existing facilities. ComReg had considered the issue with regard to the withdrawal of access where an operator may be required to retain facilities already in place in a time when it was re-

- designing its network architecture and redeploying network infrastructure and where access facilities, if not withdrawn, could impede development.
- 6.70 ComReg suggested that eircom should continue to seek ComReg's approval before withdrawing access to existing facilities and that ComReg's decision in relation to approval would be proportionate and justified and would take into account the potential impact on the market.

Consultation Question

Q. 17. Do you agree that eircom should be required not to withdraw access to facilities already granted, save without prior ComReg approval? Please detail your response.

Views of Respondents

- 6.71 One operator stated that if it becomes clear within the current period of the review that certain facilities have become redundant across industry then it would be adequate that eircom be required to provide sufficient notice to the industry and to ComReg that it intended to withdraw the facility in question. If no objection were raised by any party during this notice period then withdrawal of the facility should proceed without the initiation of a public consultation.
- 6.72 A second respondent commented that as the development of Next Generation Networks ("NGN") was likely in the coming years where some services were likely to be withdrawn or had to change then it was essential that eircom were required to gain ComReg approval for both changes and withdrawal of services. This respondent further added that OAOs may have a significant base of customers that could be impacted by either the change or withdrawal of a wholesale service and it may take time to migrate these customers to a new platform or service.
- 6.73 A third respondent argued that this proposed remedy represented a new obligation being imposed on eircom without justification, and it believed it was unnecessary, disproportionate and damaging to the interest of the industry and/or consumers. It further maintained that the current regime that existed, whereby eircom withdrew products after a period of notice to wholesale customers should be allowed to continue. It repeated its view that in an evolving market there was every likelihood that wholesale services for which there was a 'reasonable request' and demand at one time, might no longer be demanded or 'reasonable' at a future date. In some cases, the cost of maintaining these services outweighed their value and in these circumstances the respondent believed that eircom should be allowed to withdraw these types of services.

ComReg's Position

6.74 Under Regulation 13(2) (c), eircom is obliged not to withdraw access to facilities already granted, ComReg proposes to supplement this obligation by instituting an approval mechanism. This would mean that eircom would be required to obtain prior approval from ComReg in relation to withdrawal of a facility. It should be noted that ComReg does not consider this requirement to be an additional SMP obligation as such, but a mechanism in support of the existing SMP obligation, which would permit ComReg to more effectively implement and monitor that obligation. In light of the current uncertainty with

regard to roll out of NGNs and indeed the concerns of industry expressed to ComReg, ComReg is of the view that it is justifiable to impose such an obligation on eircom to the effect that eircom should not withdraw access to facilities without ComReg's prior approval. Where eircom considers withdrawing access to a facility then it should, within a reasonable timeframe depending on the nature of the facility, inform ComReg. ComReg will then consider the impact of the request to withdraw the product/service and if it is deemed that there would be a significant impact on industry then a consultation process will be initiated by ComReg. The consultation would include such issues as the notification necessary for industry and whether compensation might be necessary, or appropriate regarding stranded assets of OAOs etc. ComReg will be proportionate in this regard and is of the view that this should not create any additional or unreasonable burden to eircom.

Conclusion

6.75 eircom should continue to have an obligation not to withdraw access to facilities already granted, as part of its Access obligation. Withdrawal should not occur without ComReg's prior approval by ComReg for the withdrawal of such access. ComReg will consult further on the detail of how the withdrawal of significant facilities should take place.

iv) Provision of specified information

Consultation Proposal

- 6.76 ComReg proposed to oblige eircom to continue to provide specified information which supported existing call origination services. It was outlined that this obligation may be imposed pursuant to Regulation 13(2)(c) and 13(3) of the Access Regulations. Specified information should include such information as technical specifications, network characteristics, terms and conditions for supply and use, and prices, which was necessary for the provision of existing call origination services.
- 6.77 ComReg proposed that this obligation would be met by the continued offering of the relevant facilities in accordance with the terms, conditions and specifications contained in the Main body clauses, Annex A definitions, Billings and Payments annex, located in the recent version of eircom Core RIO document on the eircom Wholesale website, Billing forms, Network Plan, Technical Manual, Calling Line Identification Code of Practice (CLI CoP), Call Origination and Termination Routing Scheme, Non Disclosure Agreement, as published as stand alone documents on eircom's wholesale website and prices contained in the most recent version of eircom RIO Price List, also on the eircom Wholesale website.
- 6.78 ComReg noted that the RIO was an evolving document and that the specific information required to support call origination services would change over time.

Consultation Question

Q. 18. Do you agree with ComReg's proposal to require eircom to provide specified information which supports call origination services and to continue to provide such services in accordance with terms and conditions which are agreed by industry? Please detail your response.

Views of Respondents

6.79 All three respondents agreed that eircom should be required to provide specified information which supported call origination services and to continue to provide such services in accordance with terms and conditions.

ComReg's Position

6.80 ComReg believes that eircom should be obliged to provide specified information which supports call origination services as part of its Access obligation.

Conclusion

6.81 Eircom shall continue to provide specified information which supports call origination services, further to its Access obligation.

v) Obligation to meet reasonable requests for access

Consultation Proposal

- 6.82 ComReg proposed to impose an obligation on eircom to meet reasonable access requests and to address any disputes accordingly. It was outlined that this obligation may be imposed pursuant to Regulation 13(1) of the Access Regulations.
- 6.83 ComReg considered that access seekers may need to avail of other products which were included within the definition of the relevant wholesale market that would allow them to develop retail offerings to compete in the retail market. An access remedy was the only remedy which allowed OAOs to make reasonable requests for products according to their specifications pursuant to Regulation 13 (2) (a) or (f) of the Access Regulations. In cases where commercial negotiations were not successful, any such requests would be reviewed in the context of Regulation 13(4) of the Access Regulations.
- 6.84 ComReg proposed that an SMP operator should not have to meet requests that were unreasonable, or were not technically feasible. In assessing whether requests were reasonable, ComReg noted that such requests should not constitute an undue burden on the SMP operator. This meant that a request which was technically feasible should allow the SMP operator to receive a reasonable rate of return on any necessary investments made to supply a product at a price the requesting operator was willing to pay. The SMP operator must however be able to properly demonstrate how and why a request was <u>not</u> reasonable if it denied a request for access, both to the requester and ultimately to ComReg if the matter became the subject of a complaint or a dispute.

Consultation Question

Q. 19. Do you agree that eircom should have an obligation to meet reasonable requests for access as described above? Please detail your response.

Views of Respondents

- 6.85 One respondent agreed that eircom should have an obligation to meet reasonable requests for access.
- 6.86 Another respondent questioned the use of the term 'reasonableness' and referred to Article 13 of Access Regulations 2003 for guidance. It further commented on the fact that Article 13 goes on to state that when assessing whether such obligations would be proportionate a number of points should be taken into account. The respondent called upon ComReg to consider the development of a reasonable demand or proportionality test in terms of the conditions and price at which a newly-requested wholesale service are to be offered. The respondent considered that the following should be included in such a test of the proportionality of a measure:
 - The expected reasonable demand should be substantiated;
 - Commercial approaches should be given preference over heavy handed regulatory solutions;
 - The price for a particular wholesale service should include the development costs spread over the reasonably expected demand; and
 - The price should also include the 'option value' created for OAOs and for the fact that eircom sinks the investment and takes the risk; those who choose to hire its capacity on a short-term basis gain the benefits of not having to take that risk but have to pay higher short-run access prices as a consequence.

This respondent requested ComReg to also consider obligations to supply wholesale products as something of a last resort which should be used when other approaches proved ineffective or impractical. Only if there was a commercial case with reasonable demand for the product/service should it proceed. In essence the respondent summarised that the 'proportionality test' should always apply in deciding whether to require a SMP operator to offer a regulated wholesale service so as to determine if the net benefits to the market of requiring such a product outweighed the costs of delivering it.

6.87 A third respondent argued that the remedy as proposed by ComReg was not effective and hence this meant that ComReg was not properly implementing regulation. This same respondent included a number of recommendations relating to a mandatory access request process for both new and existing network access. This respondent adds that a Statement of Requirements ('SOR') will assist in achieving this.

ComReg's Position

6.88 With regard to the issue of what constitutes 'reasonableness', ComReg believes that it is more reasonable and appropriate to assess each access complaint

received on a case by case basis. In relation to one respondent's suggestion that ComReg should employ a formalised test, ComReg considers that this is not a practical approach on the basis that there are a significant number of interacting variables which must also be considered. ComReg is of the view that a common sense approach to what is a reasonable request for access and what an unreasonable request is, is more appropriate through a proper analysis where necessary of actual situations as they present themselves, on a case by case basis. Currently, there are no such issues noted around access to call origination services however, should such issues arise by the movement to IP technology then ComReg will ensure that any regulatory obligations are adhered to.

6.89 ComReg concludes that eircom should be obliged to meet reasonable requests for access as part of the Access Regulations.

Conclusion

6.90 The obligation to meet reasonable access requests as part of the Access obligation should continue to be imposed on eircom.

vi) Service Level Agreements (SLAs)

Consultation Proposal

6.91 ComReg proposed that, pursuant to Regulation 13 (3) of the Access Regulations, eircom's call origination services should be provided on terms and conditions which were fair, reasonable and timely. In this regard, ComReg believed that the terms and conditions should be supported by a Service Level Agreement ('SLA'). SLAs should ensure that eircom had an incentive to provide products and services which were fit for purpose and treated OAOs the same as its own retail arm. ComReg noted that it may consult with industry at a later stage on the need for more prescriptive SLAs. ComReg's view was that the SLA was an important instrument in order to allow OAOs to approach eircom and ensure that their requests for new or amended products were treated promptly and appropriately. In addition, pursuant to Regulation 13(2) (b) of the Access Regulations ComReg was of the view that eircom should have the obligation to negotiate in good faith with the undertakings requesting access.

Consultation Question

- Q. 20. Do you agree that eircom must provide call origination services on terms which are fair, reasonable and timely? In addition do you agree with ComReg's proposal that these terms and conditions should be supported by Service Level Agreements? Please provide detail in support of your response.
- Q. 21. Do you agree that ComReg should consult with industry on the terms and conditions of the SLA? Please provide detail in support of your response.

Views of Respondents

6.92 Two of the respondents agreed that eircom must provide call origination services on terms which were fair, reasonable and timely. One of these respondents claimed that this did not however happen in practice and that ComReg should spend more time in industry groups so that it could see how

regulation could be completely frustrated. This respondent also stated that eircom Wholesale was not looking after the interests of its customers. A third respondent commented that to date, it had not found it necessary nor had OAOs requested SLAs for eircom's provision of wholesale call origination or transit services. They added that eircom had a statement in its RIO that guarantees call routing on a non-discriminatory basis and it believed that this was sufficient and that any imposition of a SLA would represent unwarranted regulatory intervention.

6.93 Two of the three respondents agreed that ComReg should consult with industry on the terms and conditions of the SLA. One of the two operators suggested that operators should try to agree SLAs as far as possible with facilitation by ComReg on those issues that could not be resolved. The respondent also noted that it should be able to negotiate the level of service credits associated with SLAs as ultimately, these formed part of a legal contract between the two parties. A third respondent stated that there was no necessity for a SLA and as such, there was no need for a consultation with industry on same.

ComReg's Position

- 6.94 ComReg is of the view that SLAs are an important condition of any contract to ensure the provision of access services to operators are on an equivalent basis to those provided to the downstream arm of the SMP operator. Currently ComReg has not been alerted to any significant abuses in relation to call origination services. In light of the changing environment of NGNs however, it may be necessary to ensure that SLAs are developed, with terms and conditions for alternative interconnection networks.
- 6.95 ComReg believes that the following obligations should be imposed with regard to SLAs:
 - Eircom must conclude a legally binding and fit-for purpose industry SLA with OAOs in respect of wholesale products;
 - The SLA must contain provision for service credits arising from a breach of the SLA;
 - Eircom must negotiate in good faith in relation to these matters;
 - The SLA must be updated as required and such updates may be required by ComReg to be so updated;
 - The industry SLA shall be published on eircom's wholesale website;
 - The detailed operation of the SLA is to be subject of further review with industry and eircom and consultation by ComReg. Where appropriate and reasonable, the SLA may be amended and/or supplemented, following further engagement with industry and following consultation.

Conclusion

6.96 eircom must continue to provide call origination services on terms and conditions which are fair, reasonable and timely. These terms and conditions should be supported and reflected by Service Level Agreements, as part of its

Access obligation. ComReg intends to consult further on the proper implementation of SLAs, to ensure compliance with regulatory obligations.

vii) Equivalency

Consultation Proposal

- 6.97 ComReg proposed that eircom should continue to provide access to and information necessary for call origination services to competitors at an equivalent standard and an equivalent time as it provided to its own retail arm. This should include information necessary to distinguish between different call routings that calls may have taken (e.g. eircom originated or transited from third parties) so that interconnect charges may be exactly calculated and reconciled.
- 6.98 In the current review, ComReg emphasised that OAOs should be given the same notice/information in provision of wholesale call origination services as eircom provided to its retail arm. In addition ComReg and OAOs, should be given reasonable pre-notification of plans which eircom may have with regards to the restructuring of its network where interconnection services would be affected.

Consultation Question

- Q. 22. Do you agree that eircom should provide access to and information necessary for call origination services to competitors at least equivalent times and standards as it provides to its own retail arm? Please provide detail in support of your response.
- Q. 23. Do you agree that where there will be a direct impact on OAOs, that both OAOs and ComReg should be notified of plans which eircom may have with regard to restructuring of their network? If so, what form should this take?

Views of Respondents

- 6.99 One of the respondents fundamentally disagreed with ComReg's attempts to "present eircom's retail arm as an OAO". It further outlined that it considered eircom's retail arm was not in the same position as an OAO, interconnecting with eircom's network. This same respondent believed that it was important that ComReg bore this in mind when devising remedies designed to ensure that wholesale services provided by eircom to OAOs allowed them to compete effectively with eircom on retail markets.
- 6.100 Another respondent was of the opinion that the current regulation did not force eircom to provide access to and information necessary for call origination services to competitors at an equivalent standard and an equivalent time as that provided to eircom's retail arm and it included recommendations to be considered as part of ComReg's decision. A third respondent considered that a requirement on the SMP operator to provide access to competitors to origination services under equivalent conditions to those applicable to its own retail arm was a basic requirement of the non-discrimination obligations. As ComReg proposed to impose this obligation under a non-discrimination obligation on eircom with which this respondent agreed with, then specifying this requirement in the access obligation appeared to be superfluous.

- 6.101 Further, one of the respondents agreed that where OAOs were directly impacted in terms of interconnection services by plans to restructure the network, both ComReg and OAOs should be pre-notified. Another respondent commented that it was eircom's current practice to inform interconnecting OAOs in a transparent and timely fashion of changes in the network architecture. This respondent added that eircom would inform OAOs of any network restructuring or transition to a NGN that would impact on interconnection or interoperability with eircom's network(s) or OAOs' use of eircom's fixed call origination services. The principles proposed by this respondent regarding interconnection migration included in its response were as follows:
 - Once legacy products were no longer absolutely necessary in relevant markets (i.e. SMP requirements no longer valid), their provision should no longer be subject to regulatory intervention;
 - Equitable but affordable commercial agreement would be needed for new interconnection services;
 - eircom could not indemnify OAOs for investment risk due to obsolescence, which should be considered a normal commercial uncertainty;
 - There should be recognition by ComReg and all industry players that the transition to an NGN core network would be done gradually over several years; and
 - There should be recognition that the EU Regulatory Framework had an objective of encouraging infrastructure build.
- 6.102 A second respondent welcomed ComReg's initiative to engage Ovum to recommend policy principles for the Irish NGN regulatory framework as recently published on ComReg website. This respondent also stated that eircom would need to appreciate that they would need the co-operation and collaboration of the industry to agree testing, the timing of handovers, changes to service performance, new interconnect types such as IP based ones etc. The respondent also supported the initiative to start an industry group in the coming weeks. Further, the respondent noted that eircom would need to give formal notices of changes and that these should allow sufficient time for operators to rearrange their networks as appropriate. It also believed that there would in some cases potentially be issues of paying compensation for stranded assets caused, but the details of this would have to be carefully examined.

ComReg's Position

6.103 ComReg is of the view that eircom should continue to be required to provide access to and information necessary for call origination services to competitors at an equivalent standard and an equivalent time as is provided to eircom's retail arm as part of its Access obligation. In relation to the point made by one respondent who suggested that ComReg attempted to present eircom's retail arm as an OAO, ComReg believes that this misrepresents its views. It is obvious that eircom's retail arm is not in fact an OAO, but to state this is confusing and misses the point. The issue being examined is the position of eircom's retail arm, versus an OAO's retail arm. In some cases, both of these may be in the

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same position and in other cases they are not. The object of non-discrimination obligation is to oblige eircom's wholesale arm to give equality of treatment to eircom Retail on the one hand and OAOs on the other, so that the latter is not placed unduly at a disadvantage relative to eircom Retail. The ERG Remedies document for example, states that: 'In general non-discrimination requires that the SMP undertaking 'applies 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 it provides for its own services, or those of its subsidiaries or partners'. This shows that the scope of the non-discrimination obligation clearly covers a firm's internal processes. The general non-discrimination obligation requires that third party access seekers are treated no less favourably than the operator's internal divisions.' 107

6.104 With regard to eircom's notification of network plans, ComReg believes that eircom should notify ComReg of significant network plans once these have been approved in eircom. In addition, eircom should notify OAOs where these plans are likely to have a direct significant financial impact on an OAO(s). With regard to the points made on Interconnection migration, ComReg agree with some of these points in principle, but believe that these issues should be addressed through commercial negotiations. ComReg may however be required to intervene where a dispute arises. As previously discussed in the section on withdrawal of access, eircom would be required to obtain prior approval from ComReg in relation to withdrawal of a facility. ComReg would then consider the impact of the request to withdraw the product/service and if it is decided that there would be a significant impact on industry, a consultation process would be initiated by ComReg. The consultation would include such issues as the notification necessary for industry, whether compensation might be necessary or appropriate (regarding stranded assets of OAOs, etc).

Conclusion

6.105 eircom shall continue to be required to provide access to and information necessary for call origination services to competitors at an equivalent standard and an equivalent time as is provided to eircom's retail arm as part of its Access obligation.

viii) Provision of services on an unbundled basis

Consultation Proposal

- 6.106 Pursuant to Regulation 10(2) of the Access Regulations ComReg proposed that eircom should continue to provide call origination services on an unbundled basis.
- 6.107 ComReg outlined that the rationale for such an obligation was to ensure that OAOs were not required to buy products that they did not need for their services, as this may have the effect of reducing their efficiency and ability to compete.

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¹⁰⁷ ERG Common Position on the approach to appropriate remedies in the new regulatory framework.

Consultation Question

Q. 24. Do you agree that eircom should provide call origination services on an unbundled basis as part of its Access obligation? Please provide detail in support of your response.

Views of Respondents

6.108 Two of the respondents agreed that eircom should continue to provide unbundled access as part of the Access obligation. One of the respondents believed that this call for unbundled call origination services with reference to its own retail arm was inappropriate. It further added that as indirect access and interconnection were not provided to eircom's retail arm and that it was difficult to understand the intent of this proposal, but if it required that call origination be offered at all primary switches, then that was already in place and as such, further regulatory intervention was unnecessary.

ComReg's Position

6.109 ComReg considers that it is reasonable to require eircom to provide call origination services on an unbundled basis, in order to ensure that OAOs are not required to buy additional products to those directly required for their services. As already clarified in the consultation document, 'the basis for this provision is to ensure that OAOs are not required to buy products that they do not need for their services, as this may have the effect of reducing their efficiency and ability to compete'.

Conclusion

6.110 ComReg concludes that eircom must continue to provide call origination services on an unbundled basis, further to its Access obligation.

ix) Open access

Consultation Proposal

- 6.111 ComReg proposed, pursuant to Regulation 13(2)(e) of the Access Regulations that eircom should continue to grant open access to technical interfaces, protocols, or other key technologies and systems and should also be required to provide access to such Operational Support Systems ('OSS') or similar software necessary to ensure fair competition in the provision of services.
- 6.112 Unless these matters were mandated, ComReg was of the view that there may be an incentive for eircom to limit access, or to make access more difficult. ComReg noted that it was obviously essential for OAOs to have open access to technical interfaces, protocols, and OSS such as was necessary for them to take up the mandated product and to allow them to compete with eircom at the retail level.

Consultation Question

Q. 25. Do you agree that eircom should be required to grant open access to technical interfaces, protocols, or other key technologies and systems and should also be required to provide access to such OSS or similar software necessary to ensure fair competition in the provision of services? Please provide detail in support of your response.

Views of Respondents

- 6.113 Two of the respondents disagreed with ComReg's proposal as set out above. One of these respondents argued that its concern was to ensure that eircom was not obliged to provide open access as outlined above to an OAO making a request for new network access, unless and until it had sufficient understanding of the nature of the request to judge that it was 'genuine and reasonable'.
- 6.114 The second respondent claimed that the information that was required from the SMP operator should be defined at the point of interconnection. This respondent believed that information about those technical interfaces and protocols that were essential to support access to wholesale call origination services should be provided, however, information about technologies, systems and software that may be specific to eircom's retail activities and replicated by OAOs should not be subject to open access requirements.
- 6.115 The third respondent believed that Equivalence of Input (EoI) should be the desired goal where all parties had access to the same information and used the same gateway at the same time. This respondent added that as eircom moved towards NGNs this represented an opportune time to start moving to the EoI approach and until EoI was achieved eircom should provide the same information, availability and responses that it provided to its retail arm.

ComReg's Position

- 6.116 With regard to the views expressed by respondents, ComReg notes that where an operator is refused open access on the grounds that the request is not 'genuine and reasonable' that operator can submit a dispute to ComReg, which will be assessed by ComReg, on a case by case basis. The OAO submitting the dispute might ultimately have to demonstrate to ComReg that its request is in fact 'genuine and reasonable'. It would not be appropriate for ComReg to define at this time what exactly 'genuine and reasonable' means for all cases in advance this would be considered on a case by case basis.
- 6.117 With regard to the suggestion by one respondent on the 'Equivalence of Input' (EoI) ComReg propose to revisit this at a later stage and may decide to consult with industry in this regard.
- 6.118 It should also be noted that OAOs should be allowed access to the data available through OSS which OAOs require for the efficient provision of services and allow competitors to compete effectively. ComReg considers that the imposition of an obligation to provide access to OSS, in conjunction with the supporting remedies for non-discrimination and transparency is appropriate to ensure a level playing field in the context of product/service development.

ComReg considers that, an obligation to 'negotiate in good faith' in relation to requests for access is also appropriate. ComReg would like to highlight that it will consult separately on the requirement for a separate remedy of negotiation in good faith.

Conclusion

6.119 eircom should continue to be required to grant open access to technical interfaces, protocols, or other key technologies and systems and should also be required to provide access to such OSS or similar software necessary to ensure fair competition in the provision of services in foot of its Access obligation. Where access to updated facilities of the incumbent requires an update of the facilities on the part of the OAO to benefit from these upgrades, sufficient notice must be given to this OAO(s) by eircom.

Transparency

Consultation Proposal

- 6.120 ComReg proposed that a transparency obligation should continue to be imposed on the SMP operator, eircom. The Access Directive¹⁰⁸ provided that transparency may be used in relation to 'interconnection and/or access, requiring operators to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices'.
- 6.121 ComReg outlined that transparency was a necessary means of ensuring that ComReg and OAOs could observe price and non-price terms and conditions for eircom's wholesale call origination products. A transparency obligation was required to support any accounting separation obligations that may also be imposed, as this would allow the calculation of costs and prices (i.e. internal price transfers) to be rendered visible. This would also allow ComReg to monitor compliance with any non-discrimination obligations, and to address possible competition problems relating to cross subsidisation, price discrimination and the application of price squeezes.
- 6.122 ComReg noted that it had considered the existing level of publication of data per the RIO eircom currently published a full suite of reference documentation in relation to interconnect products, including call origination services. However, ComReg was of the view that, in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result.

Consultation Question

Q. 26. Do you agree that transparency, and in particular the requirement to make public interconnection terms and conditions, is a necessary remedy to actual and prospective problems in this market? Please provide detail in support of your response.

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¹⁰⁸ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, Article 9.

Views of Respondents

- 6.123 One of the respondents agreed that the obligation of transparency was a necessary and appropriate obligation to impose on a SMP operator.
- 6.124 A second respondent believed that the only way to make such rules work was to gain a full understanding of the different ways eircom provided services to themselves, including identifying the components, comparing the differences to that which is provided to the OAOs and then to maintain this level of openness.
- 6.125 A third respondent agreed that transparency was a necessary remedy however; the respondent claimed that the existing level of publication by eircom satisfied the obligation for transparency. It added that there was no evidence to suggest that there was currently a lack of transparency and it was therefore unnecessary to impose these remedies.

ComReg's Position

6.126 In relation to the above comments, ComReg considers that eircom should notify ComReg of significant network plans, once these have been approved in eircom. In addition, eircom should notify OAOs where these plans are likely to have a direct significant financial impact on an OAO. This will allow the efficient upgrade of OAO systems which may be required in order to facilitate such obligations as access to new services. In response to the point raised by one respondent regarding transparency (that the existing level of publication by eircom satisfied the obligation for transparency) ComReg is of the view that in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result.

Conclusion

6.127 A transparency obligation should continue to be imposed on the SMP operator.

i) Publication of Reference Interconnect Offer ("RIO")

Consultation Proposal

6.128 In considering the implementation of the transparency obligation, ComReg proposed that eircom should continue to publish a RIO for call origination services on its wholesale website pursuant to Regulation 10(3) of the Access Regulations.

Consultation Question

Q. 27. Do you agree that eircom should publish a Reference Offer for Call Origination services on its wholesale website? Please provide detail in support of your response.

Views of Respondents

6.129 Two of the respondents agreed that eircom should continue to publish a RIO for call origination services on its wholesale website. One of these respondents noted that publication and transparency was the only way to guard against discrimination. This respondent strongly believed that the services offered to

eircom Retail should be included in this RIO to ensure non-discrimination. A third respondent re-iterated its view that transparency was a necessary remedy but that the existing level of publication by eircom amply satisfied this obligation. It added that there was no evidence to suggest that there was currently a lack of transparency and it was therefore unnecessary to impose these remedies.

ComReg's Position

- 6.130 In relation to the comments made by respondents, ComReg proposes to revisit at a later stage the suggestion that the services offered by eircom Wholesale to eircom Retail should be included in the RIO. ComReg may decide that a specific consultation is most appropriate to address this. Another respondent raised the point that transparency was a necessary remedy, however, that respondent claimed that the existing level of publication by eircom satisfied the obligation for transparency. As ComReg observed, it is of the view that in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result.
- 6.131 ComReg will monitor the developments in the market in the coming months and should a revised RIO be necessary, it will be updated.

Conclusion

6.132 eircom must continue to publish a RIO for call origination services on its wholesale website as part of its Transparency obligation.

ii) Publication of specified information

Consultation Proposal

6.133 In considering an effective access obligation, ComReg noted that eircom should be required to continue to provide information necessary to support call origination services. It was proposed that a transparency obligation would continue eircom's obligation to publish the set of specified information as described above as published on the eircom Wholesale website¹⁰⁹, and would make provision for the evolution of the RIO documentation, and for the introduction of new products and services.

Consultation Question

Q. 28. Do you agree that eircom should publish specified information which supports call origination services? Please provide detail in support of your response.

Views of Respondents

6.134 Two of the three respondents agreed that eircom should publish specified information which supported call origination services. One of the respondents included recommendations relating to what should be published to enable connectivity and remove discrimination. A third respondent repeated its view that transparency was a necessary remedy, but that the existing level of

¹⁰⁹ www.eircomwholesale.ie/regulatory/

publication adequately satisfied the obligation. It added that there was no evidence to suggest that there was currently a lack of transparency and it was therefore unnecessary to impose these remedies.

ComReg's Position

- 6.135 The main issues expressed by respondents in relation to publication of specified information have been addressed by ComReg in the section on 'Publication of Reference Offer'.
- 6.136 In addition, ComReg maintains that the current publication is sufficient. However, should the need arise to revise the current RIO following developments in the call origination market, then ComReg will revisit this.

Conclusion

6.137 eircom must publish specified information which supports call origination services. This information must be published as soon as updates are necessary. Any proposed amendments must be reviewed and approved by ComReg before publication.

iii) Publication of manuals and documentation

Consultation Proposal

6.138 ComReg proposed that eircom should continue to publish appropriate manuals and supporting documentation for new and existing Call Origination services. This would include manuals, order forms and processes for new and existing services, the detail to be determined on a case by case basis.

Consultation Question

- Q. 29. Do you agree that eircom should be required to publish appropriate manuals and documentation for new and existing Call Origination services? Please provide detail in support of your response.
- Q. 30. Is there any additional information which eircom should provide to ComReg or industry or both to further support products and services in the RIO? Please provide detail in support of your response.

Views of Respondents

- 6.139 Two of the respondents agreed that eircom should be required to publish appropriate manuals and documentation for new and existing call origination services.
- 6.140 One respondent stated that in the case of new services, the format and level of detail provided in publications should be consistent with that currently provided for existing services.

- 6.141 The second respondent again emphasised that the requirement to force publication of information for call origination services would reduce the risk of discrimination. These manuals should include how eircom Retail obtained its services in order to avoid discrimination in favour of eircom Retail. The third respondent repeated its view that transparency was a necessary remedy, but that the existing level of publication by eircom satisfied the obligation. It added that there was no evidence to suggest that there was currently a lack of transparency and it was therefore unnecessary to impose these remedies.
- 6.142 One of the respondents suggested that the detail of what eircom Wholesale provided to eircom Retail including timing, processes, charges and all comparable details in the existing reference offer should be information that eircom provided to ComReg and industry. A second respondent again referred to the fact that transparency was necessary, but that the existing level of publication satisfied this obligation. It added that there was no evidence to suggest that there was currently a lack of transparency and that it was therefore unnecessary to impose these remedies.

ComReg's Position

- 6.143 ComReg has addressed in the sections above, the issue raised by one of the respondent regarding the existing level of publication and how it already satisfies the transparency obligation. ComReg will revisit at a later stage the suggestion made by one respondent in relation to publication of information of eircom Retail. This may involve a consultation process in order to seek the views of industry.
- 6.144 ComReg is of the view that currently the publications satisfy the obligation. However, this will be kept under review and updated as soon as possible where conditions change. Any amendments and updates will require ComReg approval prior to publication.

