



Market Analysis: – Wholesale Call Origination and Transit Services

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1 Executive Summary

Introduction

- 1.1 On 22 October 2004 ComReg published a national consultation on the review of the Interconnection markets¹ and on 19 May 2005 ComReg notified these findings to the EU Commission and published the response to consultation². Notified measures were accepted by the European Commission in correspondence to the Chairperson of ComReg dated 17 June 2005. This process is referred to as the 'initial review' throughout this document.
- 1.2 ComReg has decided that before issuing a Final Decision, it is appropriate to review the findings of the initial review to include current data and to take account of any market developments since the Notification. This allows for consideration of changes in the markets, from the time of the initial review. In order to take account of current industry views ComReg met with a large number of operators and in June 2006 issued a comprehensive data direction to fixed and mobile operators.
- 1.3 This second consultation will be referred to as the 'current review'. The current review on interconnection is published in two parts. This document 07/02 examines the markets for wholesale call origination and transit (including international transit). ComReg document 07/03 examines the markets for wholesale call termination.

Timeframe

- 1.4 The timeframe of this review is two years from the date of publication of the Decision.

Market definition

- 1.5 ComReg proposes to define 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; and
 - Wholesale market for outgoing international transit services on the public telephone network provided at a fixed location.

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 2005, with a Herfindahl-Hirschman Index ('HHI') 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 (97-98%). 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 so high even if OAO self-supply is included. An assessment of existing competition would indicate that eircom is in a position to act independently of its competitors and consumers.

¹ Document 04/106.

² Document 05/37a.

- 1.7 The high costs of entry and significant scale economies enjoyed by eircom constitute a potential 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') in this market which is likely to persist over the period of the review.
- 1.9 ComReg's preliminary conclusion is that eircom has significant market power in this market.

Transit Market

- 1.10 Eircom's share of transit traffic has remained relatively stable above 70% from H1 2004 to H2 2005, 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 consumers. BT's market share declined by four percentage points between H1 2004 and H2 2005 and is not likely to experience a significant increase over the current 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 preliminary 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 due to barriers to entry/expansion associated with its economies of scale and scope, control of infrastructure not easily replicated the mature nature of the market, barriers to wholesale consumers 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 preliminary conclusion is that eircom has significant market power in this market.

Outgoing International Transit Market

- 1.14 ComReg has presented its preliminary assessment as to whether the outgoing international transit services market is susceptible to *ex ante* regulation. ComReg has assessed this market against the Three Criteria set out in the Relevant Markets Recommendation. In respect of the first criterion, ComReg seeks views on whether there are significant and non-transitory barriers to entry present in this market.
- 1.15 In relation to the second criterion, whether this market tends towards effective competition, ComReg has examined the nature and extent of existing competition, market shares, pricing trends and any barriers to expansion. At this point, evidence may indicate that the outgoing international transit market is tending towards effective

Interconnection Market Review - Call Origination and Transit Services competition. ComReg has not taken a final position but seeks views from interested parties.

- 1.16 As regards the third criterion, ComReg has identified that some potential restrictions of competition may still be possible, for example, through possible predatory or exclusionary behaviour by eircom (due to its strong position in other markets). However, the scope or risk of such anti-competitive behaviour emerging may not be so significant or immediate as to warrant *ex-ante* regulation at this time. Were such strategies to emerge and to constitute a possible abuse of dominance, ComReg seeks views as to whether competition law provides the appropriate instruments to effectively address such potential market failures.
- 1.17 ComReg's preliminary view is that this market does not meet the Three Criteria cumulatively and that *ex-ante* regulatory intervention is not appropriate for this market, but would welcome input from interested parties on this issue.

Remedies

- 1.18 As ComReg's preliminary analyses of the **Call Origination Market** and **National Transit Market** indicate that eircom should be designated with significant market power in both markets, ComReg is obliged to impose at least one regulatory obligation on eircom in each market. 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)
- Price control and Cost Accounting (Regulation 14)

- 1.19 ComReg is of the preliminary view that the above obligations would be proportionate and justified on the basis of competition. 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 this objective.

- 1.20 In light of the preliminary view that the **Outgoing International Transit Market** fails the Three Criteria 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; and
- Price control and Cost Accounting.

- 1.21 The proposed withdrawal of obligations in the international transit market is considered justifiable in that no operator has been found to have SMP in this market. The market has been provisionally found to have characteristics which suggest a tendency towards effective competition and is, thus, not suitable for ex-ante regulation.
- 1.22 ComReg is of the preliminary view that the remedies set out in this market review support the objectives outlined in the Communications Regulation Act 2002 as to how ComReg should exercise its functions. The remedies proposed aim to address market failures, to protect consumers against the exercise of market power and to promote competition in the markets involving interconnection services.

2 Introduction

Initial Review

2.1 On 22 October 2004 ComReg published a national consultation on the Interconnection markets³ and on 19 May 2005 ComReg notified to the EU Commission and published the response to consultation⁴. Notified measures were accepted by the European Commission, in correspondence to the Chairperson of ComReg dated 17 June 2005. This process is referred to as the 'initial review' throughout this document. The findings of the initial review were as follows:

Market definition

2.2 ComReg proposed to define four interconnection markets:

- National market for wholesale call origination services provided over public telephone networks at a fixed location;
- National markets for wholesale call termination services used to provide retail calls to end users on each public telephone network, provided at a fixed location;
- National market for wholesale call termination services used to provide retail calls to service providers on public telephone networks, provided at a fixed location; and
- National market for wholesale national call transit services on the public telephone networks provided at a fixed location.

2.3 ComReg also proposed to undertake a separate national consultation on the market for international transit services.

Market analysis

2.4 eircom were found to have SMP in all four markets, while all other fixed network operators (OAOs) were to be designated as having SMP on their respective fixed public telephone network in the markets for wholesale call termination to end users. However, following discussion with the EU Commission on whether the call termination to service providers market was potentially susceptible to *ex-ante* regulation, ComReg withdrew its notification of this market.

Remedies

2.5 ComReg identified a number of competition problems that could arise out of significant market power in these markets, such as leveraging of market power and exploitative/exclusionary behaviour by dominant operators, which could include excessive pricing. In the markets for **call origination** and **national transit**, ComReg proposed that the following remedies should be imposed on eircom to address market failure:

- Transparency;
- Non-discrimination;
- An access obligation;

³ Document 04/106.

⁴ Document 05/37a.

- A price control and cost accounting obligation; and
 - An obligation to maintain existing accounting systems, accounting separation and associated methodologies pending the outcome of further consultation.
- 2.6 In the market for **call termination to end users**, ComReg recognised the different competitive conditions faced by eircom and OAOs, and proposed that proportionate remedies should be designed to reflect these differences.
- 2.7 ComReg proposed that appropriate remedies for OAOs were:
- Transparency;
 - Non-discrimination; and
 - A price control obligation.
- 2.8 ComReg proposed that appropriate remedies for eircom were:
- Transparency;
 - Non-discrimination;
 - An access obligation;
 - A price control and cost accounting obligation; and
 - An obligation to maintain current cost accounting systems, accounting separation and associated methodologies pending the outcome of further consultation.

Other services necessary for the provision of interconnection

- 2.9 ComReg proposed to mandate the provision of capacity based interconnection products without the definition of a relevant market or a designation of SMP. ComReg considered its approach in mandating such products to be consistent with the approach set out in the *Access Regulations* and the *Explanatory Memorandum*. It was ComReg's view that the provision of these products was essential to ensure adequate access, interconnection and interoperability. ComReg also proposed that it was not necessary to impose additional remedies on fixed SMS. Finally, the information available to ComReg did not indicate that the supply of wholesale Directory Enquiry services was effectively competitive. However, ComReg intended to consider the matter further by means of an additional consultative stage.

Current Review

- 2.10 ComReg has decided that, before issuing a Final Decision on these markets, it is appropriate to re-examine and update the market analysis contained in the initial review. This will allow ComReg to fully consider any change in the market from the time of the initial review. This process is referred to throughout the document as the 'current review'.
- 2.11 The current review has 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 markets⁵ and conducted meetings and conference calls with a large number of

⁵ Interconnection Data Direction sent out to the fixed and mobile network operators – dated 09 June 2006.

Interconnection Market Review - Call Origination and Transit Services operators. ComReg has reviewed the findings of the EU Commission in its new Draft Recommendation on Relevant Markets⁶ as well as the independent expert report advising the EU Commission on this new recommendation (The Expert Report)⁷. ComReg has also carefully reviewed the findings of other NRAs and the comments of the EU Commission on these findings as a useful source of ancillary information on the interconnection markets.

- 2.12 The initial review generally incorporated market information to the end of 2004, where this information was available, and looked ahead two years in considering how the markets were likely to develop. The initial review primarily used quantitative data which had been collected on a quarterly basis for the purposes of the ComReg Quarterly Report. This current review is based on new quantitative data collected as part of the Interconnection Data Direction for the four periods from H1 2004 to H2 2005. A time period of two years was chosen as it was considered that a longer time period would have been overly burdensome on operators. As this new data is not directly comparable to the old Quarterly Report data, due to different sources, data categories, time periods, etc., only the new quantitative data is relied on in the current review. As recommended in *The Guidelines*⁸ the current review considers the market prospectively, and considers how the market is likely to change over the next two years. ComReg is of the preliminary view that while the data set runs until H2 2005, there has been little significant change in the intervening period that would indicate a change in the trends in market share.
- 2.13 ComReg is now inviting responses to this updated market analysis, and to the proposals and views contained herein. The intention is to consider responses, consult with the Competition Authority and publish a Final Decision, which will also be notified to the EU Commission.
- 2.14 ComReg would welcome comments from all interested parties on the questions posed in this market review and will accept written comments on or before 5.30 pm Friday 2 March 2007. Under Article 5 of the Framework Regulations and in order to promote further openness and transparency, ComReg will publish the names of all respondents subject to maintaining confidentiality.

Timeframe

- 2.15 The timeframe of this review is two years from the date of publication of the Decision.

Structure of this document

- 2.16 The consultation on interconnection is published in two parts. This document examines the markets involving wholesale call origination and wholesale call transit. ComReg Document 07/03 examines the market for wholesale call termination.
- 2.17 The remainder of this consultation document is structured as follows:

⁶http://ec.europa.eu/information_society/policy/ecom/comm/doc/info_centre/public_consult/review/recommendation_final.pdf

⁷ Martin Cave, Ulrich Stumpf and Tommaso Valletti, July 2006, "A review of certain markets included in the Commission's Recommendation on Relevant Markets subject to *ex ante* Regulation", available from:

http://ec.europa.eu/information_society/policy/ecom/comm/info_centre/documentation/studies_ext_consult/index_en.htm

⁸ Commission's Guidelines on Market Analysis and Significant Market Power ("The Guidelines"). OJ C 165/03. Paragraph 20.

- **Section 3** presents ComReg's preliminary 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, as well as demand and supply-side assessments;
- **Section 4** presents ComReg's market analysis of the origination and transit markets and presents ComReg's preliminary view on whether the markets are effectively competitive;
- **Section 5** presents ComReg's preliminary view on those undertakings with significant market power 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 likely remedies are proposed;
- **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** sets out a glossary of terms used in this document;
- **Annex C** presents ComReg's views on the methodology for a wholesale price cap;
- **Annex D** sets out the consultation questions; and
- **Annex E** assesses the appropriate SMP criteria to be considered in the competition assessment for each market.

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.

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 consumers to be included within the same relevant product market. ComReg examined the prevailing conditions of demand substitution by applying, where possible, the hypothetical monopolist test. The **Small but Significant Non-transitory Increase in Price** (“SSNIP”) or hypothetical monopolist test provides a useful conceptual framework within which to identify the existence of close demand substitutes⁹.
- 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.*”¹⁰ 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.¹¹ When these conditions are met, the market may be broadened to include the products that those suppliers are already producing.¹²
- 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. 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 ComReg notes that this current review is prospective in analysing possible developments in the market, and considers a timeframe of around two years.

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:

⁹ 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.*”

¹⁰ The Commission’s Notice on Market Definition, para. 20.

¹¹ OFT Guideline (July 2001) OFT 342, The role of market definition in monopoly and dominance inquiries, Economic Discussion Paper 2,, para. 2.20.

¹² Richard Whish (2003), Competition Law, Fifth Edition, pages 32-33.

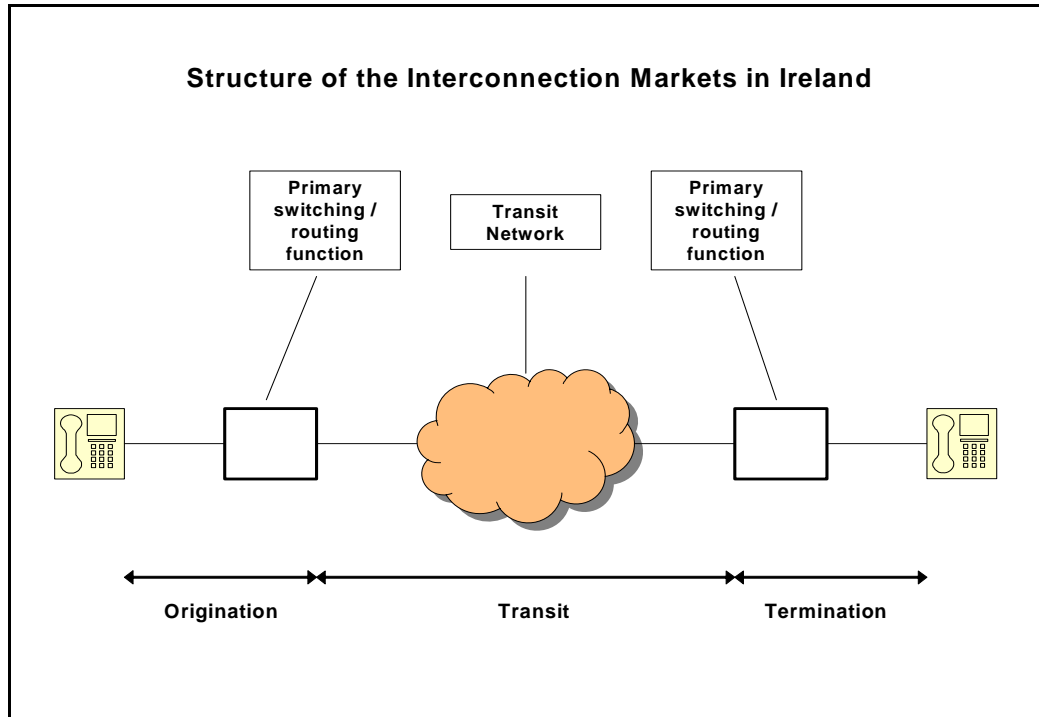
- Wholesale call origination;
 - Wholesale call termination to end users;
 - Wholesale call termination to service providers; and
 - Wholesale national call transit.
- 3.6 A potential fifth market for international call transit was to be the subject of a further separate consultation.
- 3.7 Having further considered responses to the previous consultation, responses to data requests, and input from discussions with the EC and industry, ComReg is considering the following three interconnection service types:
- Wholesale call origination;
 - Wholesale call transit ; and
 - Wholesale call termination.
- 3.8 This is line with the previous EC Recommendation¹³, and with the new EC Draft Recommendation¹⁴.
- 3.9 The nature of interconnection means that the wholesale market cannot be analysed in isolation from the downstream retail markets which rely on wholesale inputs. In related consultations¹⁵, ComReg has considered the retail markets which require call origination and transit services as inputs.
- 3.10 Similar to the initial review, ComReg proposes in this current review to define the boundaries between call origination, call termination and national transit as follows:

¹³ 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.

¹⁴http://ec.europa.eu/information_society/policy/ecomms/doc/info_centre/public_consult/review/recommendation_final.pdf

¹⁵ Retail Narrowband Access Markets (06/39); Retail Calls Market Review (06/51) Wholesale unbundled access (including shared access) to metallic loops and sub-loops (04/40).

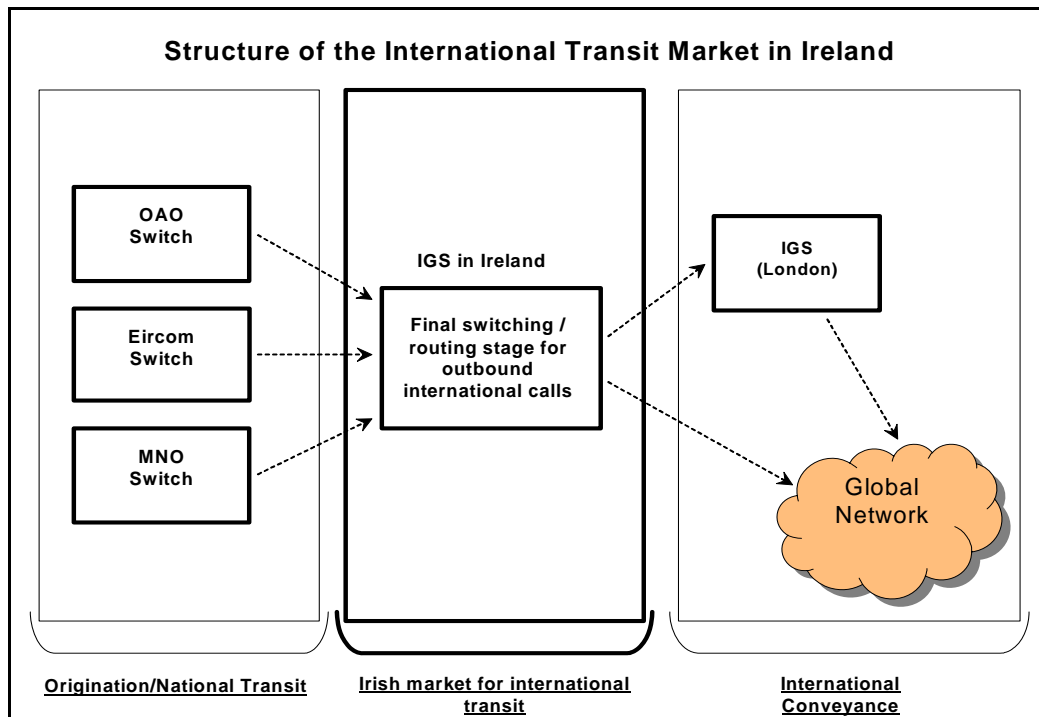
Interconnection Market Review - Call Origination and Transit Services
Figure 3.1: Structure of Interconnection Markets in Ireland