Conclusion

6.145 eircom shall continue to publish appropriate manuals and documentation for new and existing Call Origination services as part of its transparency obligation.

iv) Reference Interconnect Offer (RIO)

Consultation Proposal

- 6.146 ComReg proposed to oblige eircom pursuant to Regulation 10 (2) of the Access Regulations to offer a RIO that was sufficiently unbundled so as to ensure that other undertakings availing of such facilities were not required to pay for facilities which were not necessary for the service requested. ComReg proposed that the RIO should include:
 - i. A description of the relevant offerings broken down into components according to market needs; and
 - ii. A description of the associated terms and conditions, including prices.
- 6.147 It was outlined that eircom should publish any proposed textual changes to the RIO text on its website for the purpose of notifying all interested parties of 131

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such changes. Comments on the proposed changes by OAOs should be submitted to ComReg within 21 (twenty one) calendar days of any such notice and ComReg would either approve or amend the proposed changes within a further 3 (three) weeks. eircom should amend and re-publish its RIO. ComReg proposed that as provided for by Regulation 10 (5) of the Access Regulations, ComReg may issue directions requiring eircom to make changes to the RIO to give effect to obligations imposed pursuant to the Access Regulations and to publish the RIO with such changes.

- 6.148 With regard to pricing, it was noted that under the current process for updating the RIO, eircom notified ComReg 7 days in advance of its intentions to publish an updated RIO price list. The updated RIO price list was circulated to OAOs 21 days before the changes came into effect¹¹⁰.
- 6.149 The RIO Price List was published on the eircom Wholesale website, and consisted of the following documents:
 - RIO Change Matrix
 - RIO Price List marked version
 - RIO Price List unmarked version
- 6.150 ComReg proposed that these obligations should be maintained as it was necessary to provide OAOs with sufficient notice of any changes to the eircom RIO and it was useful for ComReg because it was both necessary and essential for verifying compliance. It was proposed that this process should apply to all the documents relating to the call origination market.

Consultation Question

Q. 31. In your opinion is the current process for updating of the RIO adequate? Please provide detail in support of your response.

Views of Respondents

6.151 Two of the respondents agreed that the current process of updating the RIO was adequate. One of the respondents stated that often industry was merely informed by electronic mail of changes and in the majority of cases there was no explanation as to why these changes were implemented. Further to this the same respondent was of the view that eircom would not introduce conditions necessary to deal with issues surrounding NGN and stranded assets.

ComReg's Position

6.152 ComReg considers that the 21 day timeframe should be the minimum and that in addition, eircom should not discriminate in terms of this notification between eircom Retail and OAOs. ComReg and industry should be given sufficient notice that will allow a thorough review on any change that could have a material impact on an OAO. Where the notification process can be approved, all efforts should be made to do this.

 $^{^{110}\,\}mathrm{International}$ Access Rates are the exception to this.

Conclusion

- 6.153 eircom shall continue to ensure that a minimum of 21 days notice is given for proposed changes to the RIO as part of its Transparency obligation. eircom may, in exceptional circumstances, request that compliance with this regulatory be waived by ComReg. In addition ComReg should be allowed at least five working days to allow for review of any proposed amendments unless previously agreed that it is not necessary on a case by case basis. In the event that a change is significant ComReg should be allowed sufficient time to carry out a detailed review. Again ComReg will take a view on how much time might be required on a case by case basis.
- 6.154 In relation to problems encountered in the past around the notification of operators as commented on by one operator, ComReg would expect that a clear and transparent process is in place to ensure that all affected parties are notified and that any potential for the communication of these notifications to get lost should be reduced to a minimum. ComReg cannot comment on how this process could be improved on for now, however ComReg will engage with eircom following this review on how the process could be improved (where considered necessary).

v) Billing

Consultation Proposal

- 6.155 ComReg proposed in the initial review to consult further on the issue of itemised billing. Since the time of the initial review, eircom had been providing itemised billing on an *ad hoc* basis, as requested by other operators. It was noted that there had been no recent complaints in relation to this practice. ComReg therefore proposed that further regulatory measures in relation to itemised billing were unwarranted and that a consultation would be disproportionate and unjustifiable at this time.
- 6.156 However, it was recognised that it was general practice in any industry that prior to payment of any bill a full breakdown of what the bill related to was required by the paying party. The paying party should be able to reconcile the bill in an efficient manner to their in-house system.
- 6.157 ComReg proposed to continue to monitor this process and would ensure that eircom continued to provide a satisfactory level of granularity so that eircom bills could be reconciled in an efficient manner to operator systems.

Consultation Question

- Q. 32. Do you agree that the eircom billing reports for call origination services to wholesale customers are sufficiently granular so that operators are in a position to reconcile their bill in an efficient manner to their in-house systems? Please provide detail in support of your response.
- Q. 33. If you believe that the current level of detail for call origination services on eircom wholesale bills is not sufficient please demonstrate by example material shortfalls in the reconciliation process.

Views of Respondents

6.158 Two of the respondents expressed the view that eircom billing reports for call origination services to wholesale customers were sufficiently granular to enable operators to reconcile their bills in an efficient manner. One of these respondents stated that industry had agreed the levels of billing information exchanged and the levels necessary to obtain dispute resolution. These levels were agreed through a ComReg facilitated industry forum and therefore it was unreasonable to raise this complex issue in this consultation. Third respondent raised concerns that service credits were not fully itemised and it could be difficult to establish what a specific credit related to.

ComReg's Position

6.159 Interconnect bills should be sufficiently granular to allow for reconciliation of the bill to an OAO in-house system. Where complaints are received from operators in this regard, ComReg will make an assessment as to whether requests are reasonable and if so, eircom will be requested to provide the relevant information in a timely manner. If they fail to do so, eircom may be found to be in breach of its obligation. ComReg does not believe that it is currently necessary to hold a public consultation in this regard.

Conclusion

6.160 eircom's billing should be sufficiently granular for OAO purposes; however ComReg considers that a public consultation at this time is not necessary.

Non-discrimination

Consultation Proposal

- 6.161 ComReg proposed to impose the remedy of non-discrimination on eircom.
- 6.162 It was outlined that in general, non-discrimination¹¹¹ required that the SMP undertaking 'applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it

¹¹¹ Article 10 of Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities.

- provides for its own services, or those of its subsidiaries or partners'. As such, a non-discrimination obligation required that third party access seekers were treated no less favourably than the operator's internal divisions.
- 6.163 ComReg proposed that in addition to transparency, a non-discrimination obligation should be imposed on eircom. ComReg regarded the application of an obligation of non-discrimination on eircom as necessary for dealing with potential competition problems identified in this market. Without non-discrimination, it would be difficult to safeguard against foreclosure practices such as undue requirements. Furthermore, non-discrimination was an essential complement to other obligations, particularly transparency and access.
- 6.164 In particular, ComReg proposed that eircom should be required to provide information and services to alternative operators in timescales, on a basis, and of a quality, which were at least as good as those provided to eircom's retail arm and associates¹¹². In addition, it was important that information gained by eircom as a result of their provision of wholesale call origination services to another operator was not improperly used by eircom's downstream arms in any manner. eircom Wholesale would have visibility of information regarding calls from other operators and therefore may be afforded a position at a retail level to use this call information to target new customers hence giving eircom an advantage over OAOs.
- 6.165 Furthermore, ComReg proposed that eircom should be required to apply a standard process for the development and introduction of new call origination services and elements, including standard documentation and timescales. This should ensure that cost allocations etc. to these new services were such as to ensure that OAO's and eircom's retail arm were presented with the same costs for equivalent services in a transparent manner.
- 6.166 It was noted that the rationale for *ex ante* obligations was not the identification of a particular abuse that had occurred but rather the existence of a position of SMP enjoyed by an operator on a relevant market and where scope and incentives existed for it to engage in anti-competitive behaviour. The imposition of a SMP obligation was intended to guard in advance against anti-competitive abuses occurring.

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¹¹² ComReg considers that this obligation would be met by the maintenance of the process for the introduction of new RIO services directed in D10/02 ODTR document 02/55.

Consultation Question

Q. 34. Do you agree that a non-discrimination obligation applied to eircom is necessary to remedy potential competition problems in the wholesale call origination market? Do you also agree that non-discrimination is a necessary complement to the other obligations needed to remedy potential competition problems in this market? 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 at least an equivalent wholesale call origination product to those services it provides to its retail arm? Please provide detail in support of your response.

Views of Respondents

6.167 One of the respondents agreed that eircom should be required to provide products/services to other operators that are at least the same as it offered its own retail arm. This respondent also believed that the non-discrimination obligation currently in place was not working and made a number of recommendations. These recommendations included disclosing in the RIO the extent to which the SMP operator provided network access to itself including a number of conditions which it must disclose to ensure that the same, similar or equivalent services/product were provided to any other entity. A second respondent reiterated its view that it fundamentally disagreed with ComReg's attempt to present eircom's retail arm as an OAO. It emphasised that eircom Retail was not in the same position as an OAO interconnecting with eircom's network. This respondent further stated that it was important that ComReg bore in mind when devising remedies that the wholesale services provided by eircom to OAOs allowed them to compete effectively with eircom on retail markets. A third respondent agreed that a non-discrimination obligation applied to eircom was necessary to remedy competition problems in the wholesale call origination market and was complementary to other obligations proposed to remedy competition problems in this market. However, this respondent believed that the requirement to provide an equivalent wholesale call origination product should be applied in such a way as to maximise the incentives for eircom to innovate through the introduction of new services.

ComReg's Position

- 6.168 ComReg notes that the first respondent's suggestion that the SMP operator should disclose in the RIO the extent to which the SMP operator provided network access to itself has been addressed above in the 'Publication of Reference Offer' section. Also the point raised by another respondent relating to the suggestion that ComReg has attempted to present eircom Retail as an OAO has been addressed by ComReg in the 'Equivalency' section.
- 6.169 ComReg believe that when assessing the scope of any obligation efficient OAOs should be able to compete effectively with the incumbent's retail arm, as

such equivalency of treatment is required by eircom Wholesale between OAOs and eircom's Retail arm. eircom Retail should not be at a commercial advantage over OAOs by virtue of the fact that it has information about internal plans for network development, IT upgrades etc which are specific to eircom Wholesale.

Conclusion

6.170 The remedy of non-discrimination will continue to be imposed on eircom.

i) Local call handling

Consultation Proposal

included the fact that alternative operators ("OAOs") suffered a cost disadvantage in handling local calls when compared to that of the incumbent (BT). For certain types of calls, i.e. calls that were originated and terminated on the same local exchange (incumbent's exchange) or adjacent local exchange which had a direct link between them, OAOs suffered a routing inefficiency known as 'tromboning' which resulted in a cost disadvantage in handling local calls when compared to the incumbent. The tromboning effect meant that it cost OAOs more to carry a local call than the incumbent. In the past this difference had not been material, due to large margins enjoyed by the incumbent's retail division on most calls but as margins were reduced (which had become more evident in light of recent 'talktime' packages) the difference appeared to have become material. Ultimately, as the incumbent retail call charges continued to move towards cost, OAOs may be unable to compete in the local calls market, or even the national calls market.

Consultation Question

Q. 35. Do you believe that in light of the increased shift of local call costs towards cost that ComReg should consult further with industry on a proposed remedy similar to that reached in the UK in relation to local call disadvantage?

Views of Respondents

6.172 Two of the three respondents agreed that ComReg should consult further with industry on local call disadvantage. One respondent disagreed on the basis that all of the OAOs that operate in this market in Ireland were aware of this remedy that was available in the UK however none had sought this remedy in Ireland. It further stated that it believed that the reason that OAOs had not sought this remedy was that they recognised that the additional complexities that it would entail for CPS services could not be justified by the limited improvements available in the ability to compete in the market for off-peak local calls.

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¹¹³ Ofcom, "Addressing the local call disadvantage consultation", 15 March 2005.

ComReg's Position

6.173 ComReg notes that the majority of respondents considered that it should carry out a further consultation on this issue. ComReg will investigate this further at some point in the future and depending on the findings, may decide to hold a consultation.

Conclusion

6.174 The issue regarding local call disadvantage may be consulted on in detail at some time in the future.

Price control and Cost Accounting

- 6.175 The transparency, non-discrimination and access obligations discussed above would assist in creating a level playing field enabling greater service-based competition in the retail calls market. However, on their own these obligations would not be sufficient to tackle the possibility of the SMP operator setting excessive prices, or to deal with potential problems related to possibly inefficient investments undertaken by a dominant operator. As such, while competition in service provision may be fostered, consumer benefits may not be maximised, due to the setting of excessive prices, or occurrence of excessive costs.
- 6.176 ComReg has continued to apply regulation of call origination since the last review and this has helped to facilitate indirect competition in the retail calls market.
- 6.177 There are a number of forms of price control that may be used by a regulator when deciding upon price controls. The current price control regulation applied in this market mandates cost oriented tariffs based on a Forward Looking-Long Run Incremental Costing (FL-LRIC) methodology.
- 6.178 Competition in the retail calls market has increased since the introduction of CPS and SB-WLR products. However, the success of other operators to be in a position to compete depends to a large extent on reaching price points at a wholesale level that allow for adequate returns, while also encouraging direct investment where commercially feasible by OAOs.

Principles of Price Control

- 6.179 Based on the experience to date of regulating interconnect rates in the Irish market and on the conclusions of the market analysis data, ComReg proposes to continue to impose the form of price control that gives rise to the obligation that interconnection services are offered at cost-oriented prices in the call origination market. This will help ensure that the provision of interconnection is on fair and efficient terms and that interconnect charges are soundly derived from appropriate costs and give proper economic signals to operators to guide their investment decisions.
- 6.180 ComReg has reviewed the rates set by eircom based on the eircom Top Down LRIC model. This method has been in place since 1999 and the model has evolved considerably since its introduction. The existing model sets prices for call origination, call termination and call transit services. Up until 2006, the rates for the relevant financial year were set as interim for the period until such

time as the actual costs and volumes were available from the eircom separated accounts. ComReg would review the final model and, where appropriate, changes were made which may have on occasion given rise to a change to the interim rates charged to operators. Where these changes were material operators would have received refunds, or have made additional payments to the incumbent depending on the changes to rates.

- 6.181 The principle that only efficiently incurred costs can be recovered through interconnection charges is that, in ComReg's view is of vital importance. eircom at an operational level is free to manage its network, and to route calls across the network as it sees fit (subject to the non-discrimination obligation). However, should eircom for its own reasons choose to manage its network in a manner that deviates from the standard of efficient operation, then it shall only be allowed to recover those costs that would have been incurred had it operated efficiently.
- 6.182 In the initial review, ComReg discussed the principles adopted when setting prices and these principles have not altered. These principles are a means of ensuring the following:
 - encouraging efficient competition;
 - sending appropriate signals that promote forward looking investment decisions;
 - enabling cost recovery by eircom;
 - facilitating effective means of interconnection;
 - being sufficiently transparent; and
 - being non discriminatory and non-preferential.

Products subject to Price Control

- 6.183 The suite of interconnection services being offered to operators at a wholesale level by eircom has not changed since 2004 and these are published on the eircom Wholesale website (www.eircomwholesale.ie). ComReg proposes to continue to mandate the provision by eircom of access to these interconnect origination services.
- 6.184 The services included in this market include both origination charges and regulated retention rates associated with the origination portion of calls delivered to service providers. In the case of regulated retention rates, the retention will recover both the costs of the network elements used and the costs associated with collecting the retail revenue such as billing costs and bad debt. This regime is known to industry as the "deemed to be" regime and has been in operation for Number Translation Code ("NTCs") services since their introduction.

i) Near End Handover (NEHO)

Consultation Proposal

6.185 ComReg noted that in addition to the "deemed to be regime", eircom also provided what was known to industry as a Near End Handover (NEHO) solution

for number translation codes ("NTCs"). This was introduced as an alternative choice for interconnection operators, thus enabling such operators to benefit from points of interconnect at a primary level. Previously all NTC calls were handed over at the tertiary level in the eircom network. This mechanism represented the best use of infrastructure rollout as OAOs would no longer have to pay for network elements they did not require, and it encouraged more efficient network based routing so enabling OAOs to benefit from points of interconnect at the primary level. The conclusion of the initial review required that NEHO continued to be provided to those operators in a position to avail of it.

Consultation Question

Q. 36. ComReg invites respondents to submit arguments as to whether anything has changed since the last review to suggest that Near End Handover should no longer be provided to those operators in a position to avail of it? Please provide detail in support of your response.

Views of Respondents

6.186 One of the respondents commented that it was not aware of anything that would suggest that the NEHO facility should be removed, as it was known to be in use and working. This respondent was however concerned that voice interconnect in an NGN platform may move towards the core given the lack of IP connectivity at the local exchange hence this matter should be discussed and reviewed over the coming years. A second respondent disagreed that this product should no longer be provided and commented that NEHO provided an appropriate additional incentive to the entrant to build a deeper interconnect into the eircom network by providing additional margins for networks hosting NTC service providers in line with the call origination costs avoided by eircom.

ComReg's Position

6.187 ComReg notes that all respondents who commented on this issue considered that the NEHO product should continue to be provided to those operators in a position to avail of it. ComReg would add that the RIO, in this regard, provides that calls should be routed efficiently and where this is not the case, then ComReg believe, that the OAO should not be liable for the additional cost due to a decision made by the incumbent to route in a different way.

Conclusion

6.188 The NEHO product shall continue to be provided to those operators in a position to avail of it.

ii) Charging mechanism for payphone access charge (PAC)

Consultation Proposal

6.189 ComReg proposed that any new services introduced into the call origination market subsequent to this market review would be covered by the same pricing

- principles. This was because new services in the same markets would be expected to be subject to the same competitive conditions as existing services.
- 6.190 It was noted that the payphone access charge ('PAC') also fell within this market. This was a supplemental charge for calls originating from payphones. For standard calls, the costs associated with the local access network were recovered through the line rental and therefore, local access network costs were excluded from the computation of origination prices. In the special case of calls originating from payphones there was no associated line rental, and so, the local access network costs incurred to support payphones would go unrecovered without this supplemental charge.
- 6.191 In order to allow for the provision of the facility to call freephone numbers from payphones, it had been necessary to impose a charge on operators for the use of the actual payphones through the PAC to finance the incremental cost of the equipment and other costs involved in maintaining them, in addition to normal interconnect charges.
- 6.192 Currently, there was a special pricing mechanism used to arrive at the PAC, based on ComReg Decision D15/02. In this decision a set of relevant revenues, costs and volumes were taken to arrive at a rate which had been increased year on year by CPI. ComReg indicated in this document that the PAC would be reviewed in 2006. Given the length of time since this decision was made and the changes that have occurred in the Payphone Market (see eircom Historical Cost Separated Accounts 2005/2006) in recent years, ComReg suggested that it may now be appropriate to consult on the application of the PAC and whether it remained appropriate to market circumstances.

Consultation Question

Q. 37. Do you think that the current charging mechanism for PAC is still appropriate given the change in recent years to the use of payphones? If not please provide details with your answer.

Views of Respondents

6.193 Two of the respondents believed that the PAC remained appropriate. One of these respondents considered that payphones had a place in society; it was reasonable and proportionate that payphone operators were correctly rewarded for their investment and as such, they supported the continuation of the PAC. This respondent raised an issue with regard the signalling system number 7 coding which was currently used to measure PAC. It believed that the reliability of this may become an issue as eircom moved to an NGN network. An alternative means suggested by the respondent was the potential use of Caller Location Identification ("CLI"). The second respondent proposed that the entire PAC regime should be reviewed as part of a separate consultation, on the basis that volumes of calls originating on payphones were declining, which meant that the capped level of PAC was substantially below cost.

ComReg's Position

- 6.194 The issue raised by one respondent with regard to signalling system 7 number coding is a technical issue which should be brought to eircom's attention for resolution.
- 6.195 ComReg published a decision (D15/02) which amongst other things, put in place a price in respect of PAC which was deemed appropriate at the time. This was increased by CPI up to 2006. However, as is evident from the eircom historical cost accounts up to 2005/06, the payphone business has seen some dramatic changes in recent years and has incurred substantial losses. As such, ComReg conducted a review of the eircom payphone business early this year and this review is still in progress. Although that review is not yet complete, ComReg had sufficient information before it to form a view on the appropriateness of continuing with a regime of increases based on CPI. Therefore, it was decided that the CPI increase was no longer appropriate (at least for the time being) and this was communicated to eircom pending completion of the review. The conclusion of this review may give rise to an alternative pricing mechanism. The direction 3.2 of Decision Notice D15/02 states that: - "From 1st April 2003, eircom's Payphone Access Charge will be adjusted annually by reference to changes in the Consumer Price Index (CPI) for the previous calendar year. This decision is made under Regulation 8(5), 8(9), 8(10) and 10(1), 10(3) and 10(5) of the European Communities (Interconnection in Telecommunications) Regulations, 1998, SI 15 of 1998". Direction 3.2 will however be withdrawn under the Decision Instrument.

Conclusion

6.196 ComReg will engage with eircom with a view to setting a revised PAC.

iii) Current review process

Consultation Proposal

6.197 It was outlined that ComReg also regulated the order handling charges associated with Carrier Pre-Select, Single Billing through Wholesale Line Rental, Non Geographic Number Portability and Geographic Number portability which formed part of the interconnect price list on the eircom Wholesale website. This involved an annual review of process, costs and volumes to ensure that the most appropriate cost oriented charges were in place to facilitate competition. ComReg had over the past number of years intervened and issued decisions on the most appropriate pricing mechanism to use when setting charges. The current process involved the setting of interim charges, prior to the actual relevant period with a full review of charges on the availability of actual data following the financial year end. It was not envisaged that this process would change during the period of this review.

Consultation Question

Q. 38. Do you think that the current review process is still appropriate? If not please provide details with your answer.

Views of Respondents

6.198 Only one respondent commented on this issue. This respondent believed that the current review processes remained appropriate and should be retained as they have proved effective for the purposes of both review and notification.

ComReg's Position

6.199 ComReg notes the support expressed by the respondent who commented in relation to this issue that the current review process for order handling charges should continue. However ComReg would note that any efficiencies through reduced costs, or automation of processes should be highlighted to ComReg and industry as they arise and charges amended accordingly.

Conclusion

6.200 ComReg concludes that the current review process, where the incumbent is responsible for ensuring charges are cost oriented, for order handling charges should continue for the period of this review.

Form of Price Control

Consultation Proposal

- 6.201 ComReg proposed to continue with the application of the FL-LRIC costing methodology until implementation of a wholesale price cap.
- 6.202 It was noted that the interconnection rates arrived at in recent years appeared to have achieved the aim of encouraging competition and investment. The rates had not seen material change and more recently the market saw a further progression with the setting of forward looking rates (as referred to in two ComReg information notices) to March 2007¹¹⁴ and June 2008¹¹⁵. It was noted at the time that the rates set to March 2007 and June 2008, would remain in place as final rates, until such time as revised rates were required, based on the current pricing methodology, or until a wholesale price cap regime was implemented, whichever happened first.
- 6.203 In the consultation, ComReg entered into discussions with industry on the future price control mechanisms appropriate to the market in light of technological changes to the core network and consumer usage thereof. Its reason was that such changes could have a significant impact on pricing models used to arrive at interconnection rates and on the market itself.
- 6.204 The application of the forward looking long run incremental cost (FL-LRIC) method had been preferred to other cost methods, such as fully distributed

 $^{^{114}}$ ComReg Document 06/23 'Information Notice – Interconnection Rates for 2004/05, 2005/06 and 2006/07'.

¹¹⁵ ComReg Document 07/31 'Information Notice – Interconnection Rates for 2007/08'.

historical costs, and had been recommended by regulatory organisations such as the Independent Regulators Group (IRG).¹¹⁶ This was because it led to a set of prices that reflected the real resource costs taken into consideration when investment decisions were made by operators. The application of this method had been used in the past and was commonly seen in other countries as the most appropriate one to achieve the desired results.

Consultation Question

Q. 39. In your opinion do you believe that the current FL-LRIC Top Down model approach to setting call origination rates should be maintained pending the outcome of the consideration of a wholesale price cap? Please detail your response giving substantive arguments for or against as appropriate.

Views of Respondents

6.205 All three respondents agreed that the current FL-LRIC top down model should be maintained in the interim until such time as a wholesale price cap was established. One respondent however noted that the current Top Down FL-LRIC model was the appropriate basis to set termination rates in the period leading up to the period of implementation subject to a number of adjustments being made to the model. It explained that most of these adjustments arose from the fact that call origination services would be delivered over a hybrid NGN/TDM network before and during the term of the WPC. In the first instance, there would be a pause in investment in TDM network in the period before rollout of the NGN therefore modelling of only TDM costs would not allow full recovery of the costs of call termination. There would also be an effect of higher routing factors arising from calls being handed over at a small number of interconnect or gateway points between the two networks. The respondent noted that from early 2008 eircom would start to connect customers to NGN line cards providing a PSTN Emulation Service ("PES"). At this point calls from such customers – whether terminating on the eircom PSTN or on an OAO network must be routed through a small number of media gateways for termination. As a result of this the routing factor for call origination and primary call origination in particular would increase therefore increasing the number of network elements whose costs must be recovered from call origination revenues. For primary call origination in particular eircom will need to route calls up the NGN to the gateway for hand over to the PSTN. From the gateway this call would then be routed back down the network to the interconnect point to which the OAO had built to qualify the traffic as primary origination.

ComReg's Position

6.206 ComReg notes that all respondents agreed that the current FL-LRIC top down model should be maintained until a wholesale price cap was established. ComReg notes one respondent's comments in relation to the impact of NGNs. ComReg's initial views are that the current (pure PSTN) model could be used to

¹¹⁶ Regulatory Accounting in Practice, A Report prepared by the IRG Accounting Separation Working Group, ERG (06) 23, April 2006.

set a 'starting point' benchmark. As noted in the initial consultation, ComReg has built a BU model based on the current network. It may now be appropriate to update this for eircom plans to invest in the core network which will arrive at a model that meets the needs of eircom and OAOs. This will involve several months of discussion and modelling between eircom and ComReg with input from industry where possible. As it is already apparent that eircom will be looking for full, immediate cost recovery of its NGN transition costs this could easily cause a short term surge in interconnect rates. Depending on how they configure the NGN network in its early days, there might be little 'other' traffic flowing over it which then could easily over inflate the assessment of the cost of the NGN equivalent services (call origination etc) on a per unit basis. ComReg will need to consider the up front costs and the potential saving in years to come, included in this will be areas such as whether eircom should not be allowed to charge for the transition routings that an NGN based call origination might result in. This may only encourage eircom to ensure that such over-routings are mandatory which technically speaking, does not have to be the case. Such factors will need to be taken into account once further detail on the rollout of NGNs is available.

Conclusion

6.207 The current FL-LRIC top down model will be maintained as an approach to setting call origination rates, until finalisation of a WPC model which will take into account changes over the coming years.

Wholesale price cap

Consultation Proposal

6.208 ComReg noted that in the responses to the initial review, there had been general agreement among operators that moving to a WPC regime would be desirable. ComReg at that time had taken note of this and had over the past two years given considerable consideration to and made some preparations for consulting in relation to a WPC. In light of this, ComReg proposed in the consultation stage of this market review to consult with industry on the principle issues surrounding a potential wholesale price cap.

Consultation Question

Q. 40. Do you agree that ComReg should consider possible approaches to, and implementation of, a wholesale price cap?

Views of Respondents

6.209 All three respondents agreed to the proposed implementation of a WPC. One respondent commented that under the current regime the wholesale fixed interconnection charges had been determined annually, based on costs that eircom had incurred which ensured that it could only earn its reasonably incurred costs (including a return on capital employed) but did not give eircom much incentive to increase its efficiency. The respondent also referred to ComReg Document 03/57, D14/03¹¹⁷ which set down possible alternatives to the

¹¹⁷ Decision Notice on Fixed Interconnection Charging Mechanisms, 29 May 2003

current regime. They requested that ComReg carry out an examination of the issues within this consultation document as soon as possible. The respondent also highlighted the issue of NGNs and the need for ComReg to note that the effectiveness of such a regime would be dependent on its ability to promote future investment and encourage sustainable competition. The respondent also noted that the price cap would apply over the period of NGN rollout in parallel with the existing TDM network where the NGN investment would lead to a surge in both operating and capital costs which would persist at least as long as the period of control. Any WPC would therefore have to recognise these cost movements, in order to send the correct signals to new entrants to make complementary investments.

ComReg's Position

6.210 ComReg notes one respondent's concerns regarding the need to 'send the correct signals to new entrants to make complementary investments'. ComReg will carry out detailed modelling work, will participate in the NGN forum and intends to do all possible to arrive at interconnection rates that meet the needs of all industry.

Conclusion

6.211 ComReg will consult on the establishment of an appropriate WPC as soon as possible and notes at this point that there is widespread industry approval for the principle of a WPC.

Cost Accounting Systems

- 6.212 ComReg proposed that a cost accounting system¹¹⁸ would be necessary where an obligation had been imposed on a SMP operator in relation to cost oriented pricing, price controls, recovery of costs and/or retail tariff controls. It was outlined that with regard to the interconnection markets, the obligation of cost orientation was considered to be an appropriate obligation to impose on eircom and therefore, ComReg would impose a further obligation with regard to cost accounting systems on eircom.
- 6.213 It was noted that in order to demonstrate cost orientation of a service or product, it was necessary for eircom to establish cost accounting systems that captured, identified, valued and attributed relevant costs to its services and products, in accordance with agreed regulatory accounting principles, such as cost causality. A key part of this process was the stage which identified those parts of the underlying activities or elements that directly supported or were consumed by those services or products. These elements were referred to as network components. As these components were frequently used to provide more than one product or service, it was also necessary to determine how much of each component was used for each service or product that should be cost oriented. The service/product costing methodology applied the utilisation of these components to the appropriate service product. This information was used

¹¹⁸ Cost accounting is the process of tracking, recording and analysing costs associated with the products or activities of an organisation.

- by eircom and ComReg in establishing the most accurate cost oriented prices for wholesale services and without such information, it would be not be possible to ascertain these prices.
- 6.214 ComReg expressed the view that absent regulation eircom would be in a position to maintain some, or all of its prices at an excessively high level, or impose a margin squeeze so as to have adverse consequences for end users. If ComReg were to relax this obligation, it would not have any legal means of ensuring the cost orientation of prices in the market and to prevent such potential market failure.
- 6.215 It was recognised that as operators may operate in both SMP and non-SMP designated markets, the division of services and products, and the corresponding costs, capital employed and revenues, between the different markets should be reflected in costing systems and coherence and integrity of information should be assured. Where such particular costs formed part of the cost of an SMP service, ComReg needed to have visibility as to the basis of and amount of allocation across all services, SMP and non-SMP, to be in a position to form a view on the costs allocated to the SMP service. Therefore, an obligation to maintain Cost Accounting Systems could provide greater assurances in monitoring non-discrimination and to address the potential competition problems identified.
- 6.216 ComReg was of the view that this obligation would not be overly time consuming or impose a heavy burden on eircom, as eircom already had such systems in place (for a number of years) to prepare its existing set of separated accounts. Furthermore, given the size of organisations such as eircom, it was generally accepted accounting practice to have such systems in place in order to be in a position to prepare monthly and annual accounts that could support internal business decision making and price setting where appropriate.

Consultation Question

Q. 41. Do you believe that the obligation to maintain cost accounting systems should be imposed on eircom? Please detail your response.