Source: ComReg

3.11 ComReg also proposes to define the outgoing international transit market as follows:

Figure 3.2: Structure of Outgoing International Transit Market in Ireland



Source: ComReg

Further to the 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, 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, 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/WLR function and switching/routing stages which undertake a specific NTC 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 October 2005 and more in-depth analysis, ComReg now proposes 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.

3.12 The *Framework Regulations*¹⁶ 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.¹⁷ 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 Guidelines*"). In addition, ComReg considers the Commission's Notice on Market Definition¹⁸ 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

¹⁶ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 (S.I. No. 307 of 2003)

¹⁷ Framework Regulations 26 and 27.

¹⁸ European Commission, Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law, OJ [1997] C372/5.

Interconnection Market Review - Call Origination and Transit Services 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 Directive¹⁹. 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 of around 2 years.

- 3.13 ComReg is consulting in parallel on all of the interconnection markets. In order to make these market reviews more accessible to interested parties, this document considers the markets for wholesale call origination and wholesale transit, while the market for wholesale termination is considered in ComReg Document 07/03.

Market Definition: Call Origination

Initial Review

- 3.14 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.
- 3.15 In defining the relevant wholesale origination services market, ComReg proposed in the initial review that:
- The construction of alternative access facilities and/or purchased and/or leased network connections was 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

- 3.16 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, 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?

¹⁹ 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.

- 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 (WBA) be considered as part of the same relevant market as call origination services?
- What is the geographic market definition?

Do fixed origination services, construction of alternative facilities and purchased or leased network connections belong in the same relevant product market?

3.17 ComReg proposes to maintain 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)) are not in the same relevant product market as fixed origination services provided on a wholesale basis. On the *demand side*, OAOs could not credibly threaten to switch to constructing alternative access facilities and/or purchasing or leasing dedicated network connections on a scale so as to constrain small but significant changes in the price of wholesale call origination. This is because:

- One potential alternative to the purchase of call origination is to establish an access network (e.g. cable, fibre to the home, FWA, etc.). ComReg is of the view that the construction of alternative ubiquitous networks is not 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 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 (there are currently under 1000 cable narrowband access paths representing only a tiny proportion of overall access paths) and is likely to remain so during the lifetime of this current review. Construction of Fibre to the Home is also at a very nascent stage in Ireland with only a few thousand lines. The use of narrowband FWA further tends to be limited geographically (there are currently only approximately 2,000 direct access paths of narrowband FWA in Ireland representing only approx. 0.1% of access paths), is used primarily to offer broadband services and is unlikely to become ubiquitous in the short term. As outlined further in the “Relevant Market Analysis” section, FWA is still considered by many respondents to comprise an uneconomic technology for large scale deployment. Accordingly, its supply is 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 is to lease an established network connection to the end user location. As noted by one respondent, leased network connections such as leased lines and PPCs are 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/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 is an inherent risk that traffic volumes generated might not warrant the expenditure to acquire

Interconnection Market Review - Call Origination and Transit Services the capacity. It is therefore unlikely that a leased line would be a cost effective substitute for wholesale call origination services for many routes and would only likely be justified for a small proportion of routes where there are larger customer sites, e.g., large business premises.

- Local Loop Unbundling (LLU) is not a sufficiently close or effective substitute for fixed call origination. This is because there is 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 can be used to provide voice services, new entrants in principle do not unbundle local loops to provide narrowband access only. The information available to ComReg indicates further that take-up of LLU continues to be minimal (approximately 1.25% of access paths as at Q3 2006). In addition, there is a substantial pricing differential between wholesale call origination services and unbundled local loops, which is 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.

3.18 On the *supply side* the key issue to consider is whether an existing supplier of end user connections (either on a leased or purchased basis) could switch quickly and 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. 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 is 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 are 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 is 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.

3.19 Finally, the Draft Recommendation on Relevant Markets notes that each of the alternatives discussed above entail considerable time and investment, a large proportion of which are sunk, and for this reason the degree of roll out remains limited.²⁰ As such, ComReg is of the view that these alternatives should not be considered effective substitutes for call origination services for the purposes of market definition.

3.20 **Preliminary conclusion: construction of alternative facilities and/or purchased and/or leased network connections are not in the same relevant product market as fixed origination services.**

²⁰ 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/ecomms/doc/info_centre/public_consult/review/recommendation_final.pdf

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Should self-supply be included in the same relevant product market as wholesale call origination services provided to third party retail service providers?

- 3.21 In the initial review, ComReg proposed that self-supply should be included in the relevant product market, together with wholesale services provided to third party retail service providers.
- 3.22 A recent independent report prepared by Martin Cave, Ulrich Stumpf and Tommaso Valletti for the European Commission notes: *“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.”*²¹ In that regard, ComReg has carried out further analysis on this issue, and proposes the following.
- 3.23 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 is 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 is 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 is because the resellers’ wholesale inputs would also presumably be subject to the 5-10% price increase by the hypothetical monopolist.
- 3.24 *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.
- 3.25 Taking the above into account, it would appear appropriate to include eircom’s self supply in the relevant market. This is because eircom would not have to make

²¹ Martin Cave, Ulrich Stumpf and Tommaso Valletti, July 2006, “A review of certain markets included in the Commission’s Recommendation on Relevant Markets subject to *ex ante* Regulation”, available from,

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...”*

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significant additional investments or incur significant time delays for the purposes of supplying additional wholesale customers given that substantially the same network inputs are used and eircom already has the requisite systems in place (e.g., wholesale billing) for supplying wholesale customers. Further, eircom's network has the greatest level of interconnect and build out in the country which suggests 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 non-integrated hypothetical monopolist.

- 3.26 As eircom is currently the only operator providing a wholesale call origination service to wholesale customers based on own network inputs, it is 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 is little evidence to suggest that OAOs could provide a viable wholesale alternative reasonably quickly, at relatively low cost, or on a scale sufficient to 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 would not compare to that of eircom's.
- 3.27 Notwithstanding, ComReg has included OAO self-supply of traffic carried over own network inputs, as its inclusion has no bearing on the SMP assessment in this instance. However, ComReg notes that were the inclusion/exclusion of OAO self supply to have 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.
- 3.28 **Preliminary conclusion: self-supply by all operators currently supplying their own retail arm based on own network inputs should be included in the market.**

Is there a single relevant market for the supply of wholesale metered and unmetered call origination services?

- 3.29 In the initial review, ComReg proposed that wholesale metered and unmetered call origination services fall within the same relevant market.
- 3.30 On the demand side, it is 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 are 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 exists 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 is 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.
- 3.31 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.

- 3.32 There have been no significant changes in the market which would impact this conclusion.
- 3.33 **Preliminary conclusion: wholesale metered and unmetered call origination services fall within the same relevant market.**

Is there a single relevant market for the supply of origination to suppliers of retail calls to end-users and calls to service providers?

- 3.34 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.
- 3.35 On the *demand side*, an end-user would not typically substitute the origination of one type of call with another, and so there is 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 will therefore 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.
- 3.36 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.
- 3.37 **Preliminary conclusion: there is a single relevant product market for wholesale call origination services to end-users and service providers.**

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

WBA

- 3.38 ComReg does not consider that in the context of this review wholesale broadband access 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.
- 3.39 At both the retail level and indirectly at the wholesale level, it is conceivable that there could be an indirect constraint imposed on originating operators from operators providing voice over internet protocol services (VoIP)²². These types of calls would

²² 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.

Interconnection Market Review - Call Origination and Transit Services include managed voice over broadband services (VoB)²³ or unmanaged voice over internet (VoI)²⁴ services. In terms of functionality a VoB call might be substitutable for a fixed call.²⁵ However, for a number of reasons this is 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.

- 3.40 In addition, VoB uptake is dependent on users having a broadband connection. ComReg is of the preliminary 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. Broadband penetration per capita stands at 10.31% and the trend in broadband take-up is expected to be strong in 2007. However, as detailed in the recent Retail Calls Market Review, Calls for Input document²⁶, because the broadband base was relatively low compared to other member states, even high projected growth rates did not bring Ireland up to the current EU-15 average. 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.²⁷ The potential for significant demand-side substitution is 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.²⁸
- 3.41 Finally, the European Commission appears to be of the view that the relevant linked wholesale markets for voice over broadband are the local loop and WBA and that there is no wholesale call origination equivalent for voice over broadband.²⁹ Instead, voice over broadband is already regulated at the wholesale level through markets 11 and 12 of the Recommendation. However, ComReg intends to monitor developments in this market, in particular with respect to the findings of any decision in the retail calls markets.

²³ VoB 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).

²⁴ 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.

²⁵ See conclusions in Retail Calls, Calls for Input (ComReg Doc.06/51 where VoB services were considered substitutes in the non-residential market.

²⁶ ComReg Document 06/51, Retail Calls Market Review, Calls for Input on the Assessment of the three criteria.

²⁷ ComReg's latest market research shows that only a small proportion of broadband users (less than 1% at the end of 2005) actually use VOIP services and only a subset of those use VOB.

²⁸ 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.

²⁹<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/1146&format=HTML&aged=0&language=en&guiLanguage=en>

NGNs

- 3.42 Since the time of the initial review, a key area which could impact on the definition of the call origination market is the development of Next Generation Networks (NGNs). ComReg has considered the potential impact of NGNs on the interconnection markets. It is 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 is ComReg's view that within the timeframe of this review, a move towards NGNs represents the use of a more efficient technology to offer services which are similar to those included in the market now. Following the principles of market definition, and particularly the principle of technological neutrality, the competitive conditions of product and service markets are not likely to change solely due to developments in the delivery technology. ComReg therefore concludes that the move towards NGNs is not likely to impact on the market definition for wholesale call origination services over the period of this review.
- 3.43 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 over the timeframe of the review.
- 3.44 **Preliminary conclusion: wholesale broadband access and next generation networks 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.**

Geographic marketArguments put forward relating to "Exclusive" Access

- 3.45 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 are offered to and by all operators in Ireland on terms that do not differentiate by reference to geographic location. Charges are geographically averaged by all operators regardless of whether or not they are subject to retail regulation. In turn, geographic averaging at the retail level exerts an indirect uniform pricing constraint on wholesale call origination pricing.
- 3.46 However, one respondent to the original consultation, eircom, 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. eircom 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 that are imposed on eircom in the national call origination market. Finally, eircom 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.
- 3.47 While ComReg did not agree with this view in the original consultation, it has conducted a further investigation into this issue to determine whether there have 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

Interconnection Market Review - Call Origination and Transit Services further information in relation to the issue of “exclusive” access arrangements. This issue has 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

- 3.48 Following established European case law and guidance, ComReg approaches 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*”³⁰ and “*which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.*”³¹
- 3.49 Geographic market definition, 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 considers 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 is 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.
- 3.50 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.³²
- 3.51 With this in mind, ComReg is aware that the two main OAOs engaging in agreements with property developers/builders for the provision of electronic communications

³⁰ Case 27/76 *United Brands v. Commission*, [1978] ECR 207, [1987] 1 CMLR 429, paras 10 and 11.

³¹ The Commission’s Notice on Market Definition, para. 8.

³² 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.

Interconnection Market Review - Call Origination and Transit Services infrastructure in the State, continue to price their retail services nationally, irrespective of whether those services are offered in “exclusive” access areas or not. Additionally, these operators’ retail packages are available nationally. ComReg has received evidence from one OAO to suggest that revenues from “exclusive” access infrastructure represent 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 number of hurdles to overcome including reworking billing and marketing systems. Thus, it would appear that OAOs are currently 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 is 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, this makes it less likely that differential prices would occur.

- 3.52 Furthermore, a number of OAOs have indicated that although there may be instances where they are currently the only operator providing network infrastructure in certain developments, these are not under “exclusive” agreements as requests for access may be dealt with through commercial negotiations. According to eircom, its standard process of designing an access network and supplying fixed line services in response to requests from property developers is being followed in approximately 1800-2000 new housing estates each year. eircom has identified only 6-10 housing estates³³ where it is claiming it has been denied access or has experienced protracted commercial negotiations. In any case, ComReg is still of the preliminary opinion that the operators servicing these developments continue to be subject to national competitive constraints and no evidence has been provided to suggest that this situation is likely to change over the period of the review.
- 3.53 ComReg’s preliminary view is that service offerings, pricing behaviour and marketing arrangements within these developments are largely determined at the national level. Insufficient evidence has been provided to suggest that this situation will 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

- 3.54 In relation to comparisons drawn between “exclusive” access areas and the Hull geographic market defined in the UK, ComReg notes that the Hull area has 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 areas identified by eircom includes no more than 500 dwellings. ComReg is of the view that to define numerous

³³ eircom has 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 eircom, as eircom is clearly very well placed, as USO, to identify such areas. 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 overall developments in Ireland.

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geographic markets of such small size and impose SMP obligations in each case could not be considered practical, proportionate or justified.

- 3.55 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 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 is no corresponding situation where providers offering services in these "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 operators active in the national market.
- 3.56 **Preliminary Conclusion: ComReg's preliminary view is that service offerings, pricing behaviour and marketing arrangements within these developments appear to be largely determined at the national level and no evidence has been provided to suggest this situation is likely to change over the period of the review. Insufficient evidence has been provided to justify defining distinct geographic call origination markets for every instance of OAOs engaging in agreements with property developers/builders for the provision of electronic communications infrastructure in the State. As such, as long as operators engaging in these arrangements continue to determine their commercial terms and conditions on a national basis and there are constraints on them determining those terms on a more localised level, then ComReg proposes the relevant geographic market is national.**

Overall preliminary conclusions on Wholesale Call Origination Market Definition

- 3.57 **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

- 3.58 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.
- 3.59 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 such as direct connections;
 - 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.

3.60 ComReg also defined a distinct market for international transit services but committed to conducting a further review of this market.

Current Review

3.61 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.

3.62 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 such as direct connections?
- 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 international market for outgoing transit?
- Should self-supply be included in the international outgoing transit market?

Do transit interconnection services fall within a distinct relevant product market to carriage over alternative facilities such as direct connections?

3.63 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.

3.64 On the *demand side* it appears 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 Direction have indicated that they do not see their demand for fixed transit services falling significantly in the foreseeable future. In addition, they do not see 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 are generally prohibitive and only justified on a few individual routes where high traffic volumes would justify the expense.

3.65 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 are high, there are fundamental functional and usage differences between such point-to-point capacity and switched/routed transit services which influence demand for those services and are reflected in their different pricing structures. For example:

- In considering whether wholesale transit interconnection services and wholesale leased line trunk circuits fall within the same relevant product market, functional differences, primarily the difference between a dedicated point-to-point link and a switched/routed service which connects multiple points, are reflected in pricing differentials. It should be noted that transit services refer to the conveyance of switched/routed calls on the public telephone network. While call conveyance may be provided over leased lines, this entails the provision of dedicated capacity between two fixed points whereas with switched/routed transit it is possible for calls to be conveyed between multiple end-points. In light of this key functional difference it is 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 price such as to render that price increase unprofitable. Furthermore, leased lines are significantly more expensive than switched/routed transit services and only economically justified if there is significant traffic on a particular route. There will be many routes for which a direct connection is not cost-effective and applying a SSNIP test it is unlikely that operators would switch to point-to-point capacity on a sufficient number of routes 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 are unlikely to be a close substitute for switched/routed transit for the same reasons highlighted for leased lines above. In addition, the deployment of fibre optic networks requires 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.

It is noted further that the fibre optic networks being developed in Ireland generally aim to deliver broadband services within defined geographical areas (e.g. Metropolitan Area Networks), which would further suggest they would not be 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 has built out its network to the extent where it can directly connect with other operators, such as mobile operators or other fixed operators. Direct interconnection requires substantial commitment and planning, and takes time as well as significant investment. It is ComReg's preliminary view that network build is not in itself evidence of effective demand substitution, and that the main reason for network build at this level is to meet growing traffic volume. Operators are unlikely to be in a position to switch to direct interconnection with sufficient immediacy or on a significant enough scale as to render small price increases in wholesale fixed transit services unprofitable. Implementing direct interconnections is likely to be a relatively long-term development taking place over a period of years. Network roll-out per se is

Interconnection Market Review - Call Origination and Transit Services unlikely to be evidence of short-term wholesale demand substitution (See Expert Report, p. 63) but is more likely to be evidence of a gradual move over time towards decreasing reliance on the incumbent's network and self providing conveyance. This is more appropriately examined in the "Market Analysis" section 4. Furthermore, some of the operators contacted as part of the review indicated that direct connections have high fixed costs and if traffic volumes are insufficiently high on a particular route then the operators revert to using switched/routed transit services for that route. This suggests 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 the operators indicates that use of direct connections to replace switched transit appears to be declining.