Views of Respondents

6.217 All respondents agreed that the obligation on eircom to maintain cost accounting systems should be maintained. One of the respondents stated that it was particularly concerned with the allocation methodologies being adopted by eircom as these could distort the costs, so as to give an unfair advantage to eircom. Another respondent commented that eircom currently operated accounting separation and cost accounting systems pursuant to obligations imposed under the pre-2003 regulatory framework, which the EU Commission had acknowledged to be "best practice". The respondent reiterated that it understood that these systems required adjustment to reflect differences between the structure of the pre-2003 regulatory framework and the current regulatory framework, specifically to reflect the movement to market-based regulation. The respondent expressed the view that the systems did not need to be redesigned in the manner proposed by ComReg in the consultation and therefore, the respondent maintained that the obligations proposed in the pending consultation

were not justified, reasonable or proportionate. The respondent also believed that the current cost accounting systems imposed on eircom to comply with existing obligations of accounting separation and transparency were sufficient to inform the setting of wholesale prices for call conveyance services.

ComReg's Position

6.218 ComReg intends to consult further on cost accounting systems and accounting separation methodologies supporting cost accounting. It should be noted that a comprehensive price control obligation is linked to the obligation for cost accounting systems and accounting separation. In the interim, ComReg is proposing that it maintains the existing level of cost accounting system obligation on eircom until any further consultations are completed.

Conclusion

6.219 The obligation to maintain cost accounting systems shall continue to be imposed on eircom.

Accounting separation

Consultation Proposal

- 6.220 It was outlined that Accounting Separation¹¹⁹ helped to disclose possible market failures and provide evidence in relevant markets of the presence, or absence of discrimination and price squeeze. It made visible the wholesale prices and internal transfer prices of a SMP operator's products and services. It could also provide ComReg with relevant data which would allow it to perform its duties to ensure that predatory pricing or excessive pricing was not occurring, and would provide greater certainty about the costs and volumes for a given service.
- 6.221 An obligation of non-discrimination may require, amongst other things, the imposition of financial reporting regimes in order to monitor eircom's compliance with such an obligation. ComReg believed it would also be appropriate to impose an obligation of accounting separation upon eircom in this market.
- 6.222 ComReg proposed that eircom as an SMP operator should have an obligation not to unduly discriminate. As a vertically integrated undertaking, it may have an incentive to provide wholesale services on terms and conditions that discriminated in favour of its own retail activities in such a way that may have a material effect on competition. The obligation of accounting separation would support ComReg in its monitoring of eircom's behaviour with regard to non-discrimination, by clearly reporting its wholesale prices and internal transfer prices for its services.
- 6.223 ComReg underlined that it would implement the accounting separation obligation on a service and/or product basis. ComReg believed it was not sufficient to implement such an obligation at a *market level*, as it was important to discourage possible cross-subsidisation of pricing at a *service*

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¹¹⁹ The purpose of accounting separation is to provide an analysis of information derived from financial records to reflect as closely as possible the performance of parts of the business as if they were operating as separate businesses.

- level. SMP operators may provide services in a number of markets and may divide the activities required to supply these services among a number of business units. The division of activities relevant to NRAs for regulatory purposes was the division of services and the activities which underlay them, between the relevant markets. These relevant markets may be a regulated market designated with SMP, or a non- SMP designated market. Therefore, NRAs needed to be able to ascertain to what extent services in the non-SMP markets may impact on services supplied in the SMP markets. In order to determine the information required for regulatory purposes, it was necessary to explore the nature of the costs incurred by activities undertaken in the course of supplying a service (or combination of services). If ComReg were to impose accounting separation at the market level, it would not be able to identify whether products and services were being provided on a non-discriminatory basis.
- 6.224 As discussed earlier, in deciding upon the imposition of obligations to support the remedy of potential competition problems, ComReg must ensure that the obligation was based on the nature of the problem identified, justifiable and proportionate in the light of the objectives as set out in section 12 of the Communications Regulation Act, 2002. In this regard, the accounting separation obligation was designed to help provide evidence from eircom which may demonstrate the presence, or absence of price discrimination. In this regard, ComReg believed the imposition of an obligation of accounting separation upon eircom would be justifiable and based upon the nature of the problem identified.
- 6.225 If ComReg were to withdraw this obligation, it would be difficult for it to effectively monitor compliance with an obligation of non-discrimination, or to have any accurate information on margins in the retail business. ComReg did not consider that this obligation would be time consuming, or that it would impose a heavy burden on eircom, as, given the size of eircom it would already have management accounting systems in place to support internal business decision-making.

Consultation Question

Q. 42. Do you believe eircom should have an obligation of accounting separation in the wholesale call origination market? Please provide detail in support of your response.

Views of Respondents

6.226 All three respondents agreed that eircom should have an obligation of accounting separation in the wholesale call origination market.

ComReg's Position

6.227 ComReg has commenced a public consultation in relation to the detailed implementation of the accounting separation and cost accounting remedies. A significant amount of work and engagement with eircom has been carried out to date and based on this and responses received from industry, a further response to consultation is proposed, following the completion the

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outstanding market reviews. It is ComReg's intention that any further consultation on Accounting Separation will improve the current Accounting Separation reporting requirements and enhance the current reporting structure. It is also intended that the structure should help ComReg to make better informed decisions in a more timely and efficient manner on submissions for wholesale price changes that may be made by eircom to ComReg at any given time in the future. The Separated Accounts of eircom should provide such additional cost accounting information to ComReg where the annual historic accounts do not. In the interim, ComReg is proposing that eircom be required to maintain the existing level of accounting separation, until any further consultations are completed.

Conclusion

6.228 The obligation of accounting separation on the call origination market shall continue to be imposed on eircom.

The Wholesale National Transit Market

- 6.229 As set out in section 4, ComReg is of the view that eircom has a position of SMP in the wholesale national transit market over the period of this review. ComReg recognises, however, that one might potentially expect to see some level of development of competing infrastructure in the transit market at some limited geographic locations where economies of scale are available to competing operators.
- 6.230 ComReg is aware that a certain amount of investment has already been made in alternative transmission network, including the government-backed investments in the MANs and ESB's network. However, as assessed in section 4, ComReg does not believe that alternative networks will provide effective competition in this market in the timeframe of the review.
- 6.231 ComReg would, over the longer term, hope to see the gradual emergence of infrastructure-based competition in this market. When applying obligations on eircom in this market ComReg is aware of the need to avoid discouraging efficient investment by other operators in the longer term while promoting competition in the retail market and delivering maximum benefits to end users in the short to medium term.

Potential competition problems in the wholesale transit market Possible Exploitative Behaviour

- 6.232 In light of ComReg's finding that eircom has a position of SMP in the wholesale transit market, it is considered that eircom has the ability and incentives to engage in behaviour that exploits its wholesale customers via such practices as excessive pricing.
- 6.233 Concerns about pricing arise where, absent SMP regulation, price levels are likely to be persistently high with no effective pressure (e.g., from new entry/expansion or strong buyers) to bring them down to competitive levels over the period of the review¹²⁰. In that regard, eircom's *ability* to charge excessive prices for wholesale transit stems from the fact that such high prices would not be undermined by significant new entry or expansion over this review. This was demonstrated in section 4 above where it was shown that eircom has consistently enjoyed a high and stable share of the transit market in excess of 70% (see paragraphs 4.57-4.73). Furthermore, the analysis found that wholesale customers were unlikely to significantly decrease their reliance on eircom over the period of this review due largely to the ubiquitous coverage of eircom's network and the barriers to wholesale customers switching to alternate providers (see paragraphs 4.86-4.103). It was further shown that there is insufficient countervailing buyer power (see paragraphs 4.104-4.108). Thus, in the absence of regulation, there is significant scope for the SMP operator to sustain excessive prices for wholesale transit without significant downward pressure from competitors, or strong buyers over the period of this review.
- 6.234 eircom's *incentives* to charge excessive prices derive largely from its ability to make excessive profits by virtue of the absence of significant pressure from

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¹²⁰ See OFT (April 2004) OFT 414a, Draft Guideline on Assessment of Conduct, para. 2.6.

competitors or customers emerging over the timeframe of this review (see section 4 above). Further incentives to charge excessive prices also derive from eircom's vertically integrated position and the fact that such high prices could restrict competition/raise rivals' costs in downstream retail calls markets thereby enabling eircom to gain retail market share at the expense of its rivals. In addition, excessive input prices could further reinforce entry barriers and eircom's dominance at the upstream level where entry tends to take place progressively from downstream retail markets into upstream wholesale markets. It could also impede/foreclose existing competitors in the wholesale transit market where they require access to eircom's transit service at reasonable rates in order to provide a complete and competitive wholesale transit offering to their own customers.

6.235 As noted above (see paragraph 6.16), a firm with SMP in a relevant market might also have fewer incentives to produce efficiently due to an absence of sufficient competitive pressure and might incur excessive costs, fail to take efficient investments and/or provide a low quality service. This may lead to costlier and less efficient methods of production and consequently higher prices for customers than might otherwise exist under competitive market conditions.

Possible Exclusionary Behaviour/Leveraging

- 6.236 As is clear from section 4, it is ComReg's view that eircom has SMP in the provision of a key input for the downstream retail calls markets. Furthermore, ComReg's analysis indicated that reliance on eircom as a key provider of transit services was unlikely to change significantly over the period of this review largely due to the ubiquitous coverage of eircom's network and the fact that there are barriers to customers switching transit providers (see paragraphs 4.86-4.108). Thus, in view of eircom's continuing market power over a key input for downstream retail markets, ComReg considers that, in the absence of regulation, eircom could have considerable *ability* to influence competitive conditions on downstream retail markets. Furthermore, as alternative transit providers may also require access to eircom's wholesale transit service to provide a ubiquitous wholesale transit service to their own customers, eircom would also have the ability to affect competitive conditions on the transit market itself.
- 6.237 As eircom's wholesale transit customers are also its downstream and upstream competitors, eircom would, in the absence of regulation, have considerable *incentives* to raise rivals' costs or impede competition on both downstream and upstream markets so as to increase its own profits.
- 6.238 Such potential exclusionary behaviour/leveraging could be achieved by the following means:
 - An outright refusal to deal/denial of access: In the absence of regulation, eircom would have the ability and incentives to engage in an outright refusal to deal or denial of access to downstream and/or upstream competitors that rely on its wholesale transit service.
 - Constructive refusal to deal/discriminatory behaviour: In the absence of regulation, eircom would also have the ability and incentives to engage in a constructive refusal of access to its wholesale transit service or to supply it on inferior terms and conditions thereby raising both its downstream and upstream rivals' costs and/or restricting their sales. For example, such behaviour could

include delaying tactics such as protracted negotiations for new entrants, discriminatory use or withholding of information, quality discrimination, strategic design of product characteristics to place downstream competitors at a disadvantage, disproportionate entry criteria as well as unreasonable terms and conditions associated with access, etc.

- Leveraging by price means: In the absence of regulation, eircom could also leverage its dominance from the upstream wholesale transit market into downstream retail markets via such practices as excessive pricing of the wholesale input (see paragraph 6.32) or a price squeeze, whereby an SMP operator sets a price for a wholesale input such that the buyer of the input, who is equally as efficient as the wholesale provider in the related downstream market, is unable to operate profitably and is squeezed out of the related potentially competitive downstream market. As discussed above, eircom would also have incentives to squeeze the margins/raise the costs of competing transit providers in the wholesale transit market via the access price it sets.
- 6.239 All of the potential exclusionary behaviour noted above could have the effect of improving eircom's position vis-à-vis its downstream rivals in the retail calls markets while also potentially impeding/foreclosing competition in the upstream wholesale transit market. Horizontal leveraging concerns may also arise where an undertaking which is dominant in one market uses that market power to exert undue influence on existing or potential competition in other related markets that are at the same level in the production or distribution chain. Examples of possible horizontal leveraging can include using SMP in one market to implement certain tying/bundling practices and/or predatory type behaviour in horizontally associated markets. An SMP operator may also have the ability and incentives to engage in anti-competitive tying/bundling of transit with other interconnect services such as origination or termination potentially raising downstream rivals' costs by requiring them to purchase products they may not need.

Appropriate Obligations: wholesale national transit market

- 6.240 As demonstrated in section 4 above, eircom is the only network operator to be in a position to provide wholesale transit to higher points in the network. ComReg is of the view therefore that appropriate *ex ante* regulation of eircom's wholesale transit products is essential to lay the foundations for establishing sustainable competition in fixed wholesale and retail telecoms markets.
- 6.241 In establishing an *ex ante* regulatory framework designed to facilitate sustainable competition, ComReg needs to ensure that obligations applied on eircom in this market are proportionate to the potential problems identified. In assessing what is proportionate, ComReg takes account of the effectiveness of obligations for dealing with the problems identified, and takes account of the costs associated with the obligations.
- 6.242 In this market, ComReg has considered whether it would be possible to remedy potential problems by establishing a 'light-handed' *ex ante* regulatory framework that would oversee commercial wholesale transit negotiations. Such regulation would tend to impose a low cost on the SMP operator eircom. However, while the burden on eircom would be relatively light, at the present time, ComReg believes that eircom would have little incentive to offer fair and

reasonable interconnection terms to OAOs it competes against in related downstream markets.

- 6.243 ComReg is therefore of the view that at a minimum, the appropriate suite of obligations needed to remedy potential problems in this market requires measures directed towards facilitating access to and the use of facilities. The appropriate form of access needs to be considered by ComReg.
- 6.244 In discussing the appropriate application of obligations in this market, ComReg also needs to adopt a forward-looking perspective. While it is recognised that mandating some form of access to wholesale transit services is required to deal with potential problems over the duration of this review, in the future ComReg may rely on other, less onerous, obligations.
- 6.245 If the wholesale transit market were, for example, to become more competitive, ComReg may not need to rely upon mandated access obligations. However, it may still be necessary for ComReg to apply measures directed against the application of discrimination by SMP operators. Hence transparency and non-discrimination obligations may still be required to further promote competition.

Remedies: wholesale national transit market

- 6.246 Given the finding of SMP in the wholesale national transit market, and the potential competition problems identified above ComReg is obliged to impose obligations which ensure that operators can interconnect appropriately with the eircom network to enable them to compete in related markets. As demonstrated in section 4 above, eircom currently offers ubiquitous transit services in the Irish market and as a result has been designated with SMP in this market. Appropriate obligations in terms of transit are discussed above, and the principles behind the selection of remedies were discussed earlier in this consultation paper.
- 6.247 ComReg's consideration of appropriate remedies in this market is discussed below in terms of:
 - Access to and use of specific network elements and associated facilities
 - Transparency
 - Non-discrimination
 - Price Control and Cost Accounting
 - Accounting Separation.

Access to and use of specific network facilities

i) Access obligation

Consultation Proposal

6.248 ComReg proposed, pursuant to Regulation 13 of the Access Regulation, to continue to impose an Access obligation for wholesale national transit services on eircom. As stated in the Access Directive, obligations could be imposed 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 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.'

- 6.249 ComReg had considered the potential competition problems in this market and concluded that they could not be addressed by the remedy of non-discrimination on its own as there may be situations where an operator may require a service which eircom Retail did not. Furthermore, in the case of single (third party) transit, the majority of OAOs relied on eircom to deliver calls from/to their network to/from alternative operators' networks and had to purchase transit for this. A requirement on the SMP provider to provide wholesale access to its network was needed to facilitate competition in downstream markets by enabling competitors to compete without the need to invest in a ubiquitous network.
- 6.250 It was unlikely within the timeframe of this review that OAOs could build a transit network that could replicate eircom's network and be a comprehensive substitute. Considerable investment was needed to provide networks in competition with eircom. It may be economically viable to build backbone networks covering some parts of Ireland. However, the level of investment that would be needed to achieve the same level of coverage as eircom was a barrier to entry in this market.
- 6.251 Currently and within the period of this review, it was clear that OAOs would need access to eircom's transit network in order to deliver retail voice telephony services to end users and compete with eircom in the downstream market.

Consultation Question

Q. 43. Do you agree that an access obligation for wholesale national transit services should be imposed on eircom pursuant to Regulation 13? Please provide detail in support of your response.

Views of Respondents

6.252 All three respondents agreed that the access obligation for wholesale national transit should continue to be imposed on eircom.

ComReg's Position

6.253 ComReg concludes that the access obligation for wholesale national transit should continue to be imposed on eircom.

Conclusion

6.254 The Access obligation for wholesale national transit services should continue to be imposed on eircom.

ii) Obligation to interconnect networks/network facilities

Consultation Proposal

6.255 ComReg proposed pursuant to Regulation 13(2)(i) of the Access Regulations, that eircom should continue to be required to interconnect networks or network facilities. This was necessary to maintain eircom's obligation to interconnect with existing and new OAOs. It was recognised that eircom may suggest that it would have an incentive to interconnect. In that case, this obligation should impose no significant burden on eircom, while ensuring, *ex ante*, that any possible harmful exercise of dominance was prevented.

Consultation Question

Q. 44. Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please provide detail in support of your response.

Views of Respondents

6.256 All three respondents agreed that eircom should be required to interconnect networks or network facilities. One of the respondents added that OAOs needed to have the same interconnection to eircom network facilities as afforded to eircom Retail.

ComReg's Position

6.257 ComReg notes that respondents concurred that eircom should be required to interconnect networks, or network facilities.

Conclusion

6.258 eircom should continue to interconnect networks or network facilities as part of its Access obligation.

iii) Withdrawal of access

Consultation Question

- 6.259 ComReg proposed that eircom should continue to have an obligation pursuant to Regulation 13(2)(c), not to withdraw access to facilities already granted, unless this had been approved by ComReg. If the withdrawal had a significant impact on the market, ComReg may then decide that a public consultation was necessary prior to approval (or withholding of such approval) for withdrawal of the facility.
- 6.260 ComReg was of the view that this obligation was necessary to ensure that OAOs had the certainty to provide retail services to the marketplace and so compete with eircom.
- 6.261 In addition, ComReg noted that the gradual migration to next generation network technology may well give rise to an increase in possible cases where eircom may wish to withdraw access to existing facilities. ComReg had considered the issue with regard to the withdrawal of access where an operator

- may be required to retain facilities already in place in a time when it was redesigning its network architecture and redeploying network infrastructure and where access facilities, if not withdrawn, could impede development.
- 6.262 ComReg suggested that eircom should continue to seek ComReg approval before withdrawing access to existing facilities and that ComReg's decision in relation to approval would be proportionate and justified and would take into account the potential impact on the market.

Consultation Question

Q. 45. Do you agree that eircom should be required not to withdraw access to facilities already granted, save without prior ComReg approval? Please provide detail in support of your response.

Views of Respondents

- 6.263 One of the respondents believed that if it becomes clear that certain facilities have become redundant across the industry then it would be considered adequate that eircom should be required to provide sufficient notice to the industry and ComReg in relation to its plans of withdrawal. If no objections were raised by any party the withdrawal of the facility should proceed without a need for a public consultation. A second respondent welcomed ComReg's initiative to engage Ovum to recommend policy principles for the Irish NGN regulatory framework as recently published on ComReg website. This respondent also noted that eircom needed to appreciate that they would require the co-operation and collaboration of the industry to agree testing, the timing of handovers, changes to service performance, new interconnect types such as IP based etc. The respondent also supported the initiative to start an industry group in the coming weeks. The respondent also stated that eircom would need to give formal notice of changes and these should allow sufficient time for operators to re-arrange their networks as appropriate. It also believed that there would in some cases be issues of paying compensation for stranded assets caused and the details of this would have to be worked through.
- 6.264 A third respondent believed that the current regime whereby eircom withdrew products after a period of notice to wholesale customers should be allowed to continue. It added that the proposed remedies represented a new obligation without justification and, were unnecessary, disproportionate and damaging to the interest of industry and/or consumers. It also believed that in an evolving market the wholesale services for which there was a 'reasonable request' and demand at one time may no longer be demanded or 'reasonable' at a future date. In some cases the cost of maintaining these services would outweigh their value and eircom should therefore be allowed to withdraw these types of services. The respondent suggested that if ComReg imposed the proposed obligation it could fetter its future policy-making discretion.

ComReg's Position

6.265 Under Regulation 13(2)(c), eircom is obliged not to withdraw access to facilities already granted, In addition ComReg proposes to supplement this obligation by instituting an approval mechanism. This would mean that eircom

would be required to obtain prior approval from ComReg in relation to withdrawal of a facility. ComReg does not consider this requirement to be an additional SMP obligation as such, but a mechanism in support of the existing obligation which would permit ComReg to more effectively implement and monitor the obligation. In light of current uncertainty with regard to roll out of NGNs and indeed the concerns of industry expressed to ComReg, ComReg is of the view that it is justifiable to impose such an obligation on eircom to the effect that eircom should not withdraw access to facilities without ComReg's prior approval. Where eircom considers withdrawing access to a facility then it should, within a reasonable timeframe depending on the nature of the facility, inform ComReg. ComReg will then consider the impact of the request to withdraw the product/service and if it is deemed that there would be a significant impact on industry then a consultation process will be initiated by ComReg. The consultation would address such issues as the notification necessary for industry, whether compensation might be necessary or appropriate for the stranded assets of OAOs etc. ComReg will be proportionate in this regard and is of the view that this should not create any additional or unreasonable burden to eircom.

Conclusion

6.266 eircom should continue to have an obligation not to withdraw access to facilities already granted, as part of the Access obligation. Withdrawal should not occur without ComReg's prior approval for the withdrawal of such access. ComReg will consult further on the detail of how withdrawal of significant facilities should take place.

iv) Provision of specified information

- 6.267 ComReg proposed, pursuant to Regulation 13(2)(c) and 13 (3) of the Access Regulations, that eircom should continue to provide specified information which supported existing and new transit services. Specified information should include such information as technical specifications, network characteristics, terms and conditions for supply and use, and prices, which were necessary for the provision of existing transit services.
- 6.268 ComReg was of the view that this obligation would be met by the continued offering of the relevant facilities in accordance with the terms, conditions and specifications contained in the Main body clauses, Annex A definitions, Billing and Payments annex, contained in the eircom Core RIO Document on the eircom Wholesale website, Billing forms, Network Plan, Technical Manual, CLI CoP, Call Origination and Termination Routing Scheme, Non Disclosure Agreement as published as stand alone documents on eircom's wholesale website, and the prices contained in the eircom RIO Price List and eircom Switched Routing Transit Price List also both held on the eircom Wholesale website.
- 6.269 ComReg noted that the RIO was an evolving document and that the specific information required to support wholesale transit services would change over time.

Consultation Question

Q. 46. Do you agree with ComReg's proposal to require eircom to provide specified information which supports existing and new transit services? Please provide detail in support of your response.

Views of Respondents

6.270 Two of the respondents agreed that eircom should continue to provide specified information which supported existing and future call transit services. One of these respondents added that the move to NGNs would require an understanding by OAOs of such a change on their business model. A third respondent commented to the effect that it fundamentally disagreed with ComReg's attempt to present eircom's retail arm as an OAO. It also commented on the fact that eircom must ensure that it is not obliged to provide information to another provider making a request for new network access unless and until it has a sufficient understanding of the nature of the request to judge that it is genuine and reasonable.

ComReg's Position

6.271 In relation to the point made by one respondent who suggested that ComReg attempted to present eircom's retail arm as an OAO, ComReg would like to point out that it does not attempt to do such a thing. The issue being examined is the position of eircom's retail arm, versus an OAO's retail arm. In some cases both of these may be in the same position and in other cases they are not. The object of non-discrimination obligation is to oblige eircom's wholesale arm to give equality of treatment to eircom retail on the one hand and OAOs on the other, so that the latter is not placed unduly at a disadvantage because of eircom's behaviour. The IRG Remedies document states that 'In general nondiscrimination requires that the SMP undertaking 'applies 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 it provides for its own services, or those of its subsidiaries or partners'. This shows that the scope of the non-discrimination obligation clearly covers a firm's internal processes. The general non-discrimination obligation requires that third party access seekers are treated no less favourably than the operator's internal divisions.'121 In response to the views expressed by the same respondent with regard to judging a request for access to information on the grounds of whether it is reasonable and genuine, ComReg are of the view that where an operator is refused access to information on the grounds that the request is not 'genuine and reasonable' that operator can submit a dispute to ComReg, which will be assessed by ComReg on a case by case basis. The OAO submitting the dispute might ultimately have to demonstrate to ComReg that its request is in fact 'genuine and reasonable'. It would not be appropriate for ComReg to define what exactly 'genuine and reasonable' means but this would be considered on a case by case basis.

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¹²¹ ERG Common Position on the approach to Appropriate remedies in the new regulatory framework.

Conclusion

6.272 ComReg concludes that it is appropriate to oblige eircom to continue to provide specified information which supports existing and future call transit services as part of its Access obligation.

v) Obligation to meet reasonable requests for access

Consultation Proposal

- 6.273 ComReg proposed to impose on eircom the obligation to continue to meet reasonable access requests and to address any disputes accordingly This obligation may be imposed pursuant to Regulation 13(1) of the Access Regulations.
- 6.274 ComReg considered that access seekers may need to avail of other products which were included within the definition of the relevant wholesale market that would allow them to develop retail offerings to compete in the retail market. It was noted that an access remedy was the only remedy which allowed OAOs to make reasonable requests for products according to their specifications pursuant to Regulation 13 (2) (a) or (f) of the Access Regulations. In cases where commercial negotiations were not successful any such requests would be reviewed in the context of Regulation 13(4) of the Access Regulations.
- 6.275 ComReg believed that an SMP operator should not have to meet requests that were unreasonable, or were not technically feasible. In assessing whether requests were reasonable, ComReg noted that such requests should not constitute an undue burden on the SMP operator. This meant that a request which was technically feasible should allow the SMP operator to receive a reasonable rate of return on any necessary investments made to supply a product at a price the requesting operator was willing to pay. The SMP operator must however be able to demonstrate how and why a request was not reasonable.

Consultation Question

Q. 47. Do you agree that eircom should have an obligation to meet reasonable requests for access? Please provide detail in support of your response.

Views of Respondents

- 6.276 One of the respondents agreed that the obligation to meet reasonable requests should be imposed on eircom. A second respondent questioned the term 'reasonableness' and referred to Article 13 of Access Regulations 2003 for guidance. It further commented on the fact that Article 13 goes on to state that when assessing whether such obligations would be proportionate a number of points shall be taken into account. Arising from this the respondent called upon ComReg to consider the development of a reasonable demand or proportionality test in terms of the conditions and price at which a newly-requested wholesale service were to be offered. The following are the points they considered should be included in respect of the proportionality test:
 - The expected reasonable demand should be substantiated;
 - Commercial approaches should be given preference over heavy handed regulatory solutions;

- The price for a particular wholesale service should include the development costs spread over the reasonably expected demand; and
- The price should also include the 'option value' created for OAOs and for the fact that eircom sinks the investment and takes the risk; those who choose to hire its capacity on a short-term basis gain the benefits of not having to take that risk but have to pay higher short-run access prices as a consequence.

This respondent requested ComReg to also consider obligations to supply wholesale products as something of a last resort that should be used when other approaches proved ineffective or impractical. Only if there was a commercial case with reasonable demand for the product/service should it proceed. In essence the respondent summarised that the 'proportionality test' should always apply in deciding whether to require an SMP operator to offer a regulated wholesale service so as to determine whether the net benefits to the market of requiring such a product outweighed the costs of delivering it.

6.277 The third respondent argued that this remedy was not effective and hence this meant that ComReg was not properly implementing regulation. The respondent included a number of recommendations relating to an example of a mandatory access request process.

ComReg's Position

6.278 With regard to the issue of what constitutes 'reasonableness', ComReg believes that it is more reasonable and appropriate to assess each access complaint received on a case by case basis. In relation to one respondent's suggestion that ComReg should employ a formalised test, ComReg considers that this is not a practical approach on the basis that there are a number of interacting variables which must also be considered. ComReg is of the view that a common sense approach to what is a reasonable request for access and what is an unreasonable request, is more appropriate but through a proper analysis where necessary of actual situations as they present themselves, on a case by case basis. Currently there are no such issues noted around access to call transit services however, should such issues arise by the movement to IP technology then ComReg will ensure that any regulatory obligations are adhered to.

Conclusion

6.279 The obligation to meet reasonable access requests as part of its Access obligation should continue to be imposed on eircom.

vi) Service Level Agreements (SLAs)

Consultation Proposal

6.280 ComReg proposed that, pursuant to Regulation 13 (3) of the Access Regulations, eircom's call transit services should be provided on terms and conditions which were fair, reasonable and timely. In this regard ComReg was of the view that the terms and conditions should be supported by a Service Level Agreement ('SLA'). SLAs should ensure that eircom had an incentive to provide products and services which were fit for purpose and treated OAOs the same as its own retail arm. In the consultation, ComReg discussed the potential of consulting with industry on SLAs once the market reviews had been completed. However, since this ComReg has decided to consult with industry at

a later stage on the need for more prescriptive SLAs. ComReg's view was that the SLA was important in order to allow OAOs to approach eircom and ensure that their requests for new or amended products were treated promptly and appropriately. In addition, pursuant to Regulation 13(2)(b) of the Access Regulations ComReg was of the view that eircom should have the obligation to negotiate in good faith with the undertakings requesting access.

Consultation Question

- Q. 48. Do you agree that eircom must provide call transit services on terms which are fair, reasonable and timely? In addition do you agree with ComReg's proposal that these terms and conditions should be supported by Service Level Agreements? Please provide detail in support of your response.
- Q. 49. Do you agree that ComReg should consult with industry on the terms and conditions of the SLA? Please provide detail in support of your response.

Views of Respondents

- 6.281 Two of the respondents agreed that eircom must provide transit services on terms which were fair, reasonable and timely. One of these respondents claimed that this did not however happen in practice and that ComReg should spend more time in industry groups so that it see how regulation could be completely frustrated. This respondent also stated that eircom Wholesale was not looking after the interests of its customers.
- 6.282 A third respondent commented that to date it had not found it necessary nor had OAOs requested SLAs for eircom's provision of wholesale call origination or transit services. They added that eircom had a statement in its RIO that guaranteed call routing on a non-discriminatory basis and it believed that this was sufficient and that any imposition of an SLA would represent unwarranted regulatory intervention.
- 6.283 Further, two of the three respondents agreed that ComReg should consult with industry on the terms and conditions of the SLA. One of the two operators suggested that operators should try to agree SLAs as far as possible with facilitation by ComReg on those issues that could not be resolved. Further to this the respondent also noted that it should be able to negotiate the level of service credits associated with SLAs as ultimately, these formed part of a legal contract between the two parties. A third respondent stated that there was no necessity for a SLA and therefore no need for consultation with industry on this issue.

ComReg's Position

6.284 ComReg is of the view that SLAs are an important condition of any contract to ensure the provision of access services to operators are on an equivalent basis to those provided to the downstream arm of the SMP operator. Currently ComReg has not been alerted to any significant abuses in relation to transit

services. In light of the changing environment of NGNs however, it may be necessary to ensure that SLAs are developed, with terms and conditions for alternative interconnection networks.

- 6.285 ComReg believes that the following obligations should be imposed with regard to SLAs:
 - eircom must conclude a legally binding and fit-for purpose industry SLA with OAOs in respect of wholesale products;
 - The SLA must contain provision for service credits arising from a breach of the SLA;
 - eircom must negotiate in good faith in relation to these matters;
 - The SLA must be updated as required and such updates may be required by ComReg;
 - The industry SLA shall be published on eircom's wholesale website;
 - The detailed operation of the SLA is to be subject of further review with industry and eircom and consultation by ComReg. Where appropriate and reasonable, the SLA may be amended and/or supplemented, following further engagement with industry and following consultation.

Conclusion

6.286 eircom must continue to provide call transit services on terms and conditions which are fair, reasonable and timely. These terms and conditions should be supported and reflected by Service Level Agreements, as part of its Access obligation. ComReg intends to consult further on the proper implementation of SLAs, to ensure compliance with regulatory obligations.

vii) Provision of services of an unbundled basis

- 6.287 Pursuant to Regulation 10(2) ComReg proposed that eircom should continue to be required to provide unbundled transit services. The level of unbundling should not be less than offered at the time to eircom's retail division or subsidiaries.
- 6.288 In terms of clarity, the basis for this provision was to ensure that OAOs were not required to buy products that they did not need in order to provide their services, as this would have the effect of reducing their efficiency and ability to compete.

Consultation Question

Q. 50. Do you agree that eircom should provide unbundled transit services as part of its Access obligation? Please provide detail in support of your response.

Views of Respondents

6.289 Two of the respondents agreed that eircom should provide unbundled transit services as part of its Access obligation. The third respondent believed that the reference to unbundled transit services with regard to eircom's retail arm was inappropriate. It added that the wholesale national transit was not provided to eircom's retail arm and it was therefore difficult to understand the intent of this proposal.

ComReg's Position

6.290 ComReg considers that it is reasonable to require eircom to provide transit services on an unbundled basis in order to ensure that OAOs are not required to buy additional products to those directly required for their services. As already clarified in the consultation document 'the basis for this provision is to ensure that OAOs are not required to buy products that they do not need for their services, as this may have the effect of reducing their efficiency and ability to compete'.

Conclusion

6.291 eircom should continue to provide call transit services on an unbundled basis as part of its Access obligation.

viii) Equivalency

- 6.292 ComReg proposed that eircom should continue to be required to offer access to transit services to competitors at an equivalent standard and at an equivalent time as provided to its retail arm.
- 6.293 Furthermore, ComReg was of the view that eircom should be required to provide competitors with information necessary for access to its transit services at an equivalent time as its retail arm.

Consultation Question

- Q. 51. Do you agree that eircom should provide access to and information necessary for access to transit services to competitors at equivalent times and standards as it provides to its retail arm? Please provide detail in support of your response.
- Q. 52. Do you agree that where there will be a direct impact on OAOs, that both OAOs and ComReg should be notified of plans which eircom may have with regard to restructuring of their network? If so, what form should this take?

Views of Respondents

- 6.294 All three respondents agreed that eircom should provide access to and information necessary for access to transit services to competitors at an equivalent timeframe and standards as it provides to its retail arm. One of these respondents commented that OAOs and eircom Retail should be able to avail of the same services as each other and the only way to make this happen effectively was for a transparency obligation to be placed on eircom to publish details of all the offers it provides itself (including timescales, processes, prices, terms and conditions). Another respondent expressed the view that the existing level of publication by eircom satisfied the obligation for transparency. The respondent further noted that no evidence was presented that there was currently a lack of transparency and as such it considered it unnecessary to impose these remedies.
- 6.295 Further, one of the respondents agreed that where OAOs were directly impacted in terms of interconnection services by eircom's plans to restructure the network, both ComReg and OAOs should be pre-notified. Another respondent commented that it was eircom's current practice to inform interconnecting OAOs in a transparent and timely fashion of changes in the network architecture. The respondent added that eircom would inform OAOs of any network restructuring or transition to a NGN that would impact on interconnection or interoperability with eircom's network(s) or OAOs' use of eircom's transit services.
- 6.296 A third respondent welcomed ComReg's initiative to engage Ovum to recommend policy principles for the Irish NGN regulatory framework as recently published on ComReg website. The respondent also stated that eircom needed to appreciate that in relation to the development of NGNs they would need the co-operation and collaboration of the industry to agree testing, the timing of handovers, changes to service performance, new interconnect types such as IP based etc. The respondent also supported the initiative to start an industry group in the coming weeks. The respondent also commented that eircom would need to give formal notices of changes and these should allow sufficient time for operators to re-arrange their networks as appropriate. It believed that there would in some cases be issues of paying compensation for stranded assets caused and the details of this would need to be worked through.

ComReg's Position

- 6.297 ComReg is of the view that eircom should continue to be required to provide access to and information necessary for call transit services to competitors at an equivalent standard and an equivalent time as is provided to eircom's retail arm as part of its Access obligation. In relation to the point made by one respondent who suggested that ComReg attempted to present eircom's retail arm as an OAO, ComReg believes that this completely misrepresents its views. It is perfectly obvious that eircom's Retail arm is not in fact an OAO, but to state this is confusing and misses the point. The issue being examined is the position of eircom's retail arm, versus an OAO's retail arm. In some cases, both of these may be in the same position and in other cases they are not. The object of nondiscrimination obligation is to oblige eircom's wholesale arm to give equality of treatment to eircom retail on the one hand and OAOs on the other, so that the latter is not placed unduly at a disadvantage relative to eircom Retail. The ERG Remedies document states that 'In general non-discrimination requires that the SMP undertaking 'applies 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 it provides for its own services, or those of its subsidiaries or partners'. This shows that the scope of the non-discrimination obligation clearly covers a firm's internal processes. The general non-discrimination obligation requires that third party access seekers are treated no less favourably than the operator's internal divisions.'122
- 6.298 With regard to eircom's notification of network plans, ComReg believes that eircom should notify ComReg of significant network plans once these have been approved in eircom. In addition, eircom should notify OAOs where these plans are likely to have a direct significant financial impact on an OAO(s).

Conclusion

6.299 eircom should continue to be required to provide access to and information necessary for transit services to competitors at an equivalent standard and at an equivalent time as provided to its own retail arm as part of its Access obligation.

ix) Open access

Consultation Proposal

- 6.300 ComReg proposed that pursuant to Regulation 13(2)(e) of the Access Regulations eircom should continue to grant open access to technical interfaces, protocols, or other key technologies and should also be required to provide such Operational Support Systems ('OSS') or similar software necessary to ensure fair competition in the provision of services.
- 6.301 Unless these matters were mandated ComReg was of the view that there may be an incentive for eircom to limit access, or to make access more difficult. It was obviously necessary for OAOs to have open access to technical interfaces, protocols, and OSS such as were necessary for them to take up mandated products and to allow them to compete with eircom at the retail level in winning customers.

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¹²² ERG Common Position on the approach to Appropriate remedies in the new regulatory framework.

Consultation Question

Q. 53. Do you agree that eircom should be required to grant open access to technical interfaces, protocols, or other key technologies and should also be required to provide such OSS or similar software necessary to ensure fair competition in the provision of services? Please provide detail in support of your response.

Views of Respondents

- 6.302 Two of the respondents disagreed with the proposal as outlined above. One of these respondents argued that eircom must ensure that it was not obliged to comply with this obligation until it had a sufficient understanding of the nature of the request to judge that it was genuine and reasonable.
- 6.303 A second respondent claimed that the information that was required from the SMP operator should be defined at the point of interconnection. This respondent believed that information about those technical interfaces and protocols that were essential to support access to wholesale transit services should be provided, however information about technologies, systems and software that may be specific to eircom's retail activities and replicated by OAOs should not be subject to open access requirements.
- 6.304 A third respondent believed that access to OAOs should be at least equal to that which was available to eircom Retail and this should include timing aspects, process steps, availability etc. This respondent included a set of recommendations that obliged the incumbent operator to publish a reference offer on the various products it offered it own retail arm so that OAOs could compare the terms and conditions etc.

ComReg's Position

- 6.305 With regard to the views expressed by respondents, ComReg notes that where an operator is refused open access on the grounds that the request is not 'genuine and reasonable' that operator can submit a dispute to ComReg, which will be assessed by ComReg, on a case by case basis. The OAO submitting the dispute might ultimately have to demonstrate to ComReg that its request is in fact 'genuine and reasonable'. It would not be appropriate for ComReg to define what exactly 'genuine and reasonable' means for all cases in advance but this would be considered on a case by case basis.
- 6.306 With regard to the suggestion by one respondent that access to OAOs should be at least equal to that which was available to eircom Retail, ComReg propose to revisit this at a later stage and may decide to consult with industry in this regard.
- 6.307 It should also be noted that OAOs should be allowed access to the data available through OSS which OAOs require for the efficient provision of services and allow competitors to compete effectively. ComReg considers that the imposition of an obligation to provide access to OSS in conjunction with the supporting remedies for non-discrimination and transparency is appropriate to ensure a level playing field in the context of product/service development.

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ComReg considers that an additional remedy, an obligation to 'negotiate in good faith' in relation to requests for access is also appropriate. ComReg would like to highlight that it will consult separately on the requirement for a separate remedy of negotiation in good faith.

Conclusion

6.308 eircom should continue to grant open access to technical interfaces, protocols, or other key technologies and should be required to provide such OSS or similar software necessary to ensure fair competition in the provision of services in foot of its Access obligation. Where access to updated facilities of the incumbent requires an update of facilities on the part of the OAO to benefit from these upgrades, sufficient notice should be given to this OAO(s) by eircom.

x) Interoperability

Consultation Proposal

6.309 ComReg proposed that it was necessary for OAOs to have access to Intelligent Network (IN) facilities or other specified services needed to ensure interoperability of end-to-end services to users pursuant to Regulation 13(2)(g) of the Access Regulations.

Consultation Question

Q. 54. Do you agree that eircom should be required to provide specified services needed to ensure interoperability of end-to end services to users? Please provide detail in support of your response.

Views of Respondents

6.310 Two of the respondents agreed that eircom should be required to provide specified services needed to ensure interoperability of end-to-end services to users. One respondent reiterated the view that eircom must ensure that it was not obliged to comply with this obligation until it had a sufficient understanding of the nature of the request to judge that it was genuine and reasonable.

ComReg's Position

6.311 ComReg has addressed the issue raised with regard judging an access request to evaluate if it is genuine and reasonable at the section above on 'Open Access'.

Conclusion

6.312 ComReg concludes that eircom should be required to continue to provide specified services needed to ensure interoperability of end-to-end services to users as part of its Access obligation.

xi) Operational support systems

Consultation Proposal

6.313 ComReg proposed pursuant to Regulation 13 (2) (h) of the Access Regulations that eircom should be required to provide such operational support systems

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(OSS) or similar software necessary to ensure fair competition in the provision of services.

Consultation Question

Q. 55. Do you agree that eircom should be required to provide such operational support systems or similar software necessary to ensure fair competition in the provision of services? Please provide detail in support of your response.

Views of Respondents

6.314 One of the respondents claimed that the information that was required from the SMP operator should be defined at the point of interconnection. This respondent believed that information about those technical interfaces and protocols that were essential to support access to wholesale call origination services should be provided, however information about technologies, systems and software that may be specific to eircom's retail activities and replicated by OAOs should not be subject to open access requirements. The second respondent noted that it was clear that there was an increasing use of supplying information over the electronic gateway and that was welcomed. However, the respondent expressed concerns about the timeliness of the data available on the gateway and expressed the view that information should be flowed through more quickly. A third respondent highlighted its concern that eircom should not be obliged to comply with this obligation until it was able to judge whether a request was reasonable and genuine.

ComReg's Position

- 6.315 The issue raised with regards assessing a request to evaluate whether it is genuine and reasonable has already been addressed by ComReg in the sections above
- 6.316 ComReg believe that OAOs should be allowed access to the data available through OSS which OAOs require for the efficient provision of services and allow competitors to compete effectively. ComReg considers that the imposition of an obligation to provide access to OSS in conjunction with the supporting remedies for non-discrimination and transparency is appropriate to ensure a level playing field in the context of product/service development. ComReg has also considered that an additional remedy, an obligation to 'negotiate in good faith' in relation to request for access is also appropriate. ComReg would like to flag that it will consult separately on the requirement for a separate remedy of negotiation in good faith.

Conclusion

6.317 ComReg concludes that eircom should continue to provide such OSS or similar software necessary to ensure fair competition in the provision of services as part of its Access obligation. ComReg will consult separately on the requirement for a separate remedy of negotiation in good faith. Where access to assets require action on behalf of the OAO in order to interact with eircom then

sufficient notice should be given to OAO to allow them to upgrade in parallel where possible.

Transparency

Consultation Proposal

- 6.318 ComReg proposed that a transparency obligation should continue to be imposed on the SMP operator, eircom. It noted that under the Access Directive¹²³ transparency may be used in relation to 'interconnection and/or access, requiring operators to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices'.
- 6.319 It was outlined that transparency was a necessary means of ensuring that ComReg and OAOs could observe price and non-price terms and conditions for eircom's wholesale call transit products. A transparency obligation was required to support any accounting separation obligations that may also be imposed, as this would allow the calculation of costs and prices (i.e. internal price transfers) to be rendered visible. This would also allow ComReg to monitor compliance with any non-discrimination obligations, and address potential competition problems relating to cross subsidisation, price discrimination and the application of price squeezes.
- 6.320 ComReg had considered the existing level of publication of data per the RIO It was noted that eircom currently published a full suite of reference documentation in relation to interconnect products, including call transit services. However, ComReg believed that, in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result.

Consultation Question

Q. 56. Do you agree that an obligation of transparency should be imposed on eircom? Please provide detail in support of your response.

Views of Respondents

- 6.321 One of the respondents expressed the view that the only way to make such rules work was to promote openness concerning the different ways eircom provided services to themselves.
- 6.322 Another respondent agreed that transparency was a necessary remedy however they considered that the existing level of publication by eircom adequately satisfied the obligation for transparency. They added that there was no evidence to suggest that there was currently a lack of transparency and it was therefore unnecessary to impose these remedies.

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 $^{^{123}}$ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, Article 9.

6.323 A third respondent agreed that the obligation of transparency was a necessary and appropriate obligation to impose on the SMP operator. In addition the respondent highlighted that a non-discrimination obligation was required in order to verify that the SMP operator was not engaging in discriminatory practices.

ComReg's Position

- 6.324 ComReg believes that, in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result. ComReg therefore is of the view that it is necessary for the obligation of transparency to be imposed on eircom. This view is reinforced by OAOs' concerns regarding the level of transparency currently available and the potential resultant competition problems.
- 6.325 ComReg will revisit the suggestion whereby eircom should be obliged to publish information concerning the different ways eircom Wholesale provides services to eircom Retail. ComReg propose to revisit this at a later stage and may decide to consult with industry in this regard

Conclusion

6.326 The transparency obligation should continue be imposed on the SMP operator.

i) Publication of Reference Interconnect Offer ("RIO")

Consultation Proposal

6.327 In considering the implementation of the transparency obligation, ComReg proposed that eircom should continue to publish a Reference Offer for call transit services on its wholesale website pursuant to Regulation 10(3) of the Access Regulations.

Consultation Question

Q. 57. Do you agree that eircom should publish a Reference Offer for Call Transit services on its wholesale website? Please provide detail in support of your response.

Views of Respondents

6.328 Two of the respondents agreed that eircom should continue to publish a RIO for call transit services on its wholesale website. One of these respondents commented that publication and transparency was the only way to prevent discrimination. This respondent strongly believed that the services offered to eircom Retail should be included in this Reference Offer to prove non-discrimination. A third respondent re-iterated its view that transparency was a necessary remedy, but that the existing level of publication by eircom satisfied this obligation. The respondent added that there was no evidence to suggest that there was a lack of transparency and it was therefore unnecessary to impose these measures.

ComReg's Position

6.329 As already discussed, ComReg believes that in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result. ComReg therefore is of the view that it is necessary for the obligation of transparency to be imposed on eircom. ComReg has addressed the issue raised with regard to publication of information regarding the service that eircom Wholesale provide eircom Retail in the section above on 'Transparency'.

Conclusion

6.330 eircom must continue to publish a Reference Offer for call transit services on its wholesale website as part of its Transparency obligation.

ii) Publication of specified information

Consultation Proposal

6.331 In considering the imposition of an access obligation, ComReg proposed that eircom should be required to continue to provide information necessary to support call transit services. ComReg was of the view that a transparency obligation would continue eircom's obligation to publish the set of specified information as described in paragraph 6.317 above, as published on the eircom Wholesale website, and would make provision for the evolution of the RIO documentation, and for the introduction of new products and services.

Consultation Question

Q. 58. Do you agree that eircom should publish specified information which supports call transit services? Please provide detail in support of your response.

Views of Respondents

- 6.332 Two of the respondents agreed that eircom should publish specified information which supported call transit services. One of these respondents stated that eircom should publish information on all services including timescales, terms and conditions, prices etc. of services that it was offering itself.
- 6.333 A third respondent repeated its view that transparency was a necessary remedy but that the existing level of publication by eircom satisfied this obligation. It added that there was no evidence to suggest that there was a lack of transparency and it was therefore unnecessary to impose these measures.

ComReg's Position

6.334 All issues raised by respondents with regard to publication of specified information have been addressed by ComReg in the section above on 'Publication of Reference offer'.

Conclusion

6.335 eircom should be obliged publish specified information which supports call transit services.

iii) Details of access to facilities already granted

- 6.336 ComReg proposed that eircom should continue to publish a Reference Offer containing details of access to facilities already granted.
- 6.337 ComReg believed that this obligation would be met by the continued publication of the transit services schedule and prices, call origination service schedules, prices, product descriptions and inter-operator process manuals and call termination service schedule and prices contained in the most recent version of the Core RIO document and eircom RIO Price List and the most recent version of the eircom Switched Transit Routing Price List. All these documents were included on the eircom Wholesale website.
- 6.338 In addition to the above, ComReg considered it appropriate to require eircom to publish a reference offer for transit services that was sufficiently unbundled to ensure that undertakings were not required to pay for facilities which were not necessary for the service requested. This 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. It was noted that ComReg had imposed a similar unbundling obligation on eircom in both the call origination market and the end user call termination market. ComReg believed that the optimal way to meet this obligation in the three markets was to require eircom to continue publishing the services that fall within these markets, in the same format as they were published in the most recent version of the RIO. ComReg further believed that that the reference offer for the three markets call origination market, eircom end user call termination and transit should be published as one offer.
- 6.339 ComReg was of the view that eircom should continue to publish appropriate manuals and supporting documentation for new and existing Call Transit services. This would include manuals, order forms and processes for new and existing services, the detail to be determined on a case by case basis.

Consultation Questions

- Q. 59. Do you agree that eircom should be required to publish a Reference Offer containing details of access to facilities already granted?
- Q. 60. Do you agree that eircom should be required to publish appropriate manuals and documentation for new and existing Transit services?

 Please provide detail in support of your response.
- Q. 61. Is there additional information eircom should provide to ComReg or industry or both? Please provide detail in support of your response.
- Q. 62. Do you agree that eircom should be required to publish the services that fall within the call origination, the eircom call termination and transit markets in the same format as they are published in the current RIO? Please provide detail in support of your response.
- Q. 63. Do you agree with ComReg's proposal to require eircom to publish one reference offer for three markets call origination market, eircom call termination and transit?

Views of Respondents

- 6.340 All respondents agreed that firstly, eircom should be required to publish a reference offer containing details of access to facilities already granted and secondly, that eircom should be required to publish appropriate manuals and documentation for new and existing transit services. One of these respondents however repeated its view that transparency was a necessary remedy but that the existing level of publication by eircom satisfied this obligation. It added that there was no evidence to suggest that there was a lack of transparency and it was therefore unnecessary to impose these measures.
- 6.341 With regard to whether eircom should be required to publish appropriate manuals and documentation for new and existing Transit services, one respondent suggested that eircom should provide information about the services it offered itself including the level of automation, terms and conditions, timescales, prices, fault performance etc. A second respondent did not consider that there was any additional information that it should provide to either ComReg or industry.
- 6.342 Further, all respondents agreed that eircom should be required to publish the services that fall within the call origination, the eircom call termination and transit markets in the same format as they were published in the current RIO. One of these respondents also suggested that publication of services offered to eircom Retail should be included.

6.343 In addition, all respondents agreed that eircom should publish one reference offer for the three markets i.e. call origination market, eircom call termination and transit.

ComReg's Position

- 6.344 ComReg would like to address two points arising from the above responses, the first relating to one respondent's view that the existing level of publication satisfied the obligation for transparency and it was therefore unnecessary to impose these remedies. As discussed previously, ComReg considers that, in the absence of an enforceable obligation, there would be no guarantee that eircom would continue to publish a RIO and ComReg would have no means of remedying any deficiencies in the RIO as a result. ComReg therefore is of the view that it is necessary for the obligation of transparency to be imposed on eircom.
- 6.345 Secondly, with regard to the point made by another respondent in relation to the suggestion that eircom should provide information about the services that it offered itself including terms and conditions, ComReg propose to revisit this at a later stage and may decide to consult with industry in this regard.

Conclusion

6.346 eircom must continue to publish a RIO containing details of access to facilities already granted. In addition, eircom must be required to continue to publish appropriate manuals and documentation for new and existing Call Transit services as part of its transparency obligation. eircom must also continue to be required to publish the services that fall within the call origination, eircom call termination and transit markets in the same format as they are published in the current RIO. eircom must be required to publish one reference offer for three markets – call origination market, eircom call termination and transit as part of its transparency obligation.

iv) Reference Interconnect Offer (RIO)

- 6.347 ComReg proposed pursuant to Regulation 10 (2) of the Access Regulations, that eircom should be obliged to ensure that the RIO should be sufficiently unbundled so as to ensure that other undertakings availing of such facilities were not required to pay for facilities which were not necessary for the service requested and such offer should include:
 - i. A description of the relevant offerings broken down into components according to market needs; and
 - ii. A description of the associated terms and conditions, including prices.
- 6.348 eircom should publish any proposed textual changes to the RIO text on its website for the purpose of notifying all interested parties of such changes. Comments on the proposed changes by OAOs should be submitted to ComReg within 21 (twenty one) calendar days of any such notice and ComReg would

either approve or amend the proposed changes within a further 3 (three) weeks. eircom should amend and re-publish its RIO in accordance with the obligations set out in this section. As provided for by Regulation 10 (5) of the Access Regulations, ComReg may issue directions requiring eircom to make changes to the RIO to give effect to obligations imposed in the Decision Instrument (see Annex A) pursuant to the Access Regulations and to publish the RIO with such changes.

- 6.349 With regard to pricing, under the current process for updating the RIO, eircom advises ComReg 7 days in advance of its intentions to publish an updated RIO price list. The updated RIO price list is circulated to OAOs 21 days before the changes come into effect¹²⁴.
- 6.350 It was noted that the RIO Price List was published on the eircom Wholesale website, and consisted of the following documents
 - RIO Change Matrix
 - RIO Price List marked version
 - RIO Price List unmarked version
- 6.351 ComReg proposed that these obligations should be maintained as it was necessary to provide OAOs with sufficient notice of any changes to the eircom RIO, and it was useful for ComReg in that it was both necessary and essential for verifying compliance. ComReg believed that this process should apply to all the documents relating to the call origination market.

Consultation Question

Q. 64. In your opinion is the current process for updating of the RIO adequate? Please provide detail in support of your response.

View of Respondents

6.352 All three respondents agreed that the current process for updating the RIO was adequate. One of the respondents suggested that it would be helpful if the electronic mail informing the operators of the update also included the changes, instead of the operator having to locate them on the website.

ComReg's Position

6.353 ComReg considers that the 21 day timeframe should be the minimum and that in addition, eircom should not discriminate in terms of this notification between eircom Retail and OAOs. ComReg and industry should be given sufficient notice that will allow a thorough review on any change that could have a material impact on an OAO. Where the notification process can be approved, all efforts should be made to do this.

¹²⁴ International Access Rates are the exception to this.

Conclusion

- 6.354 eircom shall continue to ensure that a minimum of 21 days notice is given for proposed changes to the RIO as part of its Transparency obligation. eircom may, in exceptional circumstances, request that compliance with this regulatory be waived by ComReg. In addition ComReg should be allowed at least five working days to allow for review of any proposed amendments unless previously agreed that it is not necessary on a case by case basis. In the event that a change is significant ComReg should be allowed sufficient time to carry out a detailed review. Again ComReg will take a view on how much time might be required on a case by case basis.
- 6.355 In relation to problems encountered in the past around the notification of operators as commented on by one operator, ComReg would expect that a clear and transparent process is in place to ensure that all affected parties are notified and that any potential for the communication of these notifications to get lost should be reduced to a minimum. ComReg cannot comment on how this process could be improved on for now, however ComReg will engage with eircom following this review on how the process could be improved (where considered necessary).

v) Billing

- 6.356 ComReg in the initial review proposed to consult further on the issue of itemised billing. It was outlined that since the time of the initial review, eircom had been providing itemised billing on an *ad hoc* basis as requested by other operators. There had been no recent complaints in relation to this practice. ComReg therefore proposed in the current review that further regulatory measures in relation to itemised billing were unwarranted and that a consultation was disproportionate and unjustifiable at this time.
- 6.357 However, it was noted that it was general practice in any industry that prior to payment of any bill a full breakdown of what the bill related to was required by the paying party. Following from this, the paying party should be able to reconcile the bill in an efficient manner to their in-house system.
- 6.358 ComReg would continue to monitor the process and would ensure that eircom continue to provide a satisfactory level of granularity so that eircom bills could be reconciled in an efficient manner to operator systems.

Consultation Question

- Q. 65. Do you agree that the eircom billing reports for call transit services to wholesale customers are sufficiently granular so that operators are in a position to reconcile their bill in an efficient manner to their in-house systems? Please provide detail in support of your response.
- Q. 66. If you believe that the current level of detail on wholesale bills for call transit services provided by eircom is not sufficient please demonstrate by example material shortfalls in the reconciliation process.

Views of Respondents

6.359 All three respondents agreed that eircom's billing reports for call transit services to wholesale customers were sufficiently granular so that operators were in a position to reconcile their bill in an efficient manner to their in-house systems.

ComReg's Position

6.360 The Interconnect bills should be sufficiently granular to allow for reconciliation of the bill to an OAO in-house system. Where complaints are received from operators in this regard, ComReg will make an assessment as to whether requests are reasonable and if so eircom will be requested to provide the relevant information in a timely manner. If they fail to do so eircom may be found to be in breach of its obligation. ComReg does not believe that it is currently necessary to hold a public consultation in this regard.

Conclusion

6.361 eircom's billing should be sufficiently granular for OAO purposes, but believes that a public consultation at this time is neither necessary nor proportionate.

Non- discrimination

- 6.362 ComReg proposed to continue to impose the remedy of non-discrimination on eircom.
- 6.363 It was noted that in general non-discrimination required that an SMP undertaking 'applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners'. As such, the general non-discrimination obligation required that third party access seekers were treated no less favourably than the operator's internal divisions.
- 6.364 ComReg considered that potential competition problems such as the strategic design of products would persist in this market even where a transparency obligation had been imposed. Therefore in addition to a transparency

- obligation, ComReg was of the view that a non-discrimination obligation should be imposed on eircom.
- 6.365 ComReg considered that eircom must provide information and services to alternative operators in timescales, on a basis, and of a quality, which were at least as good as those provided to eircom's retail arm and associates.
- 6.366 It was noted that the rationale for *ex ante* obligations was not the identification of a particular abuse that had occurred but rather the existence of a position of SMP by an operator on a relevant market and where scope and incentive existed for it to engage in anti-competitive behaviour. The imposition of a SMP obligation was intended to guard in advance against anti-competitive abuses occurring.

Consultation Question

Q. 67. Do you agree that eircom should be required to provide transit information and services on a non discriminatory basis to its retail arm and alternative operators? Please provide detail in support of your response.

Views of Respondents

6.367 One of the respondents reiterated its point that it fundamentally disagreed with ComReg's attempt to present eircom's retail arm as an OAO. It emphasised that eircom Retail was not in the same position as an OAO transiting traffic across eircom's network. A second respondent agreed that a non-discrimination obligation applied to eircom was necessary to remedy competition problems in the wholesale transit market and was complementary to other obligations proposed in relation to this market. However, the respondent believed that the requirement to provide an equivalent wholesale transit product should be applied in such a way as to maximise the incentives for eircom to innovate through the introduction of new services. A third respondent again suggested that eircom should be required to publish details of the service offered to eircom Retail on the basis that all operators should be provided with the same services on a non-discriminatory basis.

ComReg's Position

6.368 All issues raised by respondents were addressed by ComReg previously in the section on 'Equivalency' and 'Access to facilities already granted'.

Conclusion

6.369 The obligation of non-discrimination should continue to be imposed on eircom.

Price control and Cost Accounting

6.370 The transparency, non-discrimination and access obligations discussed above would assist in creating a level playing field enabling greater service-based competition in the retail calls market. However, on their own these obligations would not be able to tackle the possibility of the setting of excessive prices by a

- dominant operator, or deal with potential problems related to possible inefficient investments undertaken by a dominant operator. As such, while competition in service provision may be fostered consumer benefits may not be maximised, due to the setting of excessive prices or occurrence of excessive costs.
- 6.371 ComReg has continued to apply regulation of call transit since the last review and this has helped to facilitate indirect competition in the retail calls market.
- 6.372 There are a number of forms of price control that may be used by a regulator when looking at price controls. The current price control regulation applied in this market mandates cost oriented tariffs based on a Forward Looking-Long Run Incremental Costing (FL-LRIC) methodology.
- 6.373 Competition in the retail calls market has increased since the introduction of CPS and SB-WLR products. However the success of the other operators to be in a position to compete is reliant to a large extent on reaching price points at a wholesale level that allow for adequate returns while also encouraging direct investment where commercially feasible by OAOs.

Principles of Price Control

- 6.374 Based on the experience to date of regulating interconnect rates in the Irish market and on the conclusions of the market analysis data, ComReg will continue to impose the form of price control that gives rise to the obligation that interconnection services are offered at cost-oriented prices in the call transit market. This will help ensure that the provision of interconnection is on fair and efficient terms and that interconnect charges are soundly derived from appropriate costs and give proper economic signals to operators to guide their investment decisions.
- 6.375 ComReg has reviewed the rates set by eircom based on the eircom Top Down LRIC model. This has been in place since 1999 and the model has evolved considerably since its introduction. The existing model sets prices for call origination, call termination and call transit services. Up until 2006 the rates for the relevant financial year were set as interim for the period until such time as the actual costs and volumes were available from the eircom separated accounts. ComReg would review the final model and, where appropriate, changes were made which may have on occasion given rise to a change to the interim rates charged to operators. Where these changes were material operators would have received refunds or have made additional payments to the incumbent depending on the changes to rates.
- 6.376 The principle that only efficiently incurred costs can be recovered through interconnection charges is one that, in ComReg's view is of vital importance. eircom at an operational level is free to manage its network, and to route calls across the network however it sees fit (subject to the non-discrimination obligation). However, should eircom for its own reasons choose to manage its network in a manner that deviates from the standard of efficient operation then it shall only be allowed to recover those costs that would have been incurred had it operated efficiently.
- 6.377 In the initial review ComReg discussed the principles adopted when setting prices and these principles have not altered. These principles are a means of ensuring the following:

- encouraging efficient competition;
- sending appropriate signals that promote forward looking investment decisions;
- enabling cost recovery by eircom;
- facilitating effective means of interconnection;
- being sufficiently transparent; and
- being non discriminatory and non-preferential.