3.66 In addition, on the *supply side*:

- ComReg also 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 notes that there has been more build out recently by mobile operators who are now generally using direct interconnection between their mobile networks as opposed to transit or conveyance on fixed networks. As mobile operators are increasingly interconnecting with each other for their mobile-to-mobile traffic, the relevant question to address is 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, 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 the fixed network operators. These costs would likely only be justified with sufficient levels of traffic, which may not be present on all routes and at each point of interconnection. Furthermore, it is not clear that MNOs have 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 the Market Analysis section 4 below. Such substitution must be reasonably likely to occur in practice. ComReg suggests that it is 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.

NGNs

3.67 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. ComReg has considered the potential impact of NGNs on the interconnection market. It is 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 is ComReg's view that within the timeframe of this review, a move towards NGNs represents the use of a more efficient technology to offer services which are similar to those included in the market now. Following the principles of market definition, and particularly the principle of technological neutrality, the competitive conditions

Interconnection Market Review - Call Origination and Transit Services of product and service markets are not likely to change solely due to developments in the delivery technology. ComReg therefore concludes that the move towards NGNs is not likely to impact on the market definition for wholesale transit over the period of this review.

- 3.68 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 over the timeframe of the review.
- 3.69 **ComReg’s preliminary conclusion is that carriage over alternative facilities is not in the same product market as wholesale transit.**

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

Is the incorporation of origination and/or termination significant?

- 3.70 One operator has argued in the initial review and in subsequent submissions that a distinction can be drawn between trunk transit services (where the call either originates or terminates on the transiting network) and pure transit services (where the call neither originates nor terminates on the transiting network) and that they should be defined as separate markets. No justification or evidence was offered by this operator for making such a split, and it is not clear on what basis this operator is proposing to make this distinction. However, ComReg has considered, to the extent that it was possible without any supporting information being provided, whether such a distinction can be made.
- 3.71 The only difference between “trunk” and “pure” transit, as defined by this operator, is that, for trunk transit, the transiting operator is also the originating or terminating network, whereas, for pure transit, the transiting operator neither originates nor terminates the call on its own network. However, both fixed and mobile originating operators generally do not demand a “pure” transit product, but instead demand a transit product which also incorporates the termination stage. For example, in the trunk transit case, an operator offers a bundled transit + termination product over their own network, while in the pure transit case this operator offers a bundled transit + termination product, but which happens to terminate on the network of another operator (although the originating operator has no relationship with the terminating operator). Where an OAO competes with eircom it is essentially providing the same service in either case. There is no functional difference between the pure transit product as defined by this operator and the trunk transit product described above, as they are both bundled products involving conveyance of calls using similar network inputs. The only difference in each case is the relevant service provider. However, it is not sufficient to justify defining separate markets on the basis of separate service providers.
- 3.72 It is ComReg’s view that this differentiation between trunk and pure transit is not valid, as they are functionally the same product. However, ComReg has examined a *demand side* analysis based on this definition. The relevant question for the purposes of market definition is whether a hypothetical monopolist provider of trunk transit 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 will generally be determined by the best price irrespective of whether the call terminates on the same network. Further factors influencing

Interconnection Market Review - Call Origination and Transit Services whether pure transit is capable of constraining small price changes in trunk transit may include the network coverage of pure transit providers and any switching costs that trunk customers may 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 would appear 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 such as eircom. For the same reasons set out above, if the price of pure transit were 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 as to render that price increase unprofitable.

- 3.73 As such, to the extent that trunk and pure transit services are functionally similar and a significant number of customers are 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.

Are there different types of transit services?

- 3.74 As this issue was raised by one respondent in the initial review, ComReg has examined the extent to which the destination of the call affects the characterisation of different types of transit. It is 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.
- 3.75 There are 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. It is arguable, however, that there may 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 at the retail level consumers are 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 offer transit services to all number types.
- 3.76 In any case, on the *supply side*, it is arguable that an operator with the relevant transit network inputs in place could switch to the supply of transit to different number types in response to a small but significant price increase.
- 3.77 As regards transit to mobile numbers, both eircom and BT currently provide transit to both fixed geographic and mobile numbers. On that basis, it would appear 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 is scope for existing providers of fixed-to-mobile transit to adjust existing/spare capacity for the purposes of supplying additional fixed geographic transit services relatively quickly in response to a SSNIP test. Similarly, the same arguments may be made in respect of

Interconnection Market Review - Call Origination and Transit Services supplying additional fixed-to-mobile transit services relatively quickly and not at significant additional cost. In other words, the network elements used in the provision of these services are broadly similar and therefore switching can take place to delivering traffic to different number types in response to end user demand.

- 3.78 As regards the potential for supply substitution from transit to non-geographic numbers to transit to fixed geographic numbers and vice versa, it is worth noting that this service takes place over the same infrastructure. It would therefore appear that if the price of transit to fixed geographic numbers were 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 not at significant cost. This is given they would have the relevant billing and administrative systems already in place.
- 3.79 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 IN platforms. However, as stated above, many of the existing providers 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 make this less significant. BT, for example, currently supply transit to non-geographic numbers as well as transit to mobile and geographic numbers. Taking the fact that the same network elements can be used, it is ComReg's preliminary 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.
- 3.80 Certain operators have suggested that the available margins may also be another factor potentially limiting supply-side substitution to transit to particular number types. If this is the case, then ComReg is of the preliminary view that this is appropriately addressed through the implementation of remedies in the markets. As discussed above, ComReg is of the view that it is possible to use the same network elements to supply transit services to all number types and the costs are recoverable across the whole network. As such, ComReg is of the preliminary view that there is 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. ComReg would note that it intends to consult on the implementation of a wholesale price cap and issues such as cost recovery may be more appropriately considered in that context.
- 3.81 **ComReg's preliminary conclusion is that trunk and pure transit are part of the same market, and that there is a single market for national transit irrespective of the destination of the traffic.**

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

- 3.82 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.
- 3.83 In examining the issue further, it is suggested that self-supply should be included where there is potential to offer transit services in a merchant market. This would

Interconnection Market Review - Call Origination and Transit Services apply to operators who are currently self-providing transit services to their own retail arm and have 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). Their networks must also be sufficiently rolled out and of sufficient coverage as to comprise a viable alternative to the switched/routed transit services of existing operators. Transit 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). Where those conditions are fulfilled it would appear appropriate to include self-supply by operators currently supplying transit services to their retail arm.

- 3.84 The above conditions are likely to be fulfilled in the case of eircom, as eircom uses substantially the same network capacity to self-supply transit services as it does to supply transit services to third party operators. Further, it is unlikely that eircom would have to incur significant costs in making that capacity available to additional customers in a relatively short period. Its network has the greatest level of interconnect and build-out in the country which suggests that it would also be able to make such additional capacity available on a sufficient scale as to constrain small price increases by a hypothetical non-integrated monopolist provider of switched/routed transit services.
- 3.85 It would appear, however, that few OAOs would be in a position to readily convert existing self supply or spare capacity for the purposes of supplying additional transit customers if the price of switched transit services were to increase by 5-10% above the competitive level. Only those which already provide services to third party customers would have the relevant billing and account management systems in place. However, even those already operating in the merchant market may not be able to make additional transit services available on a scale which would be sufficient to constrain such small price increases by a hypothetical monopolist. This would depend in large part on the size of their network.
- 3.86 Notwithstanding the above paragraph, ComReg has included self-supply of traffic carried over own network inputs for those OAOs active in the merchant market, as its inclusion has no bearing on the SMP assessment in this instance even though it is more likely to understate eircom's position rather than overstate it. However, ComReg notes that were the inclusion/exclusion of OAO self supply to have 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, might result in an incorrect finding of effective competition in the market.
- 3.87 **ComReg's preliminary conclusion is that, where certain conditions are met self-supply of transit is included in the national transit market.**

Is the relevant market a multi-network market?

- 3.88 In the initial review, ComReg considered that the relevant product market was a multi-network market.
- 3.89 It is clear from the above discussion that purchasers of transit services see different network operators as potential substitutes in the provision of wholesale transit services depending on their price and respective network coverage, and that

Interconnection Market Review - Call Origination and Transit Services suppliers of wholesale transit services compete with one another in the provision of such services. Unlike the market for wholesale call termination, calls can be conveyed on any transit provider's network once they have the relevant network elements in place. ComReg, therefore, proposes in the current review that the relevant market for wholesale transit services is a multi network market.