Products subject to price control

- 6.378 Call transit services currently offered by eircom are included in Service Schedule 104 'National Transit' and also in the Switched Transit Routing and Price List, both, on the eircom Wholesale website¹²⁵.
- 6.379 The wholesale availability of interconnection services allows OAOs to gain access to the eircom network infrastructure where it would not be possible or practical to economically replicate it. In the absence of effective competition it is necessary to consider the application of a price control in the call transit market so as to prevent excessive pricing.

Form of Price control

Consultation Proposal

- 6.380 ComReg proposed to continue with the application of the FL-LRIC costing methodology, pending the outcome of the consideration of a wholesale price cap, discussed in Annex D.
- 6.381 It was stated that the interconnection rates arrived at in recent years would appear to have achieved the aim of encouraging competition and investment. The rates had not seen material change and more recently the market saw a further progression with the setting of forward looking rates to March 2007¹²⁶. In this information note ComReg noted that the rates set to March 2007 would remain in place as final rates until revised rates were required based on the current pricing methodology, or a wholesale price cap regime was implemented, whichever occurred earlier.
- 6.382 ComReg noted that it would like to take the opportunity presented by this transitional period of having final rates in the market to enter into discussions with industry on the future price control mechanisms appropriate to the market in light of technological changes to the core network and consumer usage thereof. Such changes could have a significant impact on pricing models used to arrive at interconnection rates and on the market itself.
- 6.383 The application of the forward looking long run incremental cost (FL-LRIC) method had been preferred to other cost methods such as fully distributed historical costs, and had been recommended by regulatory organisations such as

¹²⁵ www.eircomwholesale.ie/regulatory/

 $^{^{126}}$ ComReg Document 06/23 'Information Notice – Interconnection Rates for 2004/05, 2005/06 and 2006/07'

the Independent Regulators Group (IRG)¹²⁷, as it led to a set of prices that reflected the real resource costs taken into consideration when investment decisions were made by operators. The application of this method had been used in the past and was commonly seen in other countries as the most appropriate to achieve the desired results.

Consultation Question

- Q. 68. In your opinion do you believe that the current FL-LRIC Top Down model approach to setting call transit rates should be maintained pending the outcome of the consideration of a wholesale price cap? Please provide detail in support of your response giving substantive arguments for or against as appropriate.
- Q. 69. In light of the likely increase in competition in the transit market in the foreseeable future do you think that ComReg could relax any part of the price control obligation when compared to the call origination market? Please provide detail in support of your response.

Views of Respondents

6.384 All three respondents agreed that the current FL-LRIC top down model should be maintained in the interim until such time as a wholesale price cap was established. One of these respondents however noted that a number of adjustments were required to the model during this period. It explained that most of these adjustments arose from the fact that call origination services would be delivered over a hybrid NGN/TDM network before and during the term of the WPC. In the first instance, there would be a pause in investment in TDM network in the period before rollout of the NGN therefore modelling of only TDM costs would not allow full recovery of the costs of call termination. There would also be an effect of higher routing factors arising from calls being handed over at a small number of interconnect or gateway points between the two networks. The respondent further noted that from early 2008 customers would start being connected to NGN line cards providing a PSTN Emulation Service ("PES"). At this point calls from such customers – whether terminating on the eircom PSTN or on an OAO network must be routed through a small number of media gateways for termination. As a result of this the routing factor for call origination and primary call origination in particular would increase therefore augmenting the number of network elements whose costs would need to be recovered from call origination revenues. For primary call origination in particular eircom would need to route calls up the NGN to the gateway for handover to the PSTN. From the gateway this call would then need to be routed back down the network to the interconnect point to which the OAO had built to qualify the traffic as primary origination.

¹²⁷ Regulatory Accounting in Practice, A Report prepared by the IRG Accounting Separation Working Group, ERG (06) 23, April 2006.

6.385 One respondent commented on the issue of whether ComReg should relax any part of the price control obligation in relation to likely increased competitiveness of the transit market going forward, it held a view that traditional transit traffic over the coming years may change given the emergence of new technologies and access mechanisms but considered it was too early to predict the impact of this change. The second respondent believed that there should be a rolling back of ex ante remedies such as cost orientation in the national transit market to reflect the increase in competitiveness. In particular, the respondent outlined the view that the remedies of transparency, accounting separation and cost accounting would be sufficient for the transit market on a prospective basis. Further, the respondent posited that the transit market comprised three different levels i.e. transit to fixed domestic, transit to mobile and transit to NTC. It considered that the last two of these levels were clearly competitive in that several new entrants had built substantial interconnect capacity to the mobile network operators and to International transit and termination. Such operators offered service below the blended cost oriented rate charged by eircom. Competition for transit to fixed networks was much more mixed and there were a number of smaller domestic operators that could only be reached for call termination by transiting eircom's network. The respondent expressed the view that the range of services offered by eircom and the forms of price control should recognise this market structure.

ComReg's Position

- 6.386 ComReg considers that the FL-LRIC top down model should be maintained in the interim period until finalisation of a WPC. ComReg notes one respondent's comments in relation to the impact of NGNs. ComReg's initial views are that the current (pure PSTN) model could be used to set a 'starting point' benchmark. As noted in the initial consultation ComReg has built a BU model based on the current network. It may now be appropriate to update this for eircom plans to invest in the core network which will arrive at a model that meets the needs of eircom and OAOs. This will involve several months of discussion and modelling between eircom and ComReg with input from industry where possible. As it is already apparent that eircom will be looking for full, immediate cost recovery of its NGN transition costs this could easily cause a short term surge in interconnect rates. Depending on how they configure the NGN network in its early days, there might be little 'other' traffic flowing over it which then could easily over inflate the assessment of the cost of the NGN equivalent services (call origination etc) on a per unit basis. ComReg will need to consider the up front costs and the potential saving in years to come, included in this will be areas such as whether eircom should not be allowed to charge for the transition routings that an NGN based call origination might result in. This may only encourage eircom to ensure that such over-routings are mandatory which technically speaking does not have to be the case. Such factors will need to be taken into account once further detail on the rollout of NGNs is available.
- 6.387 ComReg is of the view that it would be premature at this juncture to relax the price control obligation currently in place. With regard to one respondent's comments on the increased competitiveness of elements of the transit market, ComReg notes that the market definition set out for the transit market did not consider a narrower market definition on the basis that it is justified based on demand and supply-side substitutability factors.

Conclusion

6.388 The current FL-LRIC Top Down Model will be maintained as an approach to setting call origination rates until finalisation of a WPC.

Wholesale price cap

Consultation Proposal

6.389 It was noted that in the responses to the 2004 initial review there was general agreement among operators that moving to a wholesale price cap regime would be desirable. ComReg at that time had taken note of this and had over the past two years been engaged in a significant project in preparation for such a move. In light of this ComReg decided in the consultation stage of this market review to consult with industry on the principle issues surrounding a wholesale price cap.

Consultation Question

Q. 70. Do you agree that ComReg should consider possible approaches to, and implementation of, a wholesale price cap?

View of Respondents

6.390 All three respondents agreed to the implementation of a WPC. One respondent commented on the fact that under the current regime the wholesale fixed interconnection charges had been determined annually, based on costs that eircom had incurred which ensured that it could only earn its reasonably incurred costs (including a return on capital employed) but did not provide much incentive to increase efficiency. The respondent referred to ComReg Document 03/57, D14/03¹²⁸ which set out possible alternatives to the current regime and requested that ComReg should examine the issues within this consultation document as soon as possible. The respondent further highlighted the issue of NGNs and the need for ComReg to note that the effectiveness of such a regime would be dependent on its ability to promote future investment and encourage sustainable competition. It also noted that the price cap would apply over the period of NGN rollout in parallel with the existing TDM network whereby the NGN investment would lead to a surge in both operating and capital costs which would persist at least as long as the period of control. Any price cap must therefore recognise these cost movements in order to send the correct signals to new entrants to make complementary investments.

ComReg's Position

6.391 ComReg notes one respondent's concerns regarding the need to 'send the correct signals to new entrants to make complementary investments'. ComReg will carry out detailed modelling work, will participate in the NGN forum and intend to do all possible to arrive at interconnection rates that meet the needs of all industry.

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¹²⁸ Decision Notice on Fixed Interconnection Charging Mechanisms, 29 May 2003

Conclusion

6.392 ComReg will proceed in establishing a WPC as soon as possible

Cost Accounting Systems

Consultation Proposal

- 6.393 ComReg proposed that a cost accounting system¹²⁹ would be necessary where an obligation had been imposed on a dominant operator in relation to cost oriented pricing, price controls, recovery of costs and/or retail tariff controls. With regard to the interconnection markets, the obligation of cost orientation had been imposed as an appropriate obligation on eircom and therefore ComReg would impose a further obligation with regard to cost accounting systems on eircom.
- 6.394 ComReg was of the view that absent regulation eircom could maintain some or all of its prices at an excessively high level, or impose a margin squeeze so as to have adverse consequences for end users. If ComReg were to relax this obligation, it would not have any means of ensuring the cost orientation of prices in the market and prevent such potential market failure. Further to this Cost Accounting Systems could provide greater assurances in monitoring non discrimination and address the potential competition problems identified.
- 6.395 ComReg did not consider that this obligation would be overly time consuming and impose a heavy burden on eircom as they already had such systems in place in order to prepare their existing set of separated accounts. Also given the size of such organisations, it was generally accepted accounting practice to have such systems in place to be in a position to prepare monthly and annual accounts that could support internal business decision making and price setting where appropriate.

Consultation Question

Q. 71. Do you believe that the obligation to maintain cost accounting systems should be imposed on eircom? Please provide detail in support of your response.

Views of Respondents

6.396 All respondents agreed that the obligation to maintain cost accounting systems should be maintained on eircom. One respondent stated it was particularly concerned with the allocation methodologies being adopted by eircom as these could distort the costs so as to afford an unfair advantage to eircom. A second respondent outlined that it accepted that where an obligation for cost orientation of prices for certain call origination services existed it was necessary for eircom to maintain an appropriate cost accounting system. In addition, the respondent expressed the view that the current cost accounting systems imposed on eircom to comply with existing obligations of accounting

¹²⁹ Cost accounting is the process of tracking, recording and analysing costs associated with the products or activities of an organisation.

separation and transparency were sufficient to inform the setting of wholesale prices for call conveyance services.

ComReg's Position

6.397 ComReg will consult further on cost accounting systems and accounting separation methodologies supporting cost accounting. It should be noted that a comprehensive price control obligation is linked to the obligation for cost accounting systems and accounting separation. In the interim ComReg is proposing that it maintains the existing level of cost accounting systems obligation on eircom until any further consultations are completed.

Conclusion

6.398 The obligation to maintain cost accounting systems will continue be imposed on eircom.

Accounting separation

Consultation Proposal

- 6.399 ComReg proposed that Accounting Separation¹³⁰ would help disclose possible market failures and provide evidence in relevant markets of the presence or absence of discrimination and price squeeze. It would make visible the wholesale prices and internal transfer prices of a dominant operator's products and services. It could also provide ComReg with relevant data which would allow it to perform its duties to ensure prices were not set in a predatory manner or at an excessive level and provide greater certainty about the costs and volumes for a given service.
- 6.400 It was noted that an obligation of non-discrimination could require, *inter alia*, the imposition of financial reporting regimes in order to monitor eircom's compliance with such an obligation.
- 6.401 ComReg was of the view that eircom as an SMP operator should have an obligation not to unduly discriminate. The obligation of accounting separation would support ComReg in its monitoring of eircom's behaviour with regard to non-discrimination by clearly reporting its wholesale prices and internal transfer prices for its services.
- 6.402 ComReg would implement the accounting separation obligation on a service and/or product basis. ComReg believed it was not sufficient to implement such an obligation at a market level as it was important to discourage possible cross-subsidisation of pricing at a service level. If ComReg were to impose accounting separation at the market level, it would not be able to identify whether products and services were being provided on a non discriminatory basis.
- 6.403 As discussed earlier, in deciding upon the imposition of obligations to support the remedy of potential competition problems, ComReg must ensure

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¹³⁰ The purpose of accounting separation is to provide an analysis of information derived from financial records to reflect as closely as possible the performance of parts of the business as if they were operating as separate businesses.

that the obligation was based on the nature of the problem identified, justifiable and proportionate in the light of the objectives laid down in section 12 of the Communications Regulation Act 2002. In this regard, the accounting separation obligation was designed to help provide evidence from eircom which may demonstrate the presence or absence of price discrimination. ComReg was of the view that the imposition of an obligation of accounting separation upon eircom would be justifiable and based upon the nature of the problem identified.

6.404 If ComReg were to withdraw this obligation, it would be difficult for it to effectively monitor compliance with any obligation of non-discrimination that may be imposed, or of having any information on margins in the retail business. ComReg did not consider that this obligation would be time consuming and impose a heavy burden on eircom, as, given the size of eircom, it would already have management accounting systems in place to support internal business decision-making.

Consultation Question

Q. 72. Do you believe eircom should have an obligation of accounting separation in the wholesale call transit market? Please provide detail in support of your response.

Views of Respondents

6.405 All three respondents agreed that eircom should have an obligation of accounting separation in the wholesale call transit market.

ComReg's Position

6.406 ComReg has entered into a public consultation on the detailed implementation of the accounting separation and cost accounting remedies under the new framework. A significant amount of work and engagement with eircom has been carried out to date and based on this and responses received from industry a further response to consultation is proposed following the completion of the first round of market reviews. It is ComReg's intention that any further consultation on Accounting Separation will improve the current Accounting Separation reporting requirements and enhance the current reporting structure. The intention is that the structure should help ComReg make more informed decisions in a more timely and efficient manner on submissions for wholesale price changes that may be made by eircom to ComReg at any given time in the future. The Separated Accounts of eircom should provide such additional cost accounting information to ComReg where the annual historic accounts do not. In the interim, ComReg is proposing that eircom be required to maintain the existing level of accounting separation, until any further consultations are completed.

Conclusion

6.407 The obligation of accounting separation on the call transit market will continue to be imposed on eircom.

Wholesale International Transit Market

Consultation Proposal

- 6.408 In the consultation ComReg provisionally concluded that eircom no longer had SMP in outgoing International Transit market and hence this market was considered to be effectively competitive. As such, ComReg proposed removing previously imposed obligations within this market. These obligations included the following:
 - Transparency;
 - Non-discrimination:
 - Access to and use of specific network elements and associated facilities;
 - Price Control and Cost Accounting; and
 - Accounting Separation.
- 6.409 An assessment was carried out on the impact of removing these obligations in the Regulatory Impact Assessment, section 9 below.

Views of Respondents

6.410 All respondents supported ComReg's proposal to remove existing regulatory measures from the outgoing International Transit market.

ComReg's Position

ComReg will continue to monitor developments in this market (in particular because obligations are being removed for the first time and competition has been encouraged in this market as a result of regulatory intervention) and conduct a further review should circumstances in the market place change sufficiently to undermine the findings of the current review.

Conclusion

6.411 ComReg has concluded that this market does not currently meet the Three Criteria Test and as such the obligations previously imposed on this market should be removed.

7 Other services necessary for the provision of Interconnection

Capacity Based Interconnection Products

Consultation Proposal

- 7.1 In the consultation, ComReg noted that it had set out its views as to the appropriate obligations to be imposed on the markets for call origination and transit markets. Further, it outlined that these obligations could not be availed of without certain 'supporting' products which were necessary in order to avail of mandated obligations. These were known as capacity based interconnection products.
- 7.2 ComReg considered the products described in Service Schedules 002 (Interconnect Paths) and 005 In Span Interconnection ('ISI') in eircom's current RIO on the eircom Wholesale website (www.eircomwholesale.ie) and eircom RIO Network Price List (also on the eircom Wholesale website) fell within the definition of these capacity based products. Similarly, the existing Interconnect Operations & Maintenance ('O&M') Manual and the Service Level Agreement ('SLA') for Interconnect Paths and Traffic Designation for Inbound & Outbound Interconnection Paths document published on eircom's wholesale website, support provision and operation of these services.
- 7.3 Without these services, interconnection for the purposes of origination, termination and transit could not be effected and as such ComReg outlined its intention to mandate the provision of capacity based interconnection products outside the market review process i.e. without a designation of SMP or definition of a relevant market. ComReg noted the statement of the European Commission in its Explanatory Memorandum to the Recommendation on Relevant Markets ("the Explanatory Memorandum"), in which it explicitly addressed the question of imposing SMP remedies in an area outside a defined market. The Commission recognised that in dealing with lack of effective competition in an identified market, it may be necessary to impose several obligations to achieve an overall solution. The Explanatory Memorandum stated:
 - "For instance, it may often be the case that adjacent or related remedies are applied to technical areas as part of the over all obligation that addresses SMP on the analysed market. If specific remedies are thought to be necessary in a specific narrow technical area, it is not necessary or appropriate to identify each technical area as a relevant market in order to place obligations in that area."
- 7.4 ComReg considered its approach in mandating capacity based interconnection products to be consistent with the approach set out in the Access Regulations and the Explanatory Memorandum.
- 7.5 In addition, Regulation 6(2) of the Access Regulations provided ComReg with discretionary powers to ensure adequate access, interconnection and interoperability. In particular, without prejudice to measures that may be taken regarding undertakings with SMP, ComReg was able to impose, to the extent that it was necessary to ensure end to end connectivity, obligations referred to in Regulations 10 to 14 of the Access Regulations inclusive on

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- undertakings that controlled access to end users, including in justified cases the obligation to interconnect their networks where this was not already the case.
- 7.6 ComReg noted that with ISI, the precise position of the handover to eircom was not mandated by eircom but was determined by the OAO. Thus, at least in theory, the handover point could be anywhere from just outside the OAO to just outside the eircom interconnect node. To a large extent, therefore, ComReg would argue that if ISI was mandated, then the question of whether or not CSH/CSI was also mandated was largely academic. ComReg also noted that the relevant market for CSH/CSI would be a national one, whereas the fibre infrastructure which was being rolled out by the MANs and by the ESB, only covered a limited number of routes and locations. Thus, there was no guarantee that the MANs or the ESB would have the required infrastructure in the right place to always facilitate ISI.
- 7.7 ComReg was of the view that it was not the case that merely having the choice between CSH/CSI and ISI rendered the market for interconnect links a competitive one. ComReg's reasoning was that the alternate fibre infrastructure was only available at a limited number of locations, whereas the relevant market for interconnect links was a national one. In areas where alternate infrastructure was not available, the only realistic product available to the OAO, as ComReg understood it, would be CSH/CSI. If that product was not available at a realistic price, then the OAO would only be able to achieve interconnect by physically digging its own fibre link(s). Given the economies of scale and scope available to eircom, but not to the OAO, this would more than likely be cost prohibitive in many cases.
- ComReg interpreted this to mean that the products described in Service Schedules 002 (Interconnect Paths) and ISI in eircom's current RIO and eircom RIO Network Price List as well as the Interconnect O&M Manual, the SLA for Interconnect Paths and the Traffic Designation for Inbound & Outbound Interconnection Paths document published on eircom's wholesale website, would continue to be supplied under the current terms and conditions. This meant the current obligation to provide such products on a reasonable request basis would continue. Obligations in respect of transparency and non discrimination would also continue. These products would remain subject to price control as in the current regime. Such charges were based on LRIC and must also be consistent with the principles applicable to charging of Partial Private Circuits given their deployment in provision of PPCs.

Consultation Question

Q. 73. Do you agree that ComReg should mandate capacity based interconnection products in this manner? Please provide detail in support

Views of Respondents

7.9 Two respondents agreed that ComReg should mandate capacity based interconnection products. One of these respondents emphasised that it was absolutely critical that ComReg should continue to mandate capacity based

interconnect products as described above. The third respondent did not give a view in relation to this question.

ComReg's Position

7.10 ComReg is of the view that the mandating of capacity based interconnection products is warranted.

Conclusion

7.11 ComReg will mandate capacity based interconnection products.

Fixed SMS

Consultation Proposal

7.12 It was noted that fixed SMS was available at a wholesale level and was included as part of the RIO Service Schedule 401 – Single Billing through Wholesale Line Rental. Any request from another operator for the provision of this service should be considered a reasonable request and would be covered through the Wholesale Line Rental provision for Non Discrimination. As such it was not felt necessary at this stage to impose any further remedies based on the fact that take-up of the service at a retail level was not significant and therefore it was not considered proportionate or justifiable to impose further remedies at this time. However, ComReg would monitor the market for SMS from fixed lines and should problems arise that were contrary to the above then this would be examined in further detail.

Consultation Question

Q. 74. Do you agree with the above position taken by ComReg in relation to Fixed SMS? Please provide detail in support of your response.

Views of Respondents

7.13 All of the respondents agreed with ComReg's position in relation to fixed SMS. One operator called on ComReg to apply in line with the principle of technology neutrality in the EU Regulatory Framework symmetric regulatory obligations for wholesale mobile SMS on mobile network operators found to have SMP in the market for call origination and access.

ComReg's Position

7.14 In relation to the point raised regarding ComReg applying specific SMS obligations on mobile network operators found to have SMP, ComReg believe that this is outside the scope of the current market analysis and that technology neutrality does not mean that a fixed network is equivalent to a mobile network.

Conclusion

7.15 Fixed SMS will be covered through the remedy for Wholesale Line Rental Non-discrimination.

Calls to directory enquiry and operator assisted services and subsequent call completion services for calls originating on the eircom network

Consultation Proposal

7.16 It was outlined that the charges for access to eircom's DQ and OA services in its RIO included both the costs of conveyance and the labour costs of the operator. Nothing had come to the attention of ComReg since the time of the initial review that would indicate a need to investigate the labour costs of providing a DQ service and therefore no change was proposed in this regard.

Consultation Question

Q. 75. Do you consider that in the period since the initial review that the market for the labour element of DQ services to be effectively competitive and therefore not suitable for ex-ante regulation? Please provide evidence to support your answer.

Views of Respondents

7.17 Two of the respondents agreed that the market for the labour element of DQ services was effectively competitive and therefore was not suitable for *exante* regulation. One of the respondents was unsure whether services were effectively competitive on the basis that although there were a number of providers in the DQ market prices remain high. The respondent added that it would not be reasonable to review the costs of labour associated with the provision of this service.

ComReg's Position

7.18 Nothing has been brought to the attention of ComReg that would suggest that this is not competitive.

Conclusion

7.19 ComReg believe currently that the market for the labour element of DQ services to be effectively competitive and therefore not suitable for ex-ante regulation.

8 Regulatory Impact Assessment (RIA) – Call Origination

- 8.1 According to ComReg's consultation on its Approach to Regulatory Impact Assessment, ComReg Document 06/69, the purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. ComReg's approach to RIA is that in the future it will continue to conduct RIAs in respect of any proposed statutory instruments which would impose regulatory obligations, or in respect of any market analyses which propose to impose, amend or withdraw obligations, through the finding of SMP or effective competition. Appropriate use of RIA should ensure the most effective approach to regulation is adopted.
- In conducting RIA ComReg will take into account the RIA Guidelines¹³¹, 8.2 adopted under the Government's Better Regulation programme. The RIA Guidelines are not formally or legally binding upon ComReg; however, in conducting RIA ComReg will have regard to them, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation may be different to regulation exclusively by way of enacting primary or secondary legislation. In conducting a RIA ComReg will take into account the six principles of Better Regulation that is, necessity, effectiveness, proportionality, transparency, accountability and consistency. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards RIA. As decisions are likely to vary in terms of their impact, if after initial investigation a decision appears to have relatively low costs, then ComReg would expect to carry out a lighter RIA in respect of those decisions.
- 8.3 The Government's RIA Guidelines sets out the stages it believes are necessary for minor impact regulations and a more detailed set of steps for more comprehensive or full RIA, ComReg has taken these steps into consideration and has come up with a 5 step approach as follows which will be used:
 - (a) Description of policy issue to be addressed and identification of objectives;
 - (b) Identify and describe the regulatory options;
 - (c) Determine the impact on stakeholders;
 - (d) Determine the impact on competition;
 - (e) Assess the impacts and select the best option;
- 8.4 In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost benefit analysis would only arise where it would be proportionate or in exceptional cases where robust, detailed and independently verifiable data is available. Such comprehensive review will be taken when necessary.

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¹³¹ See "RIA Guidelines: How to conduct a Regulatory Impact Analysis", October 2005, www.betterregulation.ie

8.5 This section in conjunction with the rest of this document represents a RIA. It sets out a preliminary assessment of the potential impact of proposed SMP obligations for the Call Origination Market.

The RIA

Description of policy context and objectives

- The European Commission, in its adoption of a new common regulatory framework for electronic communications networks and services on 7th March 2002, acknowledges the need for ex ante regulatory obligations in certain circumstances in order to ensure the development of a competitive communications market. The European Commission's Recommendation on Relevant Markets¹³² identifies electronic communications markets, the characteristics of which may be such as to justify the imposition of such regulatory obligations. Regulation 26 of the Framework Regulations¹³³ requires that, as soon as possible after the adoption by the European Commission of this Recommendation, ComReg shall define relevant markets in accordance with the principles of competition law including the geographical area within the State of such markets. In addition, Regulation 27 requires that, as soon as possible after ComReg defines a relevant market, ComReg should carry out a market analysis of these markets and where ComReg determines that a recommended market is not effectively competitive, it shall designate undertakings with significant market power on that market, and it shall impose on such undertakings such specific obligations as it considers appropriate.
- Regulation 9(1) of the Access Regulations¹³⁴ 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 Guidelines¹³⁵ states that, "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 as having SMP.
- 8.8 ComReg can impose any or a combination of obligations from those obligations listed in Regulation 10 to 14 of the Access Regulations. 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

¹³² Commission Recommendation of 11/02/2003 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 of the Council on a common regulatory framework for electronic communication networks and services.

¹³³European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003, S. I. No. 307 of 2003

¹³⁴ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

¹³⁵ SMP Guidelines.

- 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 Regulation".
- 8.9 As part of the process of selecting appropriate obligations which satisfy the requirements of Regulation 9(6), ComReg is conducting, *inter alia*, a Regulatory Impact Assessment in accordance with the Ministerial Policy Direction on Regulatory Impact Assessment¹³⁶. ComReg is also paying close attention to best practice, and specifically, to the RIA Guidelines.
- 8.10 Having undertaken a market analysis of the **Call Origination Market** (one of the markets identified in the Recommendation as having characteristics which may be such as to justify the imposition of regulatory obligations), ComReg has found that the market is not effectively competitive and has designated eircom with significant market power in this market, as required under Regulation 27 of the Framework Regulations. As such, ComReg is obliged to impose at lease one regulatory obligation on eircom in light of this finding. It is proposed that the following regulatory obligations should be imposed on eircom:
 - 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)
- 8.11 ComReg believe that the above *ex ante* regulatory obligations would be proportionate and justified on the basis of ensuring the development of a competitive communications market. The justification for imposing the above regulatory obligations on eircom is illustrated further below.

Options

- 8.12 The regulatory options open to ComReg (Regulations 10-14 of the Access Regulations):
 - Access to and use of specific network facilities: An obligation can be imposed on SMP operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, which is justified as a means of increasing competition. In terms of the Directives, this is by far the most extensively described of any of the regulatory obligations, reflecting the importance of this obligation and its central role in affecting competitive markets. The key competition concern in this market is the possible denial of access to facilities or the application of unreasonable terms and conditions by eircom. In the absence of regulation, eircom would be free to deny access to its call origination

¹³⁶ Section 6 of the Directions by the Minister for Communications Marine and Natural Resources to the Commission for Communications Regulation under s. 13 of the Communications Regulation Act 2002, published in February 2003.

services, or at the least offer such access on uncompetitive terms. As with providing access to transit and termination services, any refusal by eircom to provide access to call origination would create serious difficulties for its competitors to compete on the retail voice market. Given that ComReg must impose at least one SMP obligation, it is likely that, at a minimum, an access obligation would be imposed. As such, it is appropriate to use the access obligation as a starting point for addressing the potential competition problems identified in this market.

- Transparency & Non-discrimination: In general, an access obligation will rarely operate as a standalone obligation. Instead it is likely to be accompanied by a transparency obligation. Non-discrimination is also likely to accompany such an obligation as, often where access is required, vertically integrated entities are capable of acting in ways so as to leverage market power from the upstream to the downstream firm's advantage. The imposition of a non-discrimination obligation would protect against such behaviour. eircom currently publishes a full suite of reference documentation in relation to interconnect products they provide, including call origination services. However, in the absence of an enforceable transparency obligation on eircom, there would be no guarantee that they would continue to publish a RIO and ComReg would have no means of remedying any deficiencies on the RIO as a result. In addition, the general non-discrimination obligation currently imposed on eircom requires that third party access seekers are treated no less favourably than eircom's internal divisions. In the absence of a non-discrimination obligation, eircom would be free to treat access seekers less favourably than its own retail arm, thus inhibiting their ability to compete effectively at the retail level. Finally, out of the five SMP obligations available to ComReg, these two obligations are the least burdensome as, together, they constitute a minimum intrusion on an SMP operator's business. As such, it is appropriate to next assess whether these two obligations together should continue to be imposed to complement an access obligation in this market.
- Accounting Separation: NRAs should then consider whether sufficient information is available to ensure efficient monitoring of the non-discrimination requirement or whether additional obligations in terms of accounting separation are necessary to ensure effective compliance. In the past, it has been deemed appropriate to impose such an obligation on eircom to ensure effective compliance with the non-discrimination requirement. As such, it is appropriate to next assess whether an accounting separation obligation is required.
- Price Control and Costs Accounting Obligations: Where a lack of effective competition means that the operator concerned might apply either excessive prices and/or implement a price squeeze with anti-competitive intent (i.e. to the detriment of downstream competition and ultimately end users) then this obligation may apply. Absent regulation, the current call origination market structure would appear to allow for such an outcome. As such, it is appropriate to assess whether this obligation should be imposed to complement the preceding obligations in addressing the potential competition problems in this market.