- 3.90 **ComReg's preliminary conclusion is that, the relevant market is a multi-network market.**

Geographic market

- 3.91 The scope of the geographic market definition for the transit market has not changed since the initial review. Transit services are offered to and by all operators in Ireland on terms that do not differentiate by reference to geographic location. ComReg, thus, proposes that there is a single national market for supply of wholesale national transit services.
- 3.92 **Preliminary conclusion: The relevant market is national in scope.**

Overall preliminary conclusions on Wholesale Call Transit Market Definition

- 3.93 **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?

- 3.94 In the initial review, ComReg proposed that international transit services do not fall within the same wholesale market as national transit services. ComReg has received no evidence in the intervening period to suggest that these markets are not separate markets. However, ComReg has carried out further analysis of the dynamics of international transit services to ensure that this market definition is still appropriate. In particular, it considered whether international transit services could be further subdivided according to whether it is incoming or outgoing traffic. Through a data direction issued in October 2005, ComReg obtained further substantive information on the workings of the international transit market.

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

- 3.95 Considering the *demand side* first, incoming and outgoing international transit services are 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 are unlikely to consider an incoming international call to be an effective substitute for an outgoing call. While some limited demand-side substitution might 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 is unlikely to take place on a significant scale in response to small price changes.
- 3.96 On the *supply side*, the relevant question to address is whether suppliers of incoming international transit services could switch to supplying outgoing international transit services and vice versa with immediacy and at relatively low

Interconnection Market Review - Call Origination and Transit Services cost in response to small but significant price changes. It further needs to be determined how likely they would be to switch in practice. To that end the following considerations arise:

- 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. The necessary requirements for supplying *incoming* international transit services include 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 can switch from supplying *incoming* to *outgoing* international transit services in response to small price changes will 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 can switch to supplying *incoming* international transit services will 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.

3.97 It is considered 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 are unlikely to pose an immediate competitive constraint to providers of *incoming* international transit and are likely to be in a separate relevant market. As regards switching from supplying *incoming* international transit services to supplying *outgoing* international transit services, it is arguable that 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.

3.98 **ComReg's preliminary view is that *incoming* and *outgoing* international transit through an international gateway exchange are in separate markets.**

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

3.99 On the *demand side* incoming international transit services and national transit services are unlikely to be effective demand side substitutes. For example, a wholesale customer is unlikely to consider transit from New York to Dublin to be an effective substitute for transit from Galway to Dublin.

3.100 On the *supply side*, the relevant question to address is 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 to small but significant price changes. It further needs to be determined how likely they would be to switch in practice. To that end the following considerations arise:

- There appear 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 hits the international gateway exchange it is transited to the relevant end-user using the same network inputs as for national transit. Thus there is little obvious functional difference between the provision of bundled domestic (transit + termination) services sold to domestic

Interconnection Market Review - Call Origination and Transit Services 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, an ordinary tertiary switch used for the purposes of transiting national calls can also be used as an international gateway exchange for transiting incoming international calls. In that regard, there are 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 is routed into an international exchange, it is 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 is access to a national network of sufficient geographic coverage to ensure that the call can be conveyed and terminated. This is the same requirement as for a provider of national transit.

3.101 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 can be used for each service type, it is ComReg's preliminary view that effective supply-side substitution is possible between these two types of transit services.

3.102 **Preliminary View: ComReg proposes that transit for incoming international traffic is in the same relevant market as national transit.**

Is there a single international market for outgoing transit?

3.103 In the initial review, ComReg considered that there was a single international market for the provision of international transit services. ComReg has since considered whether the outgoing international transit market should be more narrowly defined, and has examined, in particular, the possibility of demand and supply side substitution on a route by route basis.

3.104 On the *demand side* the relevant question to address is 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 suggests that the overall cost of the transit is the significant factor for operators. This means that while there is obviously no demand side substitution relating to the actual destination (that is, transit to one destination cannot generally be substituted by transit to a different destination), operators appear generally unconcerned as to how the call is routed. Operators' responses to date suggest they operate on a least cost routing basis. This suggests 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 is consistent with defining the outgoing

Interconnection Market Review - Call Origination and Transit Services international transit market as comprising a bundle of routes rather than a series of separate route-based markets.³⁴

- 3.105 In terms of the *supply side*, the relevant question to address is 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? The answer to this question is 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 are transited through the UK which operates a sort of hubbing role for international traffic, it could be argued that 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.
- 3.106 Where wholesale customers purchase their outgoing international transit services on a least cost routing basis and/or there are no obvious supply-side constraints to operators switching between servicing various international routes, ComReg is of the preliminary view that there is no need to define separate route-based markets for outgoing international transit services.
- 3.107 **Preliminary View: It is ComReg's preliminary view that there are not separate route based markets for outgoing international transit.**

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

- 3.108 In the initial review ComReg included self-supply in the international transit market. The relevant question to address is if a hypothetical (non-integrated) monopolist of outgoing international transit services increased 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 as to constrain that small price increase and would it be reasonably likely to do so in practice. ComReg is of the initial view that an operator that offers outgoing international transit services would probably be in a position to switch its self-supply to the supply of wholesale international transit services in response to a price increase, in a timely manner and not at significant cost. This is because the relevant domestic network requirements, international transmission capability and agreements with foreign terminating operators are 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

³⁴ 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.

Interconnection Market Review - Call Origination and Transit Services
the relevant billing, marketing and other administrative systems required to constrain a small but significant (5-10%) price increase above the competitive level.

- 3.109 **Preliminary View: ComReg's preliminary conclusion is that, where certain conditions are met, self-supply of international transit services is part of the international transit market**

Overall preliminary conclusions on Wholesale International Transit Market Definition

- 3.110 **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 where certain conditions are fulfilled.**

Overall preliminary conclusions on Market Definition

3.111 The analysis which has been carried out indicates that:

3.111.1 Wholesale call origination

- Construction of alternative facilities and/or purchased and/or leased network connections are 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.
- 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

3.111.2 Wholesale transit

- The relevant market is a multi network market;
- Trunk and pure transit services should be considered part of the same market.
- 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.

- There is a single market for outgoing wholesale international transit services encompassing all routes.
- Self-supply should be included in the market for outgoing international transit services.
- The geographical scope of the market is Ireland.

3.112 ComReg, therefore, proposes to define 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.**

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.

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 Significant Market Power (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 all 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, 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 BT Ireland, as the second largest transit provider, is one of a number of OAOs currently offering wholesale transit services to third-parties in Ireland, although a number of these providers represent only a small proportion of the overall market. The OAOs actively offering transit service to third parties are BT, Colt, NTL, Smart Telecom, TNS and Verizon. 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 the possession of significant market power, it is unlikely that a firm will be dominant without a large market share. The *SMP Guidelines* note further that:

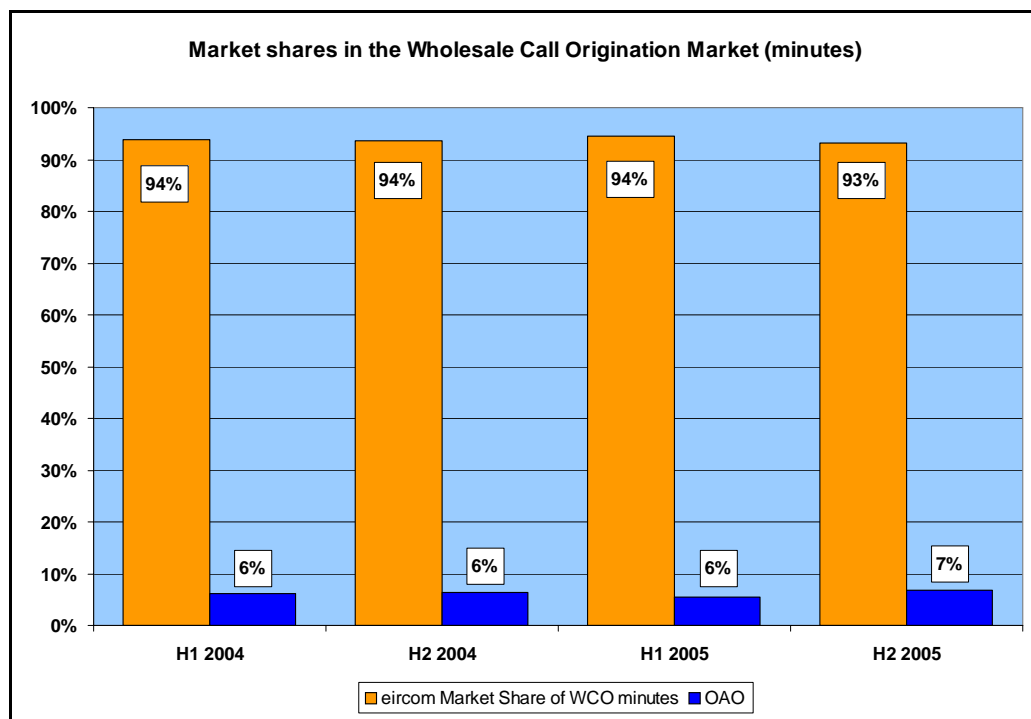
"...very large market shares – in excess of 50% - are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position"³⁵.

- 4.6 However, ComReg recognises that large market shares are 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 does not view the existence of large market shares as in themselves being determinative of the question of whether or not SMP exists in the relevant market.

³⁵ At paragraph 75.

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 has analysed market share data over four periods from H1 2004 to H2 2005. Given the complexities of the data required, the fact that operators do not necessarily collect this data in the format required for market analysis purposes and the burden on operators of providing such complex data for a large number of periods, it is deemed appropriate to focus on the development of traffic share for a two year period. The market shares over this period 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.

Figure 4.1: Market Shares in Wholesale Call Origination Market



Source: ComReg

4.8 To be consistent with the market as defined in the previous section, this market share data excludes resold wholesale call origination traffic which is carried over the eircom network but which is sold onwards by an OAO to another OAO who has the retail relationship with the end user (i.e. a reseller). Such wholesale traffic is already captured in the eircom traffic share. This resold traffic is excluded mainly because it has 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 enhances competition at the retail level rather than in the wholesale call origination market. To include 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 incorrectly understating the market share of the largest undertaking (eircom).

4.9 As discussed in the market definition section, there does not appear to be strong justification for the inclusion of self-supply of call origination by any operator other

Interconnection Market Review - Call Origination and Transit Services than eircom. This would mean that eircom's market share was closer to 100%. However, if self-supply by OAOs is included in the market share calculation, the impact on eircom's market share is to reduce it from 100% to 93%.

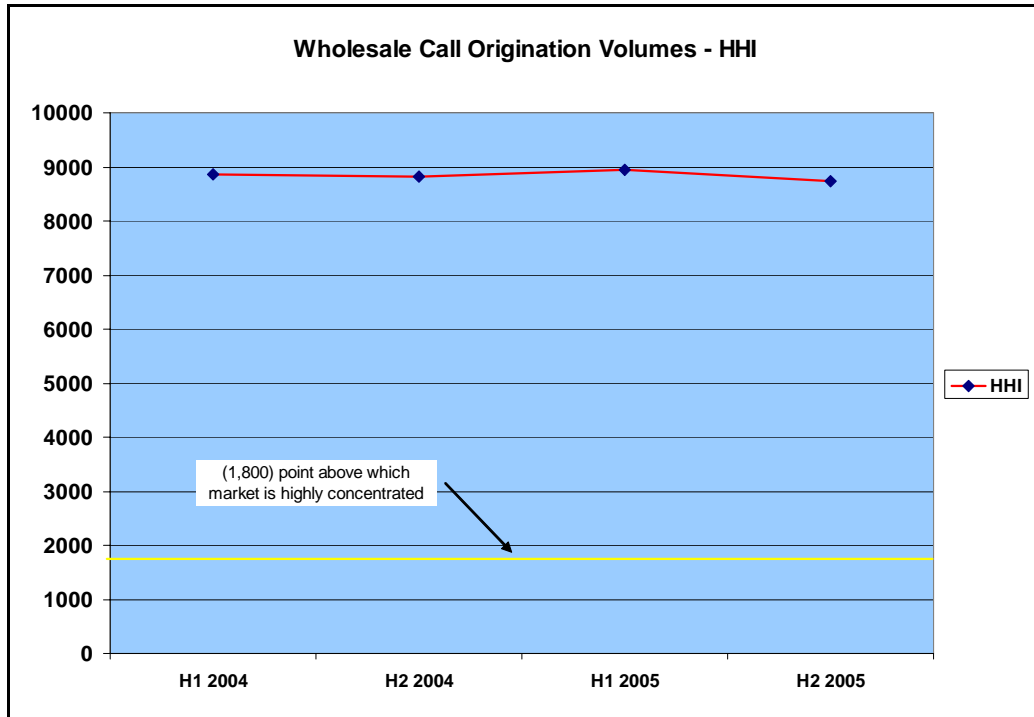
- 4.10 Even taking OAO self-supply into account, eircom has consistently provided over 90% of wholesale call origination traffic. This share has remained almost static over the last two years. eircom's high share of call origination minutes is consistent with their ownership of a high percentage of narrowband access paths (over 90% as at Q3 2006). As expected, eircom's share of call origination minutes, where self-supply is included, is lower than their share of narrowband access paths, as OAO access paths are 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, is over twice that of narrowband access paths (i.e. 7% versus 3%), although this is still negligible when compared with eircom's share.
- 4.11 ComReg notes that eircom has consistently enjoyed a very high share of wholesale call origination minutes and that, save in exceptional circumstances, such high shares are evidence of the existence of a dominant position. Notwithstanding, ComReg considers a range of other factors below before coming to an overall preliminary view on SMP.

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 are 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 are also considered before an overall view on SMP is made. Notwithstanding, measuring market shares and concentration levels is a useful first step in determining where potential concerns about market power arise.
- 4.13 The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration³⁶. It is given by the sum of the squares of market shares of the firms in the market. It can vary between 0, when the market is entirely fragmented (each firm has a market share close to 0) and 10,000 points, where there is only one firm in the industry 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 over 8,700 as at end 2005. Over the four periods the HHI fell by around 100 points (or by around 1%) and it is highly unlikely that it would decline to anywhere near 1,800 points within the timeframe of the review. Thus, the market can be considered to be highly concentrated and likely to remain so within the timeframe of the review.
- 4.14 Notwithstanding the high market share and level of concentration in the wholesale call origination market, ComReg considers a range of additional factors below in coming to a preliminary view on SMP.

³⁶ For example, the HHI is used in the US Merger Guidelines.

Figure 4.2: Levels of Concentration in Wholesale Call Origination Market



Source: ComReg

Lack of Existing Competition

4.15 eircom is currently the only operator supplying wholesale call origination services to third party customers based on its own network inputs and not as a resold product. Given that the only market entry (which is based on resold wholesale products) to date was a result of regulatory intervention, it appears 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 this 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 are effectively confined to reselling eircom’s wholesale call origination service to providers who in turn supply their end-customers. Thus, as the service provided by these OAOs is a resold product, it is difficult to see how they could appreciably affect eircom’s ability to act independently of its competitors at the wholesale level. This is 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 is 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 potential competition section below, this situation is unlikely to change significantly over the period of this review.

Ability to price independently

4.16 In some instances, pricing behaviour will be indicative of the exercise of market power. However, eircom’s current prices are regulated. The forward looking costing model used allows for the recovery of cost of capital in addition to the costs of an

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efficient operator. In essence, it allows for a margin above the cost of provision, reflecting the cost of capital.

- 4.17 eircom's origination charges, both those charged to CPS operators (CPSO) and those charged to terminating operators, are regulated under the cost model described above. eircom's charges reflect its costs of conveyance (i.e. the transmission and switching required for call origination), together with other costs such as carrier billing and administration.
- 4.18 Where eircom provides call origination services to a CPSO's customer, the CPSO pays eircom for that service. The CPSO raises the retail charge (if any) on/from the calling party (in the case of a call to an end-user) and then either pays for termination and transit. In the case of calls to service providers the CPSO retains 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 passes the balance to the next operator along the route for termination or transit as appropriate. In this latter case the CPSO's costs are currently '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.
- 4.19 ComReg takes the preliminary view that, in the absence of regulation and with no obvious existing competitive constraints, it is highly unlikely that an originating operator with a market share of approximately 93% would be constrained in setting prices in negotiating with CPS operators. This preliminary view is further supported below in the discussion on barriers to entry, potential competition and countervailing buyer power. In the absence of constraints from existing or potential competitors and/or strong buyers in the relevant market, there is convincing evidence that eircom would, in the absence of regulation, have the ability to set prices above the competitive level.

Preliminary Conclusion

- 4.20 ComReg has analysed market share data over four periods from H1 2004 to H2 2005. eircom's share of wholesale call origination traffic has remained relatively static at 93-94% over the period reviewed, with a HHI 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 (97-98%). 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 so high even if 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 competitors and consumers. This preliminary view is further supported by ComReg's assessment below of the scope for potential competition and countervailing buyer power in this market.

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.

Barriers to entry and potential competition

4.22 The last section demonstrated that eircom has a high and stable market share in the wholesale call origination market and that there has been a lack of existing competition to date. However, while a high market share is suggestive of market power, it is important that an overall analysis is carried out in order to determine if eircom can act independently of its competitors (both existing and potential) and customers.