8.13 Options for Call Origination Market:

- Option 1: Do nothing (discontinue all existing SMP obligations)
- Option 2: Impose Access obligation only
- Option 3: Impose Access, Transparency and Non-discrimination obligations
- Option 4: Impose Access, Transparency, Non-discrimination and Accounting Separation obligations
- Option 5: Impose Access, Transparency, Non-discrimination, Accounting Separation and Price Control & Cost Accounting obligations
- 8.14 In relation to the options available to ComReg in achieving the objectives of the proposed regulatory obligations (i.e. to ensure the development of a competitive communications market), ComReg notes that the "do nothing" option is primarily being included for benchmarking purposes only. Therefore, it will not be examined in great detail as part of this RIA because it is not envisaged that this option will be pursued in practice. To impose no regulatory obligations on an undertaking designated as having SMP, or vice versa, would mean a failure to comply with our EU obligations and could result in prosecution by the European Commission.

Identification of costs, benefits and other impacts of each option being considered

8.15 It is proposed that the obligations set out above in **Option 5** would be proportionate and justified on the basis of promoting competition. ComReg again sets out here reasons as to why it considers that these obligations continue to be necessary for this market. In proposing obligations, ComReg has taken into account the potential impact of each option (see below) on consumers, competitors and on eircom.

Option 1*-Do Nothing			
eircom	Competition	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility for eircom to use its market power at wholesale level to influence market developments at retail level and to also possibly delay	Negative impact on competition: High risk that, absent regulation, resulting market strategy of the dominant firm would lead to significant foreclosure of retail narrowband markets to OAOs and possibly delay investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.

competition at wholesale level.				
Option 2-Access Obligation				
eircom	Competitors	Consumers	Overall Impact	
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices and other terms and conditions of access to influence retail markets and to also possibly delay competition at wholesale level.	Negative impact on competition: High risk that, even though access afforded, insufficient regulation for ComReg to ensure that dominant firm is not adversely affecting competition through its terms and conditions of access, leading to possible foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.	
Option 3-Ac	cess, Transparency & N	on-Discrimination Ol	oligations	
eircom	competitors	consumers	Overall impact	
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices to influence retail markets and to also possibly delay competition at wholesale level.	Negative impact on competition: High risk that insufficient transparency for ComReg to ensure that competition is not adversely affected by dominant firm; also risk of excessive pricing and/or price squeeze, leading to possible foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.	

Option 4-Access, Transparency, Non-Discrimination & Accounting Separation Obligations			
eircom	competitors	consumers	Overall impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices to influence retail markets and to also possibly delay competition at wholesale level.	Negative impact on competition: High risk of excessive pricing and/or price squeeze by dominant firm, leading to possible foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.
	transparency, Non-dis Price Control & Cost Ac		ing Separation
eircom	competitors	consumers	Overall impact
Negative impact on eircom: Existing regulatory burden on eircom remains. However, wholesale price cap affords eircom more flexibility than the current price control in setting wholesale prices in response to market	Positive impact on competition: Existing eircom Wholesale products continue to be made available to OAOs on terms which enable them to compete more effectively at the retail level with the incumbent eircom.	Positive impact on consumer welfare: Consumers benefit from increasing choice of fixed provider and resulting lower prices and possibly enhanced service and innovation levels.	Negative impact on eircom (although regulation already in place); Positive impact on competition and consumers.

^{*} This option would leave ComReg open to legal challenge from the European Commission for not imposing an obligation on an SMP operator

Consultation

8.16 This document is subject to formal public consultation procedures.

Enforcement and compliance

8.17 This is not relevant as all regulatory procedures for all interested parties are already in place.

Review

8.18 The obligations imposed under this market review are periodically reviewable at the end of the timeframe of the review or before this time if market conditions change sufficiently to render the findings of the current review inappropriate. ComReg is obliged to continue to monitor developments in this market to assess whether the obligations in place remain appropriate.

Consultation Conclusion

- 8.19 The proposed maintaining of regulation in the call origination market (i.e. **Option 5**) is considered justifiable, in that it is required to ensure that eircom does not exploit its market power at the wholesale level to the detriment of competition in both upstream and downstream markets, to the ultimate detriment of consumers. The regulatory obligations chosen do not unduly discriminate against eircom in that, while they only apply to eircom, the obligations are imposed in order to specifically address the potential competition problems arising out of eircom's clear position of dominance in the call origination market. They are proportionate in that they are the least burdensome means of achieving this objective.
- 8.20 ComReg considers that it has met the condition of transparency by setting out the potential obligations on eircom, the justification for the proposed obligations, and by issuing a public consultation on the same.

Consultation Question

Q. 76. Respondents are asked to provide views on whether the remedies in section 6 of this consultation paper are proportionate and justified and offer views on what factors ComReg should consider in completing its Regulatory Impact Assessment in terms of the impact of these remedies on end users, competition, the internal single market and technological neutrality.

Views of Respondents

- 8.21 One of the respondents maintains that this market review is unwarranted and inefficient and a wasteful use of resources. It states that the European Commission ('EC') does not consider 'wholesale market for outgoing international transit services' to constitute a relevant market susceptible to ex ante regulation in its Recommendation on Relevant Markets. This respondent challenges ComReg to demonstrate that there are unique national circumstances in Ireland that would justify this regulatory intervention. The respondent is also concerned about ComReg's failure to analyse the state of the markets in the absence of regulation and the resulting circularity of its reasoning. The respondent added that ComReg should follow the European commission 'modified greenfield approach' in this and other market reviews and in the imposition of proportional regulatory remedies.
- 8.22 A second respondent suggested that ComReg should have regard to factors such as the impact of the proposed regulatory remedies on the incentives for 200 ComReg 07/51

investment and innovation and any impact on the development of potential competition using alternative access platforms. In addition, the respondent was of the view that ComReg should also quantify any costs of the proposed accounting separation and cost accounting obligation that would be avoided if these obligations were not imposed and compare these to estimates, in terms of ranges, the magnitude of the benefits for end users in terms of lower prices and increased choice.

8.23 A third respondent highlighted three remedies that it believed were poor i.e. access, transparency and non-discrimination. In terms of access the respondent was frustrated by the lack of timeliness in obtaining access to eircom's products and services. It recommended that a Statement of Requirement (SoR) should be drawn up so that OAOs have clarity and certainty about the process for requests for new Network Access. In terms of transparency the respondent believed that eircom should publish the different ways that eircom Wholesale provided services to eircom Retail and an exercise should be carried out to understand the components, compare the differences to that provided to OAOs, etc. The respondent believed that Equivalence of Input (EoI) was the way forward in terms of tackling the issue of non-discrimination. EoI would mean that all parties including eircom Retail were provided with the same inputs both technically, in terms of process, terms and conditions, etc. This respondent was of the opinion that without proper transparency OAOs did not know if they are being discriminated against therefore it was important that both of these remedies were closely linked.

ComReg's Position

- 8.24 The view that the market review is unwarranted appears to relate to the international transit market only indeed, ComReg is legally obliged to review the origination and national transit markets or it would be in breach of the EU Framework. As such, we will not consider that point any further here, since no remedies are to be imposed in that market. With regard to the issue of a "modified Greenfield approach", while the review is very careful to consider what the market would be like with and without regulation, as discussed earlier in the paper, it cannot attempt to exactly specify the counterfactual of there not having being regulation up to the period of the current review. It would also note that it would appear to be unreasonable not to distinguish between the costs of implementing *de novo* remedies, and the cost of continuing to implement remedies already in place the latter will usually involve a lower cost to the operator, and it seems entirely appropriate to factor this in when considering the impact of any remedies.
- 8.25 The view that investment incentives should be considered when implementing remedies deserves consideration, as it suggests the possibility of indirect costs that may occur due to the imposition of remedies, and not just on the direct costs to operators. However, imposing remedies should not necessarily dampen the incentive to invest; indeed it is likely that by permitting sustainable entry by non-incumbent operators, that this may enable them to gain a "toehold" in the sector, and ultimately invest on a greater scale, with corresponding benefits for the sector and consumers. Thus, ComReg has considered this issue, and sees no evidence that the imposition of these

- remedies will lead to indirect costs via reduced investment which might negate the benefits of the remedies.
- 8.26 With regard to the issue about specifying the actual cost of the remedies concerning accounting separation and cost accounting, it should be noted that both remedies are currently in place already. Thus, continuing to impose such remedies will constitute very little additional cost on eircom, as the cost of maintaining the remedies is relatively low. In particular, given that these remedies apply across a number of markets where eircom may have SMP, the incremental cost to having them apply in the origination and national transit markets seem particularly low. This should be compared with the benefits of having them: without such obligations, it would not be possible to assess accurately the appropriate prices for interconnection rates, which would lead to excessive prices to OAOs. Given eircom's dominance, it would be in a position to charge prices to OAOs at close to the monopoly level, which would be significantly higher than regulated prices. As discussed above, such higher prices will lead to a potentially severe diminishing of competition, with corresponding losses to consumers.
- 8.27 It should also be noted that the proposed wholesale price cap will actually lead to a lowering of the current regulatory impact of remedies. The cap will give much greater flexibility to eircom in setting the various interconnection rates, which will be itself benefit eircom, and, due to its format, result in a reduced administrative cost in implementation. Thus, it should be clear that the proposed set of remedies actually reduce the current regulatory burden in this market, and have a limited cost; particularly given they will involve relatively few new set-up costs.
- 8.28 The third respondent is suggesting somewhat more specific, and perhaps more extensive, remedies. ComReg is of the view that there is a reasonable limit to the specification of remedies, and that the set it is proposing to impose achieve its goals without unnecessary costs being imposed on operators. Attempting to follow the specific suggestions here could result in an increased cost to the incumbent, with limited marginal benefits over the proposed remedies.

Conclusion

8.29 Overall, the impact is likely to result in limited costs to eircom, particularly given that the remedies will actually reduce the current burden of compliance. The benefits remain clear, in that they will (a) permit other operators to compete with them in this market and (b) will ensure that such operators are charged cost-based prices.

9 Regulatory Impact Assessment (RIA) – National and International Transit Markets

- 9.1 According to ComReg's consultation on its Approach to Regulatory Impact Assessment, ComReg Document 06/69, the purpose of a RIA is to establish whether regulation is actually necessary, to identify any possible negative effects which might result from imposing a regulatory obligation and to consider any alternatives. ComReg's approach to RIA is that in the future it will continue to conduct RIAs in respect of any proposed statutory instruments which would impose regulatory obligations, or in respect of any market analyses which propose to impose, amend or withdraw obligations, through the finding of SMP or effective competition. Appropriate use of RIA should ensure the most effective approach to regulation is adopted.
- 9.2 In conducting RIA ComReg will take into account the RIA Guidelines¹³⁷, adopted under the Government's Better Regulation programme. The RIA Guidelines are not formally or legally binding upon ComReg, however, in conducting RIA ComReg will have regard to them, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation may be different to regulation exclusively by way of enacting primary or secondary legislation. In conducting a RIA ComReg will take into account the six principles of Better Regulation that is, necessity, effectiveness, proportionality, transparency, accountability and consistency. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards RIA. As decisions are likely to vary in terms of their impact, if after initial investigation a decision appears to have relatively low costs, then ComReg would expect to carry out a lighter RIA in respect of those decisions.
- 9.3 The Government's RIA Guidelines sets out the stages it believes are necessary for minor impact regulations and a more detailed set of steps for more comprehensive or full RIA, ComReg has taken these steps into consideration and has come up with a 5 step approach as follows which will be used:
 - (f) Description of policy issue to be addressed and identification of objectives;
 - (g) Identify and describe the regulatory options;
 - (h) Determine the impact on stakeholders;
 - (i) Determine the impact on competition;
 - (j) Assess the impacts and select the best option;
- 9.4 In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost benefit analysis would only arise where it would be proportionate or in exceptional cases where robust,

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¹³⁷ See "RIA Guidelines: How to conduct a Regulatory Impact Analysis", October 2005, www.betterregulation.ie

- detailed and independently verifiable data is available. Such comprehensive review will be taken when necessary.
- 9.5 This section in conjunction with the rest of this document represents a RIA. It sets out a preliminary assessment of the potential impact of proposed SMP obligations for the National Transit Market. It also sets out a preliminary assessment of the potential impact of proposed withdrawal of SMP obligations for the International Transit Market.

The RIA

Description of policy context and objectives

- The European Commission, in its adoption of a new common regulatory framework for electronic communications networks and services on 7th March 2002, acknowledges the need for ex ante regulatory obligations in certain circumstances in order to ensure the development of a competitive communications market. The European Commission's Recommendation on Relevant Markets¹³⁸ identifies electronic communications markets, the characteristics of which may be such as to justify the imposition of such regulatory obligations. Regulation 26 of the Framework Regulations¹³⁹ requires that, as soon as possible after the adoption by the European Commission of this Recommendation, ComReg shall define relevant markets in accordance with the principles of competition law including the geographical area within the State of such markets. In addition, Regulation 27 requires that, as soon as possible after ComReg defines a relevant market, ComReg should carry out a market analysis of these markets and where ComReg determines that a recommended market is not effectively competitive, it shall designate undertakings with significant market power on that market, and it shall impose on such undertakings such specific obligations as it considers appropriate. Regulation 27 also requires that, where ComReg concludes that a relevant market is effectively competitive and an undertaking had previously been designated as having significant market power in such market and SMP obligations already exist, ComReg shall withdraw such obligations from the undertaking concerned.
- 9.7 Regulation 9(1) of the Access Regulations¹⁴⁰ 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 Guidelines¹⁴¹ states that, "if NRAs designate undertakings as having SMP, they must impose on them one or more regulatory obligations, in accordance with the

¹³⁸ Commission Recommendation of 11/02/2003 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 of the Council on a common regulatory framework for electronic communication networks and services.

¹³⁹European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003, S. I. No. 307 of 2003

¹⁴⁰ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

¹⁴¹ SMP Guidelines.

- 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 as having SMP.
- 9.8 ComReg can impose any or a combination of obligations from those obligations listed in Regulation 10 to 14 of the Access Regulations. 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'.
- 9.9 As part of the process of selecting appropriate obligations which satisfy the requirements of Regulation 9(6), ComReg is conducting, *inter alia*, a Regulatory Impact Assessment in accordance with the Ministerial Policy Direction on Regulatory Impact Assessment¹⁴². ComReg is also paying close attention to best practice, and specifically, to the RIA Guidelines.
- 9.10 Having undertaken a market analysis of the **National Transit Market** (one of the markets identified in the Recommendation as having characteristics which may be such as to justify the imposition of regulatory obligations), ComReg has found that the market is not effectively competitive and has designated eircom with significant market power in this market, as required under Regulation 27 of the Framework Regulations. As such, ComReg is obliged to impose at lease one regulatory obligation on eircom in light of this finding. It is proposed that the following regulatory obligations should be imposed on eircom:
 - 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)
- 9.11 ComReg believe that the above obligations would be proportionate and justified on the basis of competition. The justification for imposing the above regulatory obligations on eircom is illustrated further below.
- 9.12 Following the market definition procedure under Regulation 26 of the Framework Regulations, ComReg identified a separate transit market for international transit services (the (outgoing) International Transit Market), which is not a market identified in the Recommendation as having characteristics which may be such as to justify the imposition of regulatory obligations. As such, ComReg is obliged to assess whether this is a market which is potentially susceptible to ex-ante regulation using the Three Criteria Test set out in the Recommendation. Where it is considered, following

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¹⁴² Section 6 of the Directions by the Minister for Communications Marine and Natural Resources to the Commission for Communications Regulation under s. 13 of the Communications Regulation Act 2002, published in February 2003.

consultation, that the market fails this test, it is proposed that all existing SMP regulatory obligations currently imposed on eircom in this market be withdrawn, in accordance with Regulation 27(3) of the Framework Regulations. These obligations include:

- Transparency
- Non-discrimination
- Accounting Separation
- Access to and use of specific network facilities
- Price control and Cost Accounting
- 9.13 The possible justification for potentially withdrawing the above regulatory obligations in this market is discussed further below.

Options

- 9.14 The regulatory options open to ComReg (Regulations 10-14 of the Access Regulations):
 - Access to and use of specific network facilities: An obligation can be imposed on SMP operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, which is justified as a means of increasing competition. In terms of the Directives, this is by far the most extensively described of any of the regulatory obligations, reflecting the importance of this obligation and its central role in affecting competitive markets. The key potential competition concern in this market is the possible denial of access to facilities or the possible application of unreasonable terms and conditions by eircom. In the absence of regulation, eircom would be free to deny access to its transit services or at the least offer such access on uncompetitive terms. As with providing access to call origination and termination services, any possible refusal by eircom to provide access to its transit network or to provide it on reasonable terms would create serious difficulties for its competitors to compete on the retail voice market. Given that ComReg must impose at least one SMP obligation, it is likely that, at a minimum, an access obligation would be imposed. As such, it is appropriate to use the access obligation as a starting point for addressing the potential competition problems identified in this market.
 - Transparency & Non-discrimination: In general, an access obligation will rarely operate as a standalone obligation. Instead it is likely to be accompanied by a transparency obligation. Non-discrimination is also likely to accompany such an obligation as, often where access is required, vertically integrated entities are capable of acting in ways so as to leverage market power from the upstream to the downstream firm's advantage. The imposition of a non-discrimination obligation would protect against such behaviour. eircom currently publishes a full suite of reference documentation in

relation to interconnect products they provide, including transit services. However, in the absence of an enforceable transparency obligation on eircom, there would be no guarantee that they would continue to publish a RIO and ComReg would have no means of remedving any deficiencies on the RIO as a result. In addition, the general non-discrimination obligation currently imposed on eircom requires that third party access seekers are treated no less favourably than eircom's internal divisions. In the absence of a nondiscrimination obligation, eircom would be free to treat access seekers less favourably than its own retail arm, thus inhibiting their ability to compete effectively at the retail level and in turn possibly delaying investment at the wholesale level. Finally, out of the five SMP obligations available to ComReg, these two obligations are the least burdensome as, together, they constitute a minimum intrusion on an SMP operator's business. As such, it is appropriate to next assess whether these two obligations together should continue to be imposed to complement an access obligation in this market.

- Accounting Separation: NRAs should then consider whether sufficient information is available to ensure efficient monitoring of the non-discrimination requirement or whether additional obligations in terms of accounting separation are necessary to ensure effective compliance. In the past, it has been deemed appropriate to impose such an obligation on eircom to ensure effective compliance with the non-discrimination requirement. As such, it is appropriate to next assess whether an accounting separation obligation is required.
- Price Control and Costs Accounting Obligations: Where a lack of effective competition means that the operator concerned might apply either excessive prices and/or implement a price squeeze with anticompetitive intent (i.e. to the detriment of downstream competition and ultimately end users) then this obligation may apply. Absent regulation, the current transit market structure would appear to allow for such an outcome. As such, it is appropriate to assess whether this obligation should be imposed to complement the preceding obligations in addressing the potential competition problems in this market.

9.15 **Options for National Transit Market:**

Option 1: Do nothing (discontinue all existing SMP obligations).

Option 2: Impose Access obligation only.

Option 3: Impose Access, Transparency and Non-discrimination obligations.

Option 4: Impose Access, Transparency, Non-discrimination and Accounting Separation obligations.

Option 5: Impose Access, Transparency, Non-discrimination, Accounting Separation and Price Control & Cost Accounting obligations.

9.16 In relation to the options available to ComReg in achieving the objectives of the proposed regulatory obligations (i.e. to ensure the development of a competitive communications market), ComReg notes that the "do nothing" option is primarily being included for benchmarking purposes only. Therefore, it will not be examined in great detail as part of this RIA because it is not envisaged that this option will be pursued in practice. To impose no regulatory obligations on an undertaking designated as having SMP, or vice versa, would mean a failure to comply with our EU obligations and could result in prosecution by the European Commission.

Identification of costs, benefits and other impacts of each option being considered

National Transit Market:

9.17 In relation to National Transit, it is proposed that the obligations set out above in **Option 5** would be proportionate and justified on the basis of competition. ComReg again sets out here reasons as to why it considers that these obligations continue to be necessary for this market. In proposing obligations, ComReg has taken into account the potential impact of each option (see below) on consumers, competitors and on eircom.

Option 1-Do Nothing (discontinue all existing SMP obligations)			
eircom	Competition	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility for eircom to use its market power at wholesale level	Negative impact on competition: High risk that, absent regulation, resulting market strategy of the dominant firm would lead to significant foreclosure of retail narrowband	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to	Positive impact on eircom; Highly negative impact on competition and consumers.

to influence market developments at retail level and to also possibly delay competition at wholesale level.	markets to OAOs and possibly delay investment in corresponding upstream wholesale markets.	increase substantially and/or service and innovation levels to decline.	
	Option 2-Acce	ss Obligation	
eircom	Competition	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices and other terms and conditions of access to influence retail markets and to also possibly delay competition at wholesale level.	Negative impact on competition: High risk that, even though access afforded, insufficient regulation for ComReg to ensure that dominant firm is not adversely affecting competition through its terms and conditions of access, leading to possible foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.
		Non-Discrimination	
eircom	Competition	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices to influence retail	Negative impact on competition: High risk that insufficient transparency for ComReg to ensure that competition is not adversely affected by dominant firm; also risk of excessive	Negative impact on consumer welfare: Consumers would likely have much reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to	Positive impact on eircom; Highly negative impact on competition and consumers.

markets and to also possibly delay competition at wholesale level.	pricing and/or price squeeze, leading to possible foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	increase substantially and/or service and innovation levels to decline.	
Option 4- Acc	cess, Transparency, N Separation (Accounting
eircom	Competition	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from reduced regulatory burden. Increased flexibility in setting wholesale prices to influence retail markets and to also possibly delay competition at wholesale level.	Negative impact on competition: High risk of excessive pricing and/or price squeeze by dominant firm, leading to some level of foreclosure of retail narrowband markets to OAOs and possible delay in investment in corresponding upstream wholesale markets.	Negative impact on consumer welfare: Consumers would likely have reduced choice of fixed telecoms provider and significant scope for prices of fixed telecoms services to increase substantially and/or service and innovation levels to decline.	Positive impact on eircom; Highly negative impact on competition and consumers.
	cess, Transparency, on & Price Control &		
eircom	Competition	Consumers	Overall Impact
Negative impact on eircom: Existing regulatory burden on eircom remains. Wholesale price cap affords eircom more flexibility than the existing price control measure in setting	Positive impact on competition: Existing eircom Wholesale products continue to be made available to OAOs on terms which enable them to compete more effectively at the retail and wholesale level with the incumbent eircom.	Positive impact on consumer welfare: Consumers benefit from increased choice of fixed provider and resulting lower prices and possibly enhanced service and innovation levels.	Negative impact on eircom (although regulation already in place); Positive impact on competition and consumers.

wholesale prices		
in response to		
market		
conditions.		

^{*} This option would leave ComReg open to legal challenge from the European Commission for not imposing an obligation on an SMP operator

(Outgoing) International Transit Market:

9.18 Options for (Outgoing) International Transit Market:

Option 1: Do nothing (maintain all existing SMP obligations)

Option 2: Withdraw some existing SMP obligations

Option 3: Withdraw all existing SMP obligations

9.19 In the following table, ComReg considers three possible options for the (outgoing) international transit market going forward and their potential implications for consumers, competitors and eircom respectively. The first two options deal with the possible preservation of all or part of the existing obligations in the International Transit market, **Option 3** considers reasons why these obligations may no longer be necessary for this market. In considering the possible removal of obligations in the (outgoing) international transit market, ComReg takes into account the potential impact of the removal of each obligation (see below) on consumers, competitors and on eircom.

Option 1- Do Nothing Maintain regulation			
eircom	OAOs	Consumers	Overall Impact
Negative impact on eircom: eircom would be subject to obligations which might hinder its ability to compete effectively in a potentially competitive market.	Neutral impact on competition: OAOs would benefit from certainty of regulated access to eircom international gateway infrastructure. OAOs competing at the wholesale level would also possibly have more pricing flexibility than eircom. However, not clear such intervention	Neutral impact on consumers: Regulated access to the eircom international gateway infrastructure further lowers the barriers to entering this market at the retail level. However, not clear such intervention proportionate given pattern of entry/expansion to date. In addition, increasing	Negative impact on eircom; Neutral impact on competition and consumers.

	proportionate given nature of existing competition in this market.	competition at wholesale level should allow benefits to be passed on to consumers.	
Opt eircom	tion 2- Withdraw son OAOs	ne Existing Obligation Consumers	overall
			Impact
Negative impact on eircom: eircom would be subject to fewer obligations, reducing the regulatory burden. However eircom would still be subject to obligations which might hinder its ability to compete effectively in a potentially competitive market.	Neutral impact on competition: OAOs would continue to benefit from some form of regulated access to eircom international gateway infrastructure. This may hinder eircom when competing with OAOs for international traffic at wholesale level. However, not clear such intervention proportionate given nature of existing competition in this market.	Neutral impact on consumers: Regulated access to the eircom international gateway infrastructure further lowers the barriers to entering this market at the retail level. However, not clear such intervention proportionate given pattern of entry/expansion to date. In addition, increasing competition at wholesale level should allow benefits to be passed on to consumers.	Negative impact on eircom; Neutral impact on competition and consumers.
	Option 3- Withdi	raw Obligations	
eircom	OAOs	Consumers	Overall Impact
Positive impact on eircom: eircom would benefit from withdrawal of regulatory obligations in terms of removal of regulatory burden and improved flexibility to compete in the	Neutral impact on competition: OAOs would have reduced certainty of access to eircom international gateway infrastructure. However, a number of providers of such services are already in place. In addition,	Neutral impact on consumers: No appreciable difference as the wholesale market would appear to already be tending towards effective competition. Retail prices should as a result continue to benefit from increasing	Positive impact on eircom Neutral impact on competition and consumers.

market place.	insufficient	competition at	
	evidence to suggest	wholesale level.	
	that eircom would		
	discontinue		
	offering this		
	service to OAOs on		
	similar terms.		

^{*} These options would leave ComReg open to legal challenge from the European Commission for not completely withdrawing SMP obligations if the market were found to be effectively competitive.

Consultation

9.20 This document is subject to formal public consultation procedures.

Enforcement and compliance

9.21 This is not relevant as all regulatory procedures for all interested parties are already in place.

Review

9.22 The obligations imposed under this market review are periodically reviewable at the end of the timeframe of the review or if market conditions change sufficiently to render the findings of the current review inappropriate. ComReg is obliged to continue to monitor developments in this market to assess whether the obligations in place remain appropriate.

Conclusion

- 9.23 The proposed maintaining of regulation in the national transit market (i.e. **Option 5**) is provisionally considered justifiable, in that it is required to ensure that eircom does not exploit its market power at the wholesale level to the detriment of competition in both upstream and downstream markets, to the ultimate detriment of consumers. The regulatory obligations chosen do not unduly discriminate against eircom in that, while they only apply to eircom, the obligations are imposed in order to specifically address the potential competition problems which clearly exist in the national transit market. They are proportionate in that they are the least burdensome means of achieving this objective.
- 9.24 The proposed withdrawal of obligations in the (outgoing) international transit market (i.e. **Option 3**) is provisionally considered justifiable in that no operator has in this preliminary analysis been found to have SMP in this market. It is suggested by the forgoing analysis that the (outgoing) international transit market has characteristics which suggest a tendency towards effective competition and may, thus, not be suitable for ex-ante regulation. ComReg would, however, appreciate respondents' views on this proposal.
- 9.25 ComReg considers that it has met the condition of transparency by setting out the potential requirements on eircom, the justification for the proposed obligations, and issuing a public consultation on the same.

Consultation Question

Q. 77. Respondents are asked to provide views on whether the proposed remedies in section 6 of this consultation paper are proportionate and justified and offer views on what factors ComReg should consider in completing its Regulatory Impact Assessment in terms of the impact of these remedies on end users, competition, the internal single market and technological neutrality

Views of Respondents

9.26 Only two respondents commented in relation to the question above. Both of the respondents highlighted the points already made in the section above.

ComReg's Position

- 9.27 The views expressed by respondents are similar to the views expressed in the RIA section of the call origination paper. Given that the remedies are essentially similar, ComReg's response in that section should be considered as being appropriate here the argument in response to the questioning of the costs of the accounting separation and cost accounting remedies seems particularly relevant, as the marginal cost of such remedies for the national transit market is likely to be very small, while the benefits, in terms of guaranteeing competitive prices for other operators and thus fostering competition, seem clear.
- 9.28 On the specific issue of whether the market review is necessary for international transit, ComReg would note that as there are currently remedies in place, it is necessary to carry out a market review and to consider the impact of removing such remedies. The market review has concluded that there is now no case for ex ante regulation of such a market, and that it is therefore necessary and appropriate for remedies to be removed. ComReg is of the view that this process is being completed as expeditiously as possible; it should not just remove obligations without considering whether or not the market should be subject to ex ante regulation in the normal manner.

Conclusion

9.29 Overall, the remedies proposed in the national transit market seem proportionate in the same manner as for call origination, and should represent a lowering of any current regulatory burden. The international transit market is no longer subject to ex ante regulation, which sees the removal of any remedies, and a corresponding removal of any regulatory burden. While ComReg would have no legal ability to impose remedies in this market in any case, it should be noted that, given the trend to effective competition, they would not be considered as necessary.

Annex A: Draft Decision Instrument (Wholesale Call Origination)

PLEASE NOTE: The Draft Decision Instrument below is set out for information purposes only. ComReg has set out its preliminary views in relation to the relevant markets and its initial views on any potential SMP obligations, both of which are subject to consideration of any views expressed during consultation by interested parties.

[DRAFT] Decision Instrument

1 Statutory Powers Giving Rise to this Decision Instrument

- 1.1 This Decision Instrument relates to the market for call origination services on the public telephone network at a fixed location, as identified in the EU Commission's Recommendation¹⁴³ and is made by the Commission for Communications Regulation ("ComReg"):
 - i. Having had regard to sections 10 and 12 of the Act of 2002¹⁴⁴;
 - ii. Having taken account, of its functions under Regulation 6 (1) of Access Regulations¹⁴⁵;
 - iii. Having taken account of and assessed the proportionality of the obligations herein, relative to the objectives of ComReg set out in section 12 of the Act of 2002;
 - iv. Having taken in to account the matters set out in Regulation 13 (4) of the Access Regulations;
 - v. Having (where appropriate) complied with the Policy Directions made by the Minister¹⁴⁶;
 - vi. Having taken the utmost account of the EU Commission's Recommendation and the SMP Guidelines¹⁴⁷;

¹⁴³ 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.

¹⁴⁴ The Communications Regulations Act, 2002 (as amended).

¹⁴⁵ 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.

¹⁴⁶ Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

¹⁴⁷ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

- vii. Having taken account of the submissions received in relation to Document No. 07/02; and
- viii. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations¹⁴⁸, and Regulations 9, 10, 11, 12, 13 and 14 of the Access Regulations.
- 1.2 This Decision Instrument is based on the market analysis and reasoning conducted by ComReg in relation to the market for wholesale call origination services on the public telephone network at a fixed location, related to the consultation in Document No. 07/02 and the reasoning set out in the body of this decision, which shall be construed together with this Decision Instrument.
- 1.3 A reference in this Decision Instrument to an Act or Statutory Instrument includes a reference to that Act or Statutory Instrument as amended, repealed or revoked.

2 Market Definition

- 2.1 The relevant product market in this Decision Instrument is defined as the market for wholesale call origination on the public telephone network at a fixed location in accordance with the EU Commission's Recommendation ("the Market").
- 2.2 The relevant geographic market for the Market is defined as Ireland.

3 Designation of Undertaking with Significant Market Power ("SMP")

- 3.1 Pursuant to Regulation 25 and Regulation 26 (4) of the Framework Regulations, eircom Limited ("eircom") is designated as having SMP in the Market in Ireland.
- 3.2 In this Decision Instrument, any reference to eircom includes a reference to any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, eircom and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities within the scope of the relevant markets defined in this Decision Instrument.

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¹⁴⁸ The European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transpose 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.

SMP Obligations 149 4

4.1 ComReg has decided to impose SMP obligations, as provided for by Regulations 10, 11, 12, 13 and 14 of the Access Regulations, on eircom. The SMP obligations are described further in the sections below.

5 **Obligation to Provide Access**

- 5.1 Pursuant to Regulation 13 (1) of the Access Regulations, eircom shall meet all reasonable requests by undertakings¹⁵⁰ for access to, and use of, such wholesale access products, features or additional associated facilities, by undertakings requesting access or use of such access products, features or additional associated facilities, included in the Market.
- Without prejudice to the generality of the foregoing, eircom shall:
 - i. Pursuant to Regulation 13 (2) (b) of the Access Regulations, negotiate good faith with undertakings, requesting
 - ii. Pursuant to Regulation 13 (2) (c) of the Access Regulations, not withdraw access to facilities already granted and continue to provide such facilities in accordance with existing terms and conditions and specifications;
 - iii. If eircom proposes a withdrawal of facilities already granted, it shall notify ComReg of its proposal one (1) calendar month in advance of so doing, giving detailed reasons for the proposal, but shall not withdraw such facilities unless it has obtained the prior approval of ComReg in writing. In certain cases of withdrawal, ComReg may consult with relevant parties, prior to making a decision on whether to grant or to withhold the approval referred to in this section 5.2;
 - iv. Pursuant to Regulation 13 (2) (e) of the Access Regulations, grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services:
 - v. Pursuant to Regulation 13 (2) (h) of the Access Regulations, provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services; and
 - vi. Pursuant to Regulation 13 (2) (i) of the Access Regulations, interconnect networks or network facilities.

¹⁴⁹ ComReg is legally obliged to impose ex ante SMP 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 Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications.

¹⁵⁰ An undertaking has the same meaning as that contained in the Framework Regulations.

- 5.3 Pursuant to Regulation 13 (1) and 13 (2) of the Access Regulations, eircom shall have an obligation to meet reasonable requests for access to, and use of the wholesale access products, features or additional associated facilities, which are described in:
 - i. Service schedules 002 and 005 and all the other eircom services listed under "eircom services" in Annex C of the RIO;
 - ii. eircom's RIO Network Price List;
 - iii. eircom's Interconnect O&M Manual:
 - iv. eircom's service level agreement ("SLA") for Interconnect Paths; and
 - v. eircom's document on Traffic Designation for Inbound & Outbound Interconnect Paths published on its wholesale website.

References to each of the documents referred to in this section 5.3 are references to the most up to date version of each of those documents and as amended from time.

6 Condition Attached to Access Obligations

6.1 Pursuant to its obligation of non-discrimination under section 7 and pursuant to Regulation 13 (3) of the Access Regulations, it shall be a condition of the obligations referred to in section 5 that eircom shall conclude legally binding SLAs with undertakings in respect of those facilities referred to in section 5. eircom shall develop and offer, or where appropriate continue to offer, SLAs in respect of those products and services referred to in section 5.

7 Obligation of Non-discrimination

- 7.1 Pursuant to Regulation 11 of the Access Regulations, eircom shall have an obligation of non-discrimination in respect of the provision of those services and products described in section 5. Without prejudice to the generality of the foregoing, eircom shall:
 - i. Provide a wholesale equivalent for retail offerings to undertakings;
 - ii. Apply equivalent conditions in equivalent circumstances to undertakings providing equivalent services and provide services and information to undertakings under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners; and
 - iii. Ensure that information and services are provided to undertakings 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.
- 7.2 Without prejudice to the generality of section 7.1, eircom shall provide access to undertakings (requesting access in accordance with sections 5.1 and

5.2 of this Decision Instrument) to any additional wholesale inputs which are necessary to enable those undertakings to provide end to end services which are the equivalent of those offered by eircom's retail division.

8 **Obligation of Transparency**

- 8.1 Pursuant to Regulation 10 (1) of the Access Regulations and in furtherance of its obligation of non-discrimination under section 7 and for the purpose of ComReg monitoring compliance with that obligation, eircom shall, ensure that it is transparent in relation to interconnection and access in the Market.
- 8.2 Without prejudice to the generality of section 8.1, eircom shall:
 - i. Publish on its wholesale website, and keep updated, a RIO in respect of the services and facilities referred to in section 5:
 - ii. Ensure that the RIO is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested;
 - iii. Ensure that the RIO 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; and
 - iv. Ensure that the RIO contains details of the terms and conditions of access in respect of facilities already granted.
- 8.3 Without prejudice to the generality of sections 8.1 and 8.2, eircom shall continue to publish the call origination schedules, prices, descriptions and inter-operator process manuals contained in "Core RIO document Version 3.14" (as amended from time to time) and eircom RIO Price List Version 1.64 (as amended from time to time)¹⁵¹.
- 8.4 eircom shall make public such information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices, in respect of the services and facilities referred to in section 5, as specified by ComReg from time to time.
- eircom shall comply with the processes developed in accordance with ComReg Decision Note D10/02.

9 **Obligation of Accounting Separation**

9.1 Pursuant to Regulation 12 of the Access Regulations, eircom shall have an obligation to maintain separated accounts. All of the obligations in relation to accounting separation applying to eircom in force immediately prior to the effective date of this Decision Instrument, shall be maintained in their entirety and eircom shall comply with those obligations, pending a further decision to be made by ComReg (following further consultation) in relation

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 $^{^{151}}$ These documents are currently published on the eircom wholesale website – $\underline{www.eircomwholesale.ie}$ ComReg 07/51

to the details of and implementation of accounting separation obligations and cost accounting obligations.

10 Obligations Relating to Price Control and Cost Accounting

- 10.1 Pursuant to Regulation 14 (1) of the Access Regulations, the prices charged by eircom to any undertaking for those products and services described in section 5 shall be cost oriented and such costs shall be calculated using a pricing model based on forward looking long run incremental costs ("FL-LRIC") or an alternative pricing model, if ComReg decides, following consultation, to adopt such an alternative pricing model.
- 10.2 Pursuant to Regulation 14 (1) of the Access Regulations, eircom shall continue to apply the existing pricing mechanisms, described in Annex C to the current version of the RIO, in respect of charges for *Near End Handover* and *FRIACO*.
- 10.3 If ComReg decides following consultation to amend the pricing mechanisms referred to in section 10.2, including the pricing mechanism applying to the payphone access charge ("the PAC").
- 10.4 Direction 3.2 of ComReg decision D15/02 as it applies to the PAC is revoked.
- 10.5 Pursuant to Regulation 14 (1) of the Access Regulations, eircom shall continue to comply with all of the obligations in relation to cost accounting in force immediately prior to the effective date of this Decision Instrument, until such time as ComReg makes a decision, following further consultation in relation to accounting separation obligations and cost accounting obligations.

11 Statutory Powers Not Affected

11.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers, or duties under any primary, or secondary legislation (in force prior to, or after the effective date of this Decision Instrument) from time to time as the occasion requires.

12 Effective Date

12.1 This Decision Instrument shall be effective on the date hereof, until further notice by ComReg.

Mike Byrne
Chairperson
The Commission for Communications Regulation
Dated the [•] day of [•] 2007

Annex A: Draft Decision Instrument (Wholesale Call Transit)

PLEASE NOTE: The Draft Decision Instrument below is set out for information purposes only. ComReg has set out its preliminary views in relation to the relevant markets and its initial views on any potential SMP obligations, both of which are subject to consideration of any views expressed during consultation by interested parties.

[DRAFT] Decision Instrument

1 Statutory Powers Giving Rise to this Decision Instrument

- 1.1 This Decision Instrument relates to the market for wholesale national call transit services on the public telephone network at a fixed location, as identified in the EU Commission's Recommendation¹⁵² and is made by the Commission for Communications Regulation ("ComReg"):
 - i. Having had regard to sections 10 and 12 of the Act of 2002¹⁵³;
 - ii. Having taken account, of its functions under Regulation 6 (1) of Access Regulations¹⁵⁴;
 - iii. Having taken account of and assessed the proportionality of the obligations herein, relative to the objectives of ComReg set out in section 12 of the Act of 2002;
 - iv. Having taken in to account the matters set out in Regulation 13 (4) of the Access Regulations;
 - v. Having (where appropriate) complied with the Policy Directions made by the Minister¹⁵⁵;
 - vi. Having taken the utmost account of the EU Commission's Recommendation and the SMP Guidelines¹⁵⁶:

¹⁵² 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.

¹⁵³ The Communications Regulations Act, 2002 (as amended).

¹⁵⁴ 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.

¹⁵⁵ Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

¹⁵⁶ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

- vii. Having taken account of the submissions received in relation to Document No. 07/02; and
- viii. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations¹⁵⁷, and Regulations 9, 10, 11, 12, 13 and 14 of the Access Regulations.
- 1.2 This Decision Instrument is based on the market analysis and reasoning conducted by ComReg in relation to the market for wholesale call origination services on the public telephone network at a fixed location, related to the consultation in Document No. 07/02 and the reasoning set out in the body of this decision, which shall be construed together with this Decision Instrument.
- 1.3 A reference in this Decision Instrument to an Act or Statutory Instrument includes a reference to that Act or Statutory Instrument as amended, repealed or revoked.

2 Market Definition

- 2.1 The relevant product market in this Decision Instrument is defined as the market for wholesale national call transit services on the public telephone network at a fixed location, in accordance with the EU Commission's Recommendation ("the Market").
- 2.2 The relevant geographic market for the Market is defined as Ireland.

3 Designation of Undertaking with Significant Market Power ("SMP")

- 3.1 Pursuant to Regulation 25 and Regulation 26 (4) of the Framework Regulations, eircom Limited ("eircom") is designated as having SMP in the Market in Ireland.
- 3.2 In this Decision Instrument, any reference to eircom includes a reference to any undertaking which is associated with, or is controlled by, or controls, directly or indirectly, eircom and which carries out business activities in Ireland, where the activities engaged in (either directly or indirectly) are activities within the scope of the relevant markets defined in this Decision Instrument.

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¹⁵⁷ The European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transpose 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.

4 SMP Obligations¹⁵⁸

4.1 ComReg has decided to impose SMP obligations, as provided for by Regulations 10, 11, 12, 13 and 14 of the Access Regulations, on eircom. The SMP obligations are described further in the sections below.

5 Obligation to Provide Access

- 5.1 Pursuant to Regulation 13 (1) of the Access Regulations, eircom shall meet all reasonable requests by undertakings¹⁵⁹ for access to, and use of, such wholesale access products, features or additional associated facilities, by undertakings requesting access or use of such access products, features or additional associated facilities, included in the Market.
- 5.2 Without prejudice to the generality of the foregoing, eircom shall:
 - i. Pursuant to Regulation 13 (2) (b) of the Access Regulations, negotiate in good faith with undertakings, requesting access;
 - Pursuant to Regulation 13 (2) (c) of the Access Regulations, not withdraw access to facilities already granted and continue to provide such facilities in accordance with existing terms and conditions and specifications;
 - iii. If eircom proposes a withdrawal of facilities already granted, it shall notify ComReg of its proposal one (1) calendar month in advance of so doing, giving detailed reasons for the proposal, but shall not withdraw such facilities unless it has obtained the prior approval of ComReg in writing. In certain cases of withdrawal, ComReg may consult with relevant parties, prior to making a decision on whether to grant or to withhold the approval referred to in this section 5.2;
 - iv. Pursuant to Regulation 13 (2) (e) of the Access Regulations, grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;
 - v. Pursuant to Regulation 13 (2) (h) of the Access Regulations, provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services; and
 - vi. Pursuant to Regulation 13 (2) (i) of the Access Regulations, interconnect networks or network facilities.
- 5.3 Pursuant to Regulation 13 (1) and 13 (2) of the Access Regulations, eircom shall have an obligation to meet reasonable requests for access to, and use of

¹⁵⁸ ComReg is legally obliged to impose ex ante SMP 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 Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications.

¹⁵⁹ An undertaking has the same meaning as that contained in the Framework Regulations.

the wholesale access products, features or additional associated facilities, which are described in:

- i. Service schedules 002 and 005 and all the other eircom services listed under "eircom services" in Annex C of the RIO;
- ii. eircom's RIO Network Price List;
- iii. eircom's Interconnect O&M Manual;
- iv. eircom's service level agreement ("SLA") for Interconnect Paths; and
- v. eircom's document on Traffic Designation for Inbound & Outbound Interconnect Paths published on its wholesale website.

References to each of the documents referred to in this section 5.3 are references to the most up to date version of each of those documents and as amended from time.

6 Condition Attached to Access Obligations

Pursuant to its obligation of non-discrimination under section 7 and pursuant to Regulation 13 (3) of the Access Regulations, it shall be a condition of the obligations referred to in section 5 that eircom shall conclude legally binding SLAs with undertakings in respect of those facilities referred to in section 5. eircom shall develop and offer, or where appropriate continue to offer, SLAs in respect of those products and services referred to in section 5.

7 Obligation of Non-discrimination

- 7.1 Pursuant to Regulation 11 of the Access Regulations, eircom shall have an obligation of non-discrimination in respect of the provision of those services and products described in section 5. Without prejudice to the generality of the foregoing, eircom shall:
 - i. Provide a wholesale equivalent for retail offerings to undertakings;
 - ii. Apply equivalent conditions in equivalent circumstances to undertakings providing equivalent services and provide services and information to undertakings under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners; and
 - iii. Ensure that information and services are provided to undertakings 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.
 - a. Without prejudice to the generality of section 7.1, eircom shall provide access to undertakings (requesting access in accordance with sections 5.1 and 5.2 of this Decision Instrument) to any additional wholesale inputs which are necessary to enable those undertakings to provide end to end

services which are the equivalent of those offered by eircom's retail division.

8 **Obligation of Transparency**

- 8.1 Pursuant to Regulation 10 (1) of the Access Regulations and in furtherance of its obligation of non-discrimination under section 7 and for the purpose of ComReg monitoring compliance with that obligation, eircom shall, ensure that it is transparent in relation to interconnection and access in the Market.
- 8.2 Without prejudice to the generality of section 8.1, eircom shall:
 - i. Publish on its wholesale website, and keep updated, a RIO in respect of the services and facilities referred to in section 5;
 - ii. Ensure that the RIO is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested;
 - iii. Ensure that the RIO 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; and
 - iv. Ensure that the RIO contains details of the terms and conditions of access in respect of facilities already granted.
- Without prejudice to the generality of sections 8.1 and 8.2, eircom shall continue to publish the call origination schedules, prices, product descriptions and inter-operator process manuals contained in "Core RIO document Version 3.14" (as amended from time to time) and eircom RIO Price List Version 1.64 (as amended from time to time) 160 .
- eircom shall make public such information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices, in respect of the services and facilities referred to in section 5, as specified by ComReg from time to time.
- 8.5 eircom shall comply with the processes developed in accordance with ComReg Decision Note D10/02.

9 **Obligation of Accounting Separation**

9.1 Pursuant to Regulation 12 of the Access Regulations, eircom shall have an obligation to maintain separated accounts. All of the obligations in relation to accounting separation applying to eircom in force immediately prior to the effective date of this Decision Instrument, shall be maintained in their entirety and eircom shall comply with those obligations, pending a further decision to be made by ComReg (following further consultation) in relation

 $^{^{160}}$ These documents are currently published on the eircom wholesale website – $\underline{www.eircomwholesale.ie}$

to the details of and implementation of accounting separation obligations and cost accounting obligations.

10 Obligations Relating to Price Control and Cost Accounting

- 10.1 Pursuant to Regulation 14 (1) of the Access Regulations, the prices charged by eircom to any undertaking for those products and services described in section 5 shall be cost oriented and such costs shall be calculated using a pricing model based on forward looking long run incremental costs ("FL-LRIC") or an alternative pricing model, if ComReg decides, following consultation, to adopt such an alternative pricing model.
- 10.2 Pursuant to Regulation 14 (1) of the Access Regulations, eircom shall continue to comply with all of the obligations in relation to cost accounting in force immediately prior to the effective date of this Decision Instrument, until such time as ComReg makes a decision, following further consultation in relation to accounting separation obligations and cost accounting obligations.

11 Statutory Powers Not Affected

11.1 Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers, or duties under any primary, or secondary legislation (in force prior to, or after the effective date of this Decision Instrument) from time to time as the occasion requires.

12 Effective Date

12.1 This Decision Instrument shall be effective on the date hereof, until further notice by ComReg.

Mike Byrne
Chairperson
The Commission for Communications Regulation
Dated the [•] day of [•] 2007

Annex B: Notification of Draft Measures Pursuant to Article 7(3) of the Directive 2002/21/EC

Under the obligation in Article 16 of the Directive 2002/21/EC, ComReg has conducted an analysis of the markets for fixed wholesale call origination and transit.

In accordance with Article 6 of the Directive 2002/21/EC, ComReg has conducted a national consultation, contained in ComReg Document 07/02. This consultation ran from 19 January 2007 to 16 March 2007. The responses to this consultation have been taken into consideration and ComReg has now reached decisions in relation to market definition, designation of SMP and imposition/withdrawal of regulatory obligations, which are contained in ComReg Document 07/51.

ComReg hereby notifies the Commission of its proposed remedies and obligations in accordance with Article 7(3) of Directive 2002/21/EC. These remedies and obligations are set out in the attached summary notification form. Under Regulation 27(1), ComReg is required to liaise with the Competition Authority in its definition and analysis of markets. ComReg has consulted with the Competition Authority ("CA") in relation to its findings on the interconnection markets and provided the CA with a summary of these findings. The CA having considered these findings and discussed them with ComReg concluded that they were appropriate.

Section 1 - Market Definition Please state where applicable:

1.1	The affected relevant product/service market (s).	ComReg proposes to define the following markets:	
		 National wholesale market for call origination services on the public telephone network provided at a fixed location; 	Pages 16- 27
	Is this market mentioned in the Recommendation on relevant	 National wholesale market for call transit services on the public telephone network provided at a fixed location (including incoming international transit services); and 	Pages 32- 48
	markets?	Wholesale market for outgoing international transit services on the public telephone network provided at a fixed location. The first two of the above are mentioned in the Recommendation, while the market for outgoing international transit services is not.	Pages 48- 54

1.2	The affected relevant geographic	Ireland.	Pages 27-
1.2	market (s)	nciand.	32, and 48.
1.3	A brief summary of the opinion of the national competition authority where provided;	The Authority considered ComReg's findings and following discussions with ComReg concluded that they were appropriate.	
1.4	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)	Three responses to the consultation were provided by: • BT Ireland Ltd., • eircom Ltd., and • Vodafone Ltd. There was general agreement among respondents on the analysis and conclusions reached. While one respondent disagreed with the market definition exercise for the three markets and accordingly with elements of the market analysis findings, no robust alternative market definitions were put forward. Overall, the proposed conclusions remained unchanged after the consultation.	
1.5	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 power ¹⁶¹ , 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 Memorandum ¹⁶² .	ComReg carried out further analysis of the dynamics of international transit services to ensure that this market definition remained appropriate. In particular, it considered whether international transit services could be further subdivided on the basis of incoming or outgoing traffic. It was concluded that incoming international transit services forms part of the national transit market. There is a single wholesale market for outgoing international transit services on the public telephone network provided at a fixed location. The wholesale market for outgoing international transit services on the public telephone network provided at a fixed location was examined in accordance with the three criteria test. It was concluded that: The market did not exhibit high and non-transitory entry barriers.	Pages 48- 54 Pages 89- 102

¹⁶¹ 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.

¹⁶² 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

	This market is tending towards an effectively competitive outcome. This is informed by an examination of the nature and extent of existing competition, market shares, pricing trends and any barriers to expansion. Competition law is well placed to address any potential competition problems/market failures in the market going forward.	
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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	eircom Ltd. is designated as having SMP in the following markets: • Wholesale call origination; and • Wholesale call transit. ComReg found that the outgoing international transit market did not meet the three criteria set out in the Relevant Markets Recommendation and as such ex ante regulatory intervention is unwarranted.	Page 103 Pages 89- 102
2.2	The criteria relied upon for deciding to designate or not an undertaking as having individually or jointly with others significant market power	 Market Share; Market concentration; Lack of existing competition; Ability to price independently; Barriers to entry/expansion and potential competition (i.e. control of infrastructure not easily replicated, vertical integration, sunk costs, economies of scale/scope, market maturity and barriers to switching); and Absence of or low countervailing buyer power. 	Pages 57- 102
2.3	The name of the main undertakings (competitors) present/active in the relevant market.	Call origination – not applicable. Any OAO providing this service is via LLU/WLR/CPS. Call transit - BT Ireland, Colt, NTL and Verizon.	
2.4	The market shares of the undertakings mentioned above and the basis of their calculation	Call origination: Total OAO market share = 5% (including OAOs' self-supply) based on	Pages 57- 60

(e.g., turnover, number of subscribers)	volume at Q1 2007. If OAOs' self-supply excluded eircom's market share would be closer to 100%. • Call transit: Total OAO market share = 26% (including OAO self-supply) based on volume at Q1 2007. Closest competitor (BT) has 18% market share while no other has in excess of 10%. (Note inclusion of OAOs' self-supply likely to underestimate the true size of eircom's market share.)	Pages 71-74
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Please provide a brief summary of:

2.5	The opinion of the national competition authority, where provided	The Authority considered ComReg's findings and following discussions with ComReg concluded that they were appropriate in relation to the market analysis exercise.	
2.6	The results of the public consultation to date on the proposed designation(s) as undertaking(s) having significant market power (e.g., total number of comments received, numbers agreeing/disagreeing)	Three responses to the consultation were provided by: BT Ireland Ltd., eircom Ltd., and Vodafone Ltd.	
		There was general agreement among respondents on the analysis and conclusions reached. While one respondent disagreed with the market analysis findings, arising from the market definition exercises as noted above. Overall, the proposed conclusions remained unchanged after the consultation.	

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 for the call origination and national transit markets: Under the Access Regulations which transpose Articles 9 to 13 of Directive 2002/19/EC (Access Directive): • Transparency – Regulation 10, • Non-discrimination – Regulation 11, • Accounting Separation – Regulation 12, • Access to, and use of, specific network facilities – Regulation 13, and • Price Control and Cost Accounting – Regulation 14. All existing SMP regulatory obligations currently imposed on eircom in the outgoing international transit market should be withdrawn, in accordance with Regulation 27(3) of the Framework Regulations. These obligations include: • Transparency, • Non-discrimination, • Accounting Separation, • Access to, and use of, specific network facilities, and • Price Control and Cost Accounting.	Pages 104-1 Page 188
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, 8 & 9 of this document.	Pages 104-1 & 193-214
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'	Not Applicable.	

within the meaning of Article 8(3)	
thereof which justify the	
imposition of such remedies.	
Alternatively, indicate the	
paragraphs, sections or pages of	
the draft measure where such	
information is to be found	

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 C: Glossary of Terms

Access Line	A circuit that connects a subscriber to a switching centre.
Broadband	A service or connection allowing a considerable amount of information to be conveyed, such as television pictures. Generally defined as a bandwidth > 2Mbit/s Broadband Integrated Services Digital Network (B-ISDN). The capability to integrate any type of communications signals (voice, data, image or multimedia) and carry them over a single broadband channel of 150-mbps and above, 4k (B-ISDN) regardless of their content.
Carrier Pre-selection (CPS)	The facility offered to customers which allows them to opt for certain defined classes of call to be carried by an operator selected in advance (and having a contract with the customer), without having to dial a routing prefix or follow any other different procedure to invoke such routing.
Dial-up	Connections made to a data network using the switched network to provide a voice band or data bearer.
Direct Access	The situation where a customer is directly connected to a telecommunications operator by a wire, fibre-optic or radio link to connect that customer to the public telecommunication network. This includes access via LLU.
Directory Enquiry Service (DQ)	Directory information service which is operator assisted and involves the operator looking up entries on a database.
Fibre Optic Cable	A transmission medium that uses glass or plastic fibres rather than copper wire to transport data or voice signals. The signal is imposed on the fibres via pulses (modulation) of light from a laser or a light-emitting diode (LED). Because of its high bandwidth and lack of susceptibility of interference, fibre-optic cable is used in long-haul or noisy applications.
Fixed telephone Services	Means the provision to end users at fixed locations of a service for the originating and receiving of national and international calls, including voice telephony services and may include, in addition, access to emergency 112 services, the provision of operator assistance, directory services, provision of public pay telephones, provision of service under special terms or provision of special facilities for customers with disabilities or with special social needs but does not include value added services provided over the public telephone system.
Flat Rate Internet Access (FRIACO)	The provision of a Flat Rate Internet Access Call Origination via a wholesale un-metered Internet access product.
Fixed Wireless Access (FWA)	A system that connects subscribers to the public switched telephone network (PSTN) using radio signals as a substitute for copper wires for all or apart of the connection between the subscriber and the switch.
Indirect Access	Where a customer's call is routed and billed through operator A's network even though the call originated from the network of operator B. It is the generic term for both easy access and equal access.
Interconnection services	Services provided by one telecommunications organisation to another for the purpose of the conveyance of messages and information between the two systems and including any ancillary services necessary for the provision and maintenance of such services.

Internet protocol (IP)	Packet data protocol used for routing and carriage of messages across the internet.
Internet telephony	A specific type of VoIP service that uses the public Internet to carry the IP traffic (also referred to as Voice over the Internet).
Leased line	A leased line is a telephone line that has been leased for private use. In some contexts, it's called a <i>dedicated</i> line. A leased line is usually contrasted with a <i>switched line</i> or <i>dial-up line</i> .
Local Loop	The access network connection between a customer's premises and the local exchange. This usually takes the form of a pair of copper wires.
Local Loop unbundling (LLU)	LLU was mandated by the EU in December 2000. It requires those operators designated as having significant market power) to make their local networks (i.e. the telephone lines that run from a customer's premises to the local telephone exchange) available to other telecommunications companies.
Narrowband	A service or connection allowing only a limited amount of information to be conveyed, such as for telephony. This compares with broadband which allows a considerable amount of information to be conveyed.
Next Generation Networks	A Next Generation Network (NGN) is a packet-based network able to provide services including Telecommunication Services and able to make use of multiple broadband, QoS-enabled transport technologies and in which service-related functions are independent from underlying transport-related technologies.
Originating network	The network to which a caller who makes a call is connected.
Other Authorised Operators (OAOs)	Companies, other than eircom, which operate telecommunications systems.
Public switched telephone network (PSTN)	The telecommunications networks of the major operators, on which calls can be made to all customers of all PSTNs.
Resellers	Service Providers who do not have their own network.
Transit	A transit service is a conveyance service provided by a network between two points of interconnection.
Voice over Internet protocol (VoIP)	The generic name for the transport of voice traffic using Internet Protocol (IP) technology. The VoIP traffic can be carried on a private managed network or the public Internet (see Internet telephony) or a combination of both. Some organisations use the term 'IP telephony' interchangeably with 'VoIP'.
Voice telephony service	A service available to the public for the commercial provision of direct transport of real-time speech via the public switched network or networks such that any user can use equipment connected to a network termination point at a fixed location to communicate with another user of equipment connected to another termination point.

Annex D: Wholesale Price Cap

Consultation Proposal

- 9.30 In section 6 of the consultation, ComReg asked whether operators think now a good time to consider in detail the move to a wholesale price control remedy. A wholesale price control would be necessary for the same reasons as the current price controls in place, to reduce the risk of excessive prices and would also serve to increase the incentive for the incumbent to operate efficiently. ComReg originally raised and discussed this issue in ComReg Document 03/16¹⁶³. In the response to the initial Interconnection consultation paper and the consultation document 03/16 a majority of respondents expressed a desire to move the current pricing mechanism from a yearly review to a forward looking price cap regime.
- 9.31 As explained previously in the consultation the regime to date has involved an annual review of the eircom Top Down ("TD") model subsequent to the publication of the eircom Current Cost and Separated Accounts at the end of September. Operators will pay interconnection rates based on an interim basis during the actual billing period. Where the actual rates arrived at subsequent to the relevant billing period is materially different to the interim rates paid, this may give rise to a "balancing" charge or payment depending on the profile of the traffic carried over the eircom network by each operator.
- 9.32 While this process has worked well over the past number of years (as is evident from the take up of CPS and WLR products), it has some disadvantages. The annual review has on occasion been time consuming and slow and both OAOs and the incumbent have complained about the consequent uncertainty. A wholesale price cap for a predetermined future period would be seen as a mechanism which could add the desired certainty and stability to the interconnect market in the coming years.
- 9.33 Currently the main control in place that prevents excessive pricing and protects consumers is the obligation of cost-orientation.
- 9.34 ComReg has completed a full analysis of the Origination and Transit interconnection markets to determine if eircom can act to an appreciable extent independently of its competitors and customers. It concludes that competition in these relevant markets does not yet appear effective. The main concern arising from a finding of SMP in interconnect markets is the ability of eircom, identified as an SMP provider, to set and/or maintain prices at a level higher than they would be if competition were effective. In the absence of competitive pressure, a firm with market power will be able to sustain prices above cost to the detriment of competition.
- 9.35 A price cap on fixed interconnection markets would constitute a remedy flowing from Regulation 14 of the Access Regulations. In summary, the principal objectives for a price cap should be:
 - to ensure that the prices charged by dominant operators to all other operators are brought closer to competitive prices than they would be in the absence of price controls;

¹⁶³ Consultation Paper on Fixed Interconnection Charging Mechanisms

- that only efficient costs of providing the interconnect services are recovered plus the regulated rate of return;
- to encourage the rapid development of effective competition in the supply of telecommunications services; and
- to achieve the above by the least intrusive means.
- 9.36 On the basis of the market analysis, ComReg believed it was appropriate to consult on the possibility of applying wholesale price cap (WPC) in the interconnection markets in order to determine the most appropriate and proportionate regulatory response as a result of any Significant Market Power ("SMP") designation that might be made following the interconnection market consultation.
- 9.37 **Conclusion**: ComReg considers that some form of a wholesale price cap measure is now appropriate when setting interconnection rates based on the eircom core network charges.

Application of a Wholesale Price Cap Cost model

- 9.38 In order to implement a wholesale price cap it is necessary to agree on the correct basis for setting interconnect rates and to agree on the appropriate cap to be applied to those rates over an agreed period.
- 9.39 In order to decide on the correct basis it is necessary to consider the pricing mechanism appropriate to arrive at forward looking interconnection rates. To date a Top Down (TD) Forward Looking LRIC approach has been adopted. The TD modelling approach is based on the Current Cost Accounts ('CCA') Separated accounts of eircom, these accounts can be seen on the eircom website under Regulatory Information¹⁶⁴. The most recent year, 1 April 2005 to 31 March 2006 was published on the 30 September 2006. These accounts are then fed into a Top Down model and following the modelling process the final interconnect rates are arrived at and are then published on the eircom RIO price list schedules 102, 103 and 104. ComReg however must review the eircom model for cost orientation prior to approving the final rates.
- 9.40 In January 2005 ComReg undertook a significant project to develop an in-house Bottom Up ("BU") model of the eircom Core network in order to get a forward looking view of the potential implications of setting interconnect rates for the coming years based on forecast costs and volumes. ComReg has now completed this project and a final Bottom Up model of the eircom Core network is available to use for reviewing or setting forward looking rates for the purposes of a wholesale price cap.
- 9.41 ComReg would acknowledge that there are inherent uncertainties of cost modelling (both Top Down and Bottom Up) and the resultant implications for prudent decision taking. The majority of inputs to the BU model are sourced from eircom, however ComReg have used external benchmarks in the BU modelling process and expert opinion in some instances where considered more appropriate. ComReg is of the view that basing modelling on the actual costs and network configuration/utilisation of the operator whose network was being modelled is not the only way to avoid bias. It is commonly accepted practice

¹⁶⁴ http://www.eircom.ie/bveircom/pdf/2006_cca_lric.pdf

when modelling a network that all reasonable endeavours should be made to ensure potential bias is limited through research and comparison within the telecoms industry. However, ComReg is of the view that in order to build a robust BU model which is not biased towards the actual costs of the incumbent other costs must be looked at to get an objective view. Following on from an operator response to the initial consultation ComReg is of the view that it is not the case that the mere presence of uncertainties renders the cost modelling exercise worthless. The use of forward looking cost estimates based on LRIC are very important tools to regulators when trying to assess the overall reasonableness of the incumbent's efficient cost base. ComReg has striven to reach a balance between the complete use of the actual costs and network configurations/utilisation of the incumbent by looking at other jurisdictions and taking a reasonable view of costs where appropriate.

- 9.42 It has also been highlighted across the industry that incumbents and other operators are entering into a period of transition from traditional network technologies to more up to date switched/other technology. This has the possibility of increasing uncertainty around the cost base of the core network and also on the most appropriate cost base to use when modelling the network on a forward looking basis. ComReg is of the view that it is not the case that the best way to address this issue of upgrading networks and investment in the network is to forbear from regulation as this contradicts the principle of technology neutrality. Having said this, ComReg is of the view that great care needs to be taken, for example when costs are being incurred in the transition phase of old and new technology running parallel and how this is recovered.
- 9.43 ComReg understands that there might be a significant period where an incumbent will have little or no choice but to maintain two generations of technology within their networks. As the levels of traffic flowing over the legacy network decline and more traffic is over the new network the respective unit costs could change dramatically. At this stage, one could question whether forward looking LRIC type modelling is the most appropriate price setting tool at least in the way it is currently applied. Three possible modifications could be:
 - To model the network based in current technology not taking into account possible future upgrades due to the uncertainty around their impact/cost etc. Any model developed would only take into account changes in volumes and current costs.
 - To move to considering the legacy network as non-MEA (Modern Equivalent Asset) in the sense that the services carried across it should be costed as though they were carried across a fully NGN network.
 - To have two costing models running in parallel, with the proper LRIC modelling applied to NGN services running over the NGN network, and a modified approach used for legacy services running over the legacy network. The modified approach would need to consider the need to keep the old network running for as long as is deemed necessary and to take a practical approach to the cost recovery of the investments (which in reality are probably largely written off by now).

Principles to adopt when setting a wholesale conveyance price cap (previously documented in ComReg 03/16)

- 9.44 Price cap type regulation of the format CPI+/-X has the merit of providing visibility of prices over an extended period and also of giving the incumbent an extra incentive in that it knows it can keep the benefits of over-achieving unit cost changes year on year. OAOs on the other hand, assuming reasonable efficiency improvements and volume growth, may have real price reductions over the time frame of the cap. The financial forecasts used to facilitate the setting of X would use the LRIC costing methodology. However all of these factors will require careful consideration by eircom/ComReg in the modelling process, whichever one is adopted.
- 9.45 A number of additional considerations would need to be addressed under this option:
 - Duration: A longer price cap period increases certainty, increases the incentive to the incumbent and is administratively simpler. On the other hand it also increases the risk that prices will not be cost oriented at the end of the period.
 - Structure and flexibility: Retail price caps usually allow the incumbent some flexibility in terms of an overall price basket target. This may be restricted by the use of individual service sub caps. In general, the greater the flexibility for eircom in setting rates, the greater the uncertainty for OAOs. In this case a decision will need to be made as to whether each individual service (origination, termination and transit) is capped separately or whether some form of basket possibly with sub caps would be allowed.
 - New Technology: Because of the lengthened duration of the control period it is possible that new technology may have a significant impact on interconnection for example IP based networks. This will need to be addressed.
 - The appropriate index for price control: The consumer price index has been used as part of the formula to determine retail rates. A decision will be required to establish if this is also appropriate for wholesale rates such as interconnection.
 - Initial Rates: ComReg is of the preliminary view that opening rates should be the current rates in place and that changes should be phased in by way of glide paths. However some step change adjustments cannot be ruled out entirely, depending on the outcome of detailed modelling work.
 - The relationship to the retail price cap would be critical both in terms of timing and duration and in terms of permitted price movements.
 - The extent to which eircom would still be required to submit detailed periodic cost submissions. ComReg would continue to monitor

annual actual results against the costs recovered by the incumbent under the price cap regime.

i) Wholesale Price Cap

Consultation Questions

- Q. 78. Do operators foresee any particular difficulties with moving to a wholesale price cap regime since the original consultation (03/16) given current and possible future changes in the proposed regulated interconnection markets? Please provide detail in support of your response.
- Q. 79. In your opinion what is the most appropriate modelling approach to take when modelling the core network, current network technology, complete NGN roll out or a hybrid approach of old and new? Please provide detail in support of your response.

Views of Respondents

- 9.46 With regard to whether operators foresaw any particular difficulties with moving to a wholesale price cap regime, one of the respondents agreed that a WPC regime would indeed be appropriate for the coming period where the annual setting of prices using a rate-of-return approach applied to a model of eircom's reported costs was no longer sustainable. A second respondent expressed the view that once the NGN was rolled out it expected eircom's costs to fall on the basis of a more concentrated and automated network whereby less manpower was required to maintain it. It expected that these savings should be passed on through lower regulated prices or a CPI-X. This respondent further outlined that a two year review of the cap was relevant to prevent costs deviating too far from the real costs and the only exception to this should be where there was a large increase in costs and therefore a longer review period would be necessary. The third respondent believed that the principal issue faced by ComReg would be to set a value of 'X' in a CPI-X price cap format that allowed for cost recovery and full recovery of the cost of capital while also approximating to the costs of an efficient operator in the context where two generations of technology were being simultaneously maintained by the SMP operator. It added that extensive discussions with industry stakeholders would be necessary and data from eircom's separated accounts would serve as a useful starting point. The respondent suggested that use of data from independent academic and international sources wherever possible would maximise the probability of developing a price control that encouraged innovation and investment while also properly focusing on the costs of an efficient operator rather than the actual costs of SMP undertakings.
- 9.47 In relation to the most appropriate modelling approach to take when modelling the core network, two of the respondents considered that a hybrid model would be the most appropriate modelling approach to take. One of these respondents

highlighted that ComReg should carefully assess the merits of applying an overall price cap, with few or no sub caps given that flexibility would permit the operator of both the legacy network and the NGN to optimally adjust prices in response to the evolution of traffic volumes and associated underlying costs over the period for which a price cap was in force. The third respondent believed FL-LRIC would be suitable as estimation of network costs must be part of the business case that eircom had for undertaking such a plan.

ComReg's Position

- 9.48 ComReg notes all issues raised by respondents above with regard to particular difficulties with moving to a wholesale price cap. ComReg propose to take these issues into account in terms of finalising a wholesale price cap.
- 9.49 In relation to consideration of a modelling approach, ComReg is of the opinion that it will use the most appropriate model which will be considered by ComReg and eircom in conjunction with all available expert advice on the most appropriate modelling approach to take.

Conclusion

9.50 ComReg will establish a Wholesale Price Cap based on an appropriate model to be considered by ComReg and eircom with input from industry where appropriate, with a view to agreeing on final interconnection rates as soon as possible on a forward looking basis.

ii) Process

Consultation Question

Q. 80. In the interests of reaching a wholesale price cap in a timely and efficient manner, do you agree that eircom and ComReg should enter into bilateral discussions on agreeing the most appropriate basis for a wholesale price cap to arrive at final rates for publication once agreement is reached? Please provide detail in support of your response.

Views of Respondents

9.51 All three respondents believed that eircom and ComReg should enter into bilateral discussions on agreeing the most appropriate basis for a WPC to arrive at final rates for publication once agreement was reached.

ComReg's Position

9.52 On the basis that there is agreement by industry to move to a WPC, ComReg believes that the process involved in establishing such a cap should take place immediately. This process may take some time due to the complexities involved taking the existing Bottom Up Core model from its traditional make up to what is forecast over the timeframe of the review. Substantial resources in both eircom and ComReg will be required to arrive at interconnection rates that are appropriate to the market over the timeframe of the price cap.

Conclusion

9.53 eircom and ComReg will enter into bi-lateral discussions on agreeing the most appropriate basis for a wholesale price cap to arrive at final rates for the price cap period. Input from industry will be sought throughout the process.

iii) Base year

Consultation Question

Q. 81. Where ComReg enter into a wholesale price process with eircom, do you agree that the year 2005/06 is the most appropriate base year on which to base a price cap setting model? Please provide detail in support of your response.

Views of Respondents

9.54 All respondents agreed that the year 2005/06 was the most appropriate period on which to base a price cap setting model. One of the respondents however raised the point that in the event that the publication of a finalised wholesale price cap approach was delayed beyond October 2007, then 2006/07 would be the most appropriate base year to use.

ComReg's Position

9.55 As the most recently available data to ComReg is 2005/06 it seems appropriate to use this data as the basis for the price cap setting model. However in the event that time does elapse and more recent audited accounts are available all relevant information will be taken into account.

Conclusion

9.56 The most appropriate base year on which to base a price cap setting model is 2005/06 subject to substantial progress being made in 2007.

iv) Time frame

Consultation Question

Q. 82. What in your opinion would be the most appropriate time frame over which the price cap should be effective, two, three or four years? Please provide detail in support of your response.

View of Respondents

9.57 All of the respondents had different views in terms of the most appropriate time frame over which the price cap should be effective. One of the respondents believed that a two year period would be appropriate as it believed that the gap between the true costs and the price cap may become too wide over a longer time frame. A second respondent believed that a cap of three to five years would be appropriate on the basis that this would allow a reasonable share of efficiency gains to be retained and to allow for a reasonable prospect of out-performance to

promote efficient operations. A third respondent would favour a price cap for a period of at least 4 years as this time period would provide the greatest incentives for the SMP operator to innovate and improve efficiency.

ComReg's Position

9.58 ComReg believe that it is necessary to carry significant research and forecasting work prior to making a decision on the appropriate timeframe. This work will be undertaken as soon as possible with eircom in order to take a view on what is a reasonable period that does not hold too much uncertainty.

Conclusion

- 9.59 ComReg will decide on the most appropriate timeframe over which the price cap should be effective during the course of the preparatory work with eircom.
 - v) Use of Consumer Price Index (CPI)

Consultation Question

Q. 83. Do you agree that the Consumer Price Index should be used in setting "X" when arriving at the annual adjustment to most recent finalised interconnection rates? Please provide detail in support of your response.

Views of Respondents

9.60 All of the respondents agreed that the CPI should be used in setting 'X' when arriving at the annual adjustment to most recent finalised interconnection rates.

ComReg's Position

9.61 As there is industry consensus on CPI and on the basis that CPI is the most widely publicised and monitored metric of changes to general price levels in Ireland it therefore appears reasonable that this is the most appropriate index to use when setting 'X'.

Conclusion

9.62 CPI will be the index used in setting 'X' when arriving at the annual adjustment to the most recent finalised interconnection rates.

vi) Treatment of interconnect rates

Consultation Question

Q. 84. Do you agree that all interconnect rates as presented in the table 102/103/104 in the eircom RIO price list should be treated separately when applying the CPI +/-X control within the overall core network cost basket?

Views of Respondents

9.63 Two of the respondents believed that an overall/single CPI+/-X was appropriate. One of these respondents added that ComReg should forbear from imposing sub-caps on individual interconnect products as sub-caps removed flexibility and risked fostering an inefficient price structure where market conditions changed in ways that were not readily foreseeable. The other respondent suggested that such tables as NTC retention rates in the RIO price list should also be included within the scope of the WPC. A third respondent agreed that the different interconnect rates should be treated separately when applying the price cap within the overall core network.

ComReg's Position

9.64 ComReg has noted the responses above and will consider these in determining whether an overall price cap or sub caps are most appropriate.

Conclusion

9.65 ComReg will consider as part of establishing and finalising the wholesale price cap whether an overall cap or sub-caps are most appropriate.

vii) Rate of return

Consultation Question

Q. 85. The current rate of return allowed is 11.5% which was set based on a network efficiency study carried out some years ago, in your opinion do you think this rate is still appropriate or should a more up to date study be carried out in light of the changing telecoms environment? Please provide detail in support of your response.

Views of Respondents

9.66 Two of the respondents agreed that a more up-to-date study should be carried out in light of changes in the telecoms environment. The third respondent (eircom) commented to the effect that it would not comment on its current allowed rate of return but will provide relevant information or data that ComReg require from eircom to progress its cost of capital review.

ComReg's Position

9.67 ComReg is currently carrying out a review on the rate of the return based on changes since the current rate was last set. The outcome of this review will be incorporated into the WPC.

Conclusion

9.68 The outcome of the current rate of return review will be incorporated into the WPC.

viii) Other interconnect services

Consultation Question

Q. 86. The eircom RIO price list also includes other interconnect services such as FRIACO, NEHO, NTC's, products necessary for the provision of interconnection such as ISI's, CSI's etc. Should these in your opinion also be subject to the wholesale price cap for the same period? Please provide detail in support of your response.

Views of Respondents

9.69 Only two respondents commented in relation to this issue. Both of these respondents agreed that the interconnect services as listed above should be subject to the WPC for the same period. One of these respondents however called for the inclusion of all interconnection rates as presented in the eircom RIO price list within the scope of the WPC.

ComReg's Position

9.70 ComReg will decide during the course of the preparatory work for the price cap on the suite of services that should be included.

Conclusion

9.71 All appropriate interconnection products and services will be included in the price cap to allow as much certainty in the market as possible. This list will be published once all aspects of the price cap is finalised

Annex E: Other SMP Criteria

In paragraph 78 of the SMP Guidelines, it is stated that ComReg should undertake a thorough and overall analysis of the economic characteristics of the relevant market before coming to a conclusion as to the existence of significant market power. The SMP Guidelines also sets out a list of criteria which might be relevant in a dominance assessment. As such, a categorisation of the relevance of each criterion to the assessment of competition in the Origination and Transit markets in Ireland is set out below. This categorisation is relied upon by ComReg in order to undertake a thorough and overall analysis of the economic characteristics of each of the relevant markets.

Origination Market:

SMP Criteria	Relevance to SMP Assessment	Relevance to Origination market
Market shares	Market shares are not on their own determinative of SMP but are a useful starting point for defining instances where SMP is more likely to arise. It is clear from EU jurisprudence that concerns about SMP are more likely to arise where a large market share is held over time.	This criterion is relevant because the wholesale call origination market is characterised by very large market shares which have persisted over time.
Barriers to entry	Barriers to entry are factors that prevent or hinder undertakings from entering a specific market. They generally comprise any disadvantage that a new entrant faces when entering a market that incumbents do not currently face. Entry barriers may result, for instance, from a particular market structure (structural barriers).	This criterion is relevant because the wholesale call origination market is characterized by high barriers to entry which are likely to persist over the period of the review. This would appear to be confirmed by the very limited entry to date. These barriers are discussed below.
Sunk costs	Sunk costs are costs which must be incurred in order to enter a market and which are not recoverable on exiting the market.	This criterion is relevant as there are considerable sunk costs associated with replicating the access infrastructure which are unlikely to be fully recoverable on exit.
Control of infrastructure not easily duplicated	This indicator refers to a situation in which certain infrastructure is: • necessary to produce a particular product/service, • exclusively or overwhelmingly under the control of a certain undertaking, and • there are high and non-	This criterion is relevant as it is clear that origination/access infrastructure is necessary to provide wholesale call origination & retail calls services and is overwhelmingly under the control of the incumbent. It is clearly not easily duplicated given the significant time and costs involved.

	transitory barriers to substituting the infrastructure in question.	
Economies of scale	Economies of scale arise when increasing production causes average costs (per unit of output) to fall. By producing above the level that a new entrant might be able to produce at, the incumbent can ensure lower unit costs than the entrant. Where economies of scale are large and/or barriers to expansion exist, the new entrant's expected profit from being in the market may fail to cover its sunk costs and entry may be deterred.	This criterion is relevant as there are significant sunk costs associated with entry and average costs per unit of output fall with increasing production. A new entrant's cost disadvantage vis-à-vis the incumbent is likely to be significant.
Economies of scope	Economies of scope exist where average costs for one product are lower as a result of it being produced jointly with other products by the same firm. If the presence of economies of scope requires that entrants enter more than one market simultaneously to achieve similar cost savings as the incumbent, this can deter entry.	This criterion is relevant given that there may be significant overlap in wholesale and retail call products that can be provided by the incumbent using the same infrastructure, (e.g. at the wholesale level the network can be shared across origination, transit and termination of calls to fixed, calls to mobile and calls to NTC). This may deter entry into the wholesale call origination market where new entrants face the prospect of entering several markets simultaneously to achieve similar cost savings as the incumbent.
Overall size of the undertaking	This refers to the potential advantages and the sustainability of those advantages that may arise from the large size of an undertaking relative to its competitors.	This criterion is not that relevant as it would appear that the competitive advantages which an incumbent enjoys as a result of its larger size are more appropriately considered under the discussion on control of infrastructure not easily duplicated and economies of scale and scope above.
Technological advantages or superiority	Such advantages may represent a barrier to entry as well as an advantage over existing competitors due to lower production costs or product differentiation.	This criterion is not that relevant as the incumbent does not appear to enjoy lower production costs or product differentiation resulting from technological advantages or superiority. Although it does appear to benefit from significant infrastructural advantages.
Product/services diversification (e.g. bundled products or services)	There can be a positive relation between product/services diversification and market power. If the incumbent is able to differentiate its products and competitors are not able to imitate the differentiation, then scope for customer switching to	This criterion may be relevant as bundling origination with other services such as transit and termination to achieve economies of scope is undertaken by the incumbent. However, in the presence of wholesale regulation competitors should be capable of replicating such bundles. On the other hand, the ability of competitors to successfully differentiate their own service offering (in terms of

Vertical integration	alternative suppliers might be reduced. Conversely, if alternative suppliers are not able to sufficiently differentiate their own service offering from that provided by the incumbent, switching away from the incumbent may also be less likely. Vertical integration, while normally efficient, can make new market entry harder where the presence of a firm at multiple levels in the production or distribution	price, quality or functionality) from that of the incumbent's is not clear given their continued dependence on the incumbents wholesale inputs. This criterion is relevant as the incumbent also has a significant presence in downstream retail markets. In the absence of regulation, the integrated operator may have an incentive to cease supplying access to its network or to
	chain increases the possibilities for it to foreclose one or more markets and/or where prospective new entrants may perceive the need to enter two or more markets simultaneously to pose a viable competitive constraint to the integrated operator.	supply access on less favourable terms which could affect competitive conditions in downstream markets and potentially further delay new entry at the upstream level.
Easy or privileged access to capital markets/financial resources	Easy or privileged access to capital markets may represent a barrier to entry as well as an advantage over existing competitors.	Although the incumbent appears to enjoy significant financial resources by virtue of its strong presence on a number of associated markets, the relevance of this criterion is ambiguous as many small operators or potential new entrants are affiliated companies belonging to larger international groups with potential access to resources on international markets. Favourable inter-company links may be considered in conjunction with other criteria such as sunk costs and economies of scale to determine whether entry/expansion is feasible over the period of this review. Any external financing is only likely to occur if entry/expansion is considered a worthwhile strategy given the particular characteristics of the market.
A highly developed distribution and sales network	A well-developed distribution system may be costly to replicate and maintain and may even be incapable of duplication. This may represent a barrier to entry as well as an advantage over existing competitors.	This criterion is of less relevance because the service in question is acquired only by purchasers at the wholesale level and it would appear that no specialized sales network is required. Furthermore, it is not clear that implementing relevant billing, account management and/or customer service systems would pose a significant barrier to potential new entrants.
Absence of potential competition	This refers to the prospect of new competitors (which are in the position to switch or extend their line of production or to commence an entirely new line of	This criterion is relevant as a credible threat of potential entry may prevent firms from raising prices above competitive levels, leading to a situation in which potentially no market power is exercised. The likelihood of potential

Barriers to expansion	production) entering the market (e.g. in response to a price increase) within the timeframe considered by the review. While growth and expansion is generally easier to achieve for individual firms (and in particular for new entrants) in growing markets, it might be inhibited in mature, saturated markets, where customers are already locked in with a certain supplier and have to be induced to switch.	competition from new entrants via various possible alternative technologies is considered in line with the economics of deploying such alternative technologies on a significant scale over the period of the review. The relevance of this criterion is strongly linked to the existence of barriers to entry which is already considered. As the incumbent is currently the only operator supplying wholesale call origination services to third party customers based on its own network inputs, the analysis focuses primarily on barriers to entry. Many of the barriers to entry identified above (e.g., control of infrastructure not easily duplicated and economies of scale) also make it difficult for small operators already in the market to expand or grow their market share.
Absence of or low countervailing buying power	The existence of customers with a strong negotiating position, which is exercised to produce a significant impact on competition, can potentially restrict the ability of providers to set their prices and/or other commercial terms independently of their customers.	This criterion is relevant given that purchasers of origination services in Ireland appear extremely limited in their ability to switch suppliers, self-supply or reduce/cease consumption in response to a price increase by the incumbent by virtue of the significant barriers to entry/expansion and absence of potential competition identified above.
Evidence from behaviour and performance	According to the OFT Market Power Guidelines, an undertaking's conduct in a market or its financial performance may provide evidence that it possesses market power. While high prices or profits alone are unlikely to be sufficient proof that an undertaking has SMP, when considered with other factors, prices that are consistently above an appropriate measure of cost or returns that are persistently high relative to those that would prevail in a competitive market may suggest the existence of market power.	This criterion does not appear as relevant here as the incumbent's pricing behaviour is regulated.

Transit Market:

CMD Cuitouia	Dolovenes	Dolovon oo da Turanida
SMP Criteria	Relevance to	Relevance to Transit
Market shares	SMP Assessment	market This criterion is relevant because the
Market shares	Market shares are not on their own determinative of SMP but are a useful starting point for defining instances where SMP is more likely to arise. It is clear from EU jurisprudence that concerns about SMP are more likely to arise where a large market share is held over time.	wholesale transit market is characterised by large market shares which have persisted over time.
Barriers to entry	Barriers to entry are factors that prevent or hinder undertakings from entering a specific market. They generally comprise any disadvantage that a new entrant faces when entering a market that incumbents do not currently face. Entry barriers may result, for instance, from a particular market structure (structural barriers).	This criterion is relevant because the wholesale transit market is characterized by high barriers to entry (e.g. economies of scale, control of infrastructure not easily replicated etc) which are likely to persist over the period of the review.
Sunk costs	Sunk costs are costs which must be incurred in order to enter a market and which are not recoverable on exiting the market.	This criterion is relevant as there are considerable sunk costs associated with interconnecting with the wide dispersion of eircom primary nodes which are unlikely to be fully recoverable on exit.
Control of infrastructure not easily duplicated	This indicator refers to a situation in which certain infrastructure is: • necessary to produce a particular product/service, • exclusively or overwhelmingly under the control of a certain undertaking, and • there are high and non-transitory barriers to substituting the infrastructure in question.	This criterion is relevant as it is clear that transit infrastructure is necessary in order to provide wholesale transit & retail calls services. While there has been some network build by alternative providers, the incumbent clearly has control of the only ubiquitous network in the country which, when considered with the other barriers to entry/expansion below, is likely to remain the case over the period of the review.
Economies of scale	Economies of scale arise when increasing production causes average costs (per unit of output) to fall. By producing above the level that a new entrant might be able to produce at, the incumbent can ensure lower unit costs than the entrant. Where economies of scale are large and/or barriers to expansion exist, the new	This criterion is relevant as there are significant sunk costs associated with entry and average costs per unit of output fall with increasing production. A new entrant's cost disadvantage vis-à-vis the incumbent is likely to be significant.

	entrant's expected profit	
	from being in the market may fail to cover its sunk costs and entry may be deterred.	
Economies of scope	Economies of scope exist where average costs for one product are lower as a result of it being produced jointly with other products by the same firm. If the presence of economies of scope requires that entrants enter more than one market simultaneously to achieve similar cost savings as the incumbent, this can deter entry.	This criterion is relevant given that there may be significant overlap in wholesale and retail call products that can be provided by the incumbent using the same infrastructure, (e.g. at the wholesale level the network can be shared across origination, transit and termination of calls to fixed, calls to mobile and calls to NTC). This may deter entry into the wholesale transit market where new entrants face the prospect of entering several markets simultaneously to achieve similar cost savings as the incumbent.
Overall size of the	This refers to the potential	This criterion is not that relevant as it
undertaking	advantages and the sustainability of those advantages that may arise from the large size of an undertaking relative to its competitors.	would appear that the competitive advantages which an incumbent enjoys as a result of its larger size are more appropriately considered under the discussion on control of infrastructure not easily duplicated and economies of scale and scope above.
Technological advantages	Such advantages may	This criterion is not that relevant as the
or superiority	represent a barrier to entry as well as an advantage over existing competitors due to lower production costs or product differentiation.	incumbent does not appear to enjoy lower production costs or product differentiation resulting from technological advantages or superiority. Although it does appear to benefit from infrastructural advantages.
Product/services diversification (e.g. bundled products or services)	There can be a positive relation between product/services diversification and market power. If the incumbent is able to differentiate its products and competitors are not able to imitate the differentiation, then scope for customer switching to alternative suppliers might be reduced. Conversely, if alternative suppliers are not able to sufficiently differentiate their own service offering from that provided by the incumbent, switching away from the incumbent may also be less likely.	This criterion may be relevant as bundling transit with other services such as origination and termination to achieve economies of scope is undertaken by the incumbent. However, in the presence of wholesale regulation competitors should be capable of replicating such bundles. On the other hand, the ability of competitors to successfully differentiate their own service offering (in terms of price, quality or functionality) from that of the incumbent's is not clear given their continued reliance on wholesale inputs from the incumbent.
Vertical integration	Vertical integration, while normally efficient, can make new market entry harder where the presence of a firm at multiple levels in the production or distribution chain increases the	This criterion is relevant as the incumbent also has a significant presence in downstream retail markets. In the absence of regulation, the integrated operator may have an incentive to cease supplying transit services or to supply such services on less favourable terms

	possibilities for it to foreclose one or more markets and/or where prospective new entrants may perceive the need to enter two or more markets simultaneously to pose a viable competitive constraint to the integrated operator.	which could affect competitive conditions in downstream markets and potentially further delay new entry at the upstream level.
Easy or privileged access to capital markets/financial resources	Easy or privileged access to capital markets may represent a barrier to entry as well as an advantage over existing competitors.	Although the incumbent appears to enjoy significant financial resources by virtue of its strong presence on a number of associated markets, the relevance of this criterion is ambiguous as many small operators or potential new entrants are affiliated companies belonging to larger international groups with potential access to resources on international markets. Favourable inter-company links may be considered in conjunction with other criteria such as sunk costs and economies of scale to determine whether entry/expansion is feasible over the period of this review. Any external financing is only likely to occur if entry/expansion is considered a worthwhile strategy given the particular characteristics of the market.
A highly developed distribution and sales network	A well-developed distribution system may be costly to replicate and maintain and may even be incapable of duplication. This may represent a barrier to entry as well as an advantage over existing competitors.	This criterion is of less relevance because the service in question is acquired only by purchasers at the wholesale level and it would appear that no specialized sales network is required. Furthermore, it is not clear that implementing relevant billing, account management and/or customer service systems would pose a significant barrier to potential new entrants.
Absence of potential competition	This refers to the prospect of new competitors (which are in the position to switch or extend their line of production or to commence an entirely new line of production) entering the market (e.g. in response to a price increase) within the timeframe considered by the review.	This criterion is relevant as a credible threat of potential entry may prevent firms from raising prices above competitive levels, leading to a situation in which potentially no market power is exercised. The likelihood of potential competition from new entrants via various possible alternative technologies is considered in line with the economics of deploying such alternative technologies on a significant scale over the period of the review.
Barriers to expansion	While growth and expansion is generally easier to achieve for individual firms (and in particular for new entrants) in growing markets, it might be inhibited in mature, saturated markets, where customers are already locked in with a certain supplier and have to be induced to switch.	The relevance of this criterion is strongly linked to the existence of barriers to entry which is already considered. Many of the barriers to entry identified above (e.g., control of infrastructure not easily duplicated and economies of scale) also make it difficult for small operators already in the market to expand or grow their market share. The maturity of the market and any barriers to customers switching from one provider to another

		may also be considered here.
Absence of or low	The existence of customers	This criterion is relevant given that
countervailing buying	with a strong negotiating	purchasers of transit services in Ireland
power	position, which is exercised	appear limited in their ability to switch
-	to produce a significant	suppliers, self-supply or reduce/cease
	impact on competition, can	consumption of transit services in
	potentially restrict the ability	response to a price increase by the
	of providers to set their	incumbent, by virtue of the barriers to
	prices and/or other	entry/expansion and absence of potential
	commercial terms	competition identified above.
	independently of their	
	customers.	
Evidence from behaviour	According to the OFT	This criterion does not appear as relevant
and performance	Market Power Guidelines,	here as the incumbent's pricing
•	an undertaking's conduct in	behaviour is regulated, although there
	a market or its financial	has been a significant level of stability in
	performance may provide	the incumbent's transit pricing over the
	evidence that it possesses	past 6 years.
	market power. While high	
	prices or profits alone are	
	unlikely to be sufficient	
	proof that an undertaking	
	has SMP, when considered	
	with other factors, prices	
	that are consistently above	
	an appropriate measure of	
	cost or returns that are	
	persistently high relative to	
	those that would prevail in a	
	competitive market may	
	suggest the existence of	
	market power.	