4.23 In the initial review, ComReg analysed actual and potential barriers to entry in the call origination market. ComReg has now developed this analysis further to take account of developments in the market in the intervening period.

4.24 In order to assess the potential for a new entrant to come into the call origination market and constrain eircom's commercial behaviour, ComReg has analysed barriers to entry associated with economies of scale, scope and density, control of infrastructure not easily replicated, and vertical integration. It provisionally concludes that barriers to entry are significant and potential competition is unlikely to take place on a significant scale over the period of the review.

Sunk costs, Economies of scale, scope and density

4.25 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."*³⁷

4.26 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 ECJ explicitly referred to economies of scale and irrecoverable costs of entry as factors indicating dominance³⁸.

4.27 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

³⁷ 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.

³⁸ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, para. 122.

Interconnection Market Review - Call Origination and Transit Services 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 sunk³⁹.

- 4.28 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*".⁴⁰ 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 prospect of having to achieve economies of scale, scope and density combined may further act as a disincentive to new entry.
- 4.29 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 conditions⁴¹. 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.
- 4.30 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 studies⁴² have been carried out in different countries, but are generally beset with methodological and data problems. ComReg is therefore aware that quantitative analysis on this subject may not always be conclusive. A study which was carried out

³⁹ Squire, Sanders & Dempsey LLP, May 2002, "Market Definitions Regulatory Obligations in Communications Markets", A Study for the European Commission, Executive Report, Brussels, p. 14.

⁴⁰ OECD, (DAF/COMP(2005)42), March 2006, Barriers to Entry, Paris, p. 22.

⁴¹ See for example, the World Bank's "Telecommunications Regulation Handbook" ed by McCarthy Tetrault.

⁴² 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)

Interconnection Market Review - Call Origination and Transit Services recently⁴³ 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. 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.

4.31 When this is placed in the context of the Irish market, it would suggest that eircom does not achieve significant economies of scale above one million lines, but would achieve economies of scale up to that level. This can be compared with OAOs, the largest of which has just over 43,500 direct access channels, and are therefore nowhere near to being able to achieve economies of scale which compare with eircom. In other words, in the size band in which OAOs would be operating, eircom achieves considerable economies of scale and OAOs do not.

4.32 ComReg's preliminary conclusions are therefore that eircom enjoys significant economies of scale, scope and density in the provision of wholesale call origination services which acts as a barrier to entry in this market.

Control of infrastructure not easily replicated and lack of potential competition

4.33 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.

4.34 According to *The 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 operators⁴⁴. 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, eircom has control over infrastructure that is not easily duplicated. Wholesale call origination services over the eircom network are essential for operators wishing to provide retail calls to end users. eircom is the only operator that offers a wholesale call origination product over its own network inputs, controls over 90% of narrowband access paths⁴⁵ and provides over 90% of all wholesale call origination traffic in Ireland. Furthermore, there are high and non-transitory barriers to replicating the infrastructure in question which is further reflected by the limited scope for potential competition from alternative infrastructures to emerge over the period of this review. This is outlined further below.

4.35 There is limited potential competition from alternative access facilities (e.g. from wholesale broadband access, NGNs, unbundled local loops, FWA, direct build, cable, etc.) and, as outlined below, this situation is unlikely to change over the current review.

- As demonstrated in the market definition section above, the relatively low penetration of broadband (approximately 10%) and even lower take-up of

⁴³ Applying the EU Regulatory Framework in Microstates, Ovum and Indepen, 2005.

⁴⁴ SMP Guidelines, paras 81-82.

⁴⁵ Quarterly Report data Q3 2006.

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Voice over Broadband services at present⁴⁶ suggests **wholesale broadband access** is unlikely to exercise sufficient constraint over eircom's control of the access infrastructure over the period of this review.

- Further, the implementation of **NGNs** is at a relatively nascent stage in its development, which is expected to remain the case over the period of the review. It is not yet clear what impact NGNs will eventually have on the existing means of accessing end users, although it is not expected to have any effect on the existing access infrastructure over the lifetime of this review. While it is conceivable that there may eventually be a move towards replacing the traditional access infrastructure with IP functionality, it is not clear that the wholesale call origination services provided to OAOs over that infrastructure will be significantly different to that 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 is no evidence to suggest that NGNs will give rise to a significantly different access service for OAOs to that already provided or that it is likely to pose a significant competitive threat to eircom's control of infrastructure over the next two or three years. If OAOs wish to find alternative means of accessing the end user so as to bypass the incumbent, they will still likely have to engage in the costly and timely exercise of building fibre out to the end-user. In any case, ComReg proposes to keep the deployment of next generation networks and services under review.
- As eircom continued to control over 90% of narrowband access paths and 93% of call origination minutes and, as outlined above, there are significant costs and constraints involved in replicating eircom's access network, **OAO network build** is unlikely to pose a significant competitive threat over the review timeframe. This is further underlined by OAOs' continued reliance on eircom's wholesale call origination service and the fact that no other OAO currently provides a wholesale call origination service to third party customers based on its own network inputs.
- Take up of **LLU** also continues to be minimal (1.25% of access paths as at Q3 2006)⁴⁷ which when compared with eircom's share of over 90% of narrowband access paths suggests LLU is unlikely to exercise a sufficient constraint over the period of the review.
- **Fixed Wireless Access (FWA)** and **Cable Networks** also need to be considered as a potential source of competition. However, as can be seen from the following they are unlikely to have a significant impact over the course of this review. There are currently some 2,000 narrowband FWA access paths on the eircom network in Ireland representing only approx. 0.1% of access paths. It has been suggested by some operators that it is still an uneconomic technology for large-scale deployment, and so is 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 are currently under 1000 cable narrowband access paths representing only a tiny proportion of overall access paths. While there are plans to integrate the two cable networks (Chorus and NTL) to offer triple play services (including voice services), the

⁴⁶ ComReg's market research shows that only a small proportion of broadband users (less than 1% at the end of 2005) actually use VOIP services and only a subset of those use VOB.

⁴⁷ ComReg Doc 06/68 - Quarterly Key Data Report – December 2006

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gradual introduction of this product is unlikely to pose a significant competitive threat over the review timeframe.

4.36 ComReg's preliminary conclusion is that eircom controls infrastructure that is not easily replicated and which acts as a barrier to entry. Furthermore, 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.

Vertical integration

4.37 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 stability⁴⁸.

4.38 eircom is vertically integrated in that, while it is an important undertaking in the upstream interconnection markets, it also has a significant presence in downstream retail markets. In the absence of regulation, eircom may have an incentive to cease supplying wholesale call origination 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 and incentives of OAOs to invest in infrastructure and enter the upstream call origination market.

4.39 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.

4.40 ComReg concludes on a preliminary basis that, in the absence of regulation, eircom's vertical integration combined with its control of an infrastructure that is not easily replicated could act to deter entry to the call origination market and possibly affect competition in downstream markets.

Preliminary Conclusion

4.41 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.

4.42 ComReg's preliminary conclusion is that 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. To complete the analysis ComReg also considers the scope for any strong buyers to exert a possible constraint on eircom's behaviour over this review.

⁴⁸ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, paras 69-81, 85-90.

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.

Countervailing Buyer Power

4.43 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 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 must assess the effect that these potential alternatives have in constraining eircom's pricing behaviour by acting as a possible alternative for customers exercising their buyer power.

4.44 ComReg is of the preliminary view that there is insufficient countervailing buyer power 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 are 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 own network inputs. Indeed, eircom is currently the only operator supplying wholesale call origination services based on own network infrastructure and not as a resold product. 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 cashflow implications of building their own infrastructure are too severe.

4.45 Absent regulation, eircom would be unlikely to have an incentive to offer a wholesale call origination product, thereby further undermining the OAOs' bargaining position. Even if it did supply a wholesale product, OAOs would have no choice but to accept eircom's price and other terms and conditions in order to access end users in Ireland.

Preliminary Conclusion

4.46 ComReg's preliminary conclusion is that there is insufficient countervailing buyer power in this market which is likely to persist over the period of the review.

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.

Overall preliminary conclusion on market analysis: call origination

4.47 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 countervailing

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buyer power and the level of barriers to entry in assessing eircom's ability to act independently of its competitors and customers.

4.48 ComReg has noted that eircom's market share has remained high and stable in excess of 90%, and has not been appreciably mitigated by other factors such as countervailing buyer power or a lowering of barriers to entry. Despite regulation, eircom's dominance of the market persists. The continuing high barriers to entry in this market coupled with 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. As a result, ComReg's preliminary conclusion is that eircom has SMP in the market for wholesale call origination.

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

Market Analysis: Wholesale National Transit

Existing Competition

Market share

4.49 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* 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"⁴⁹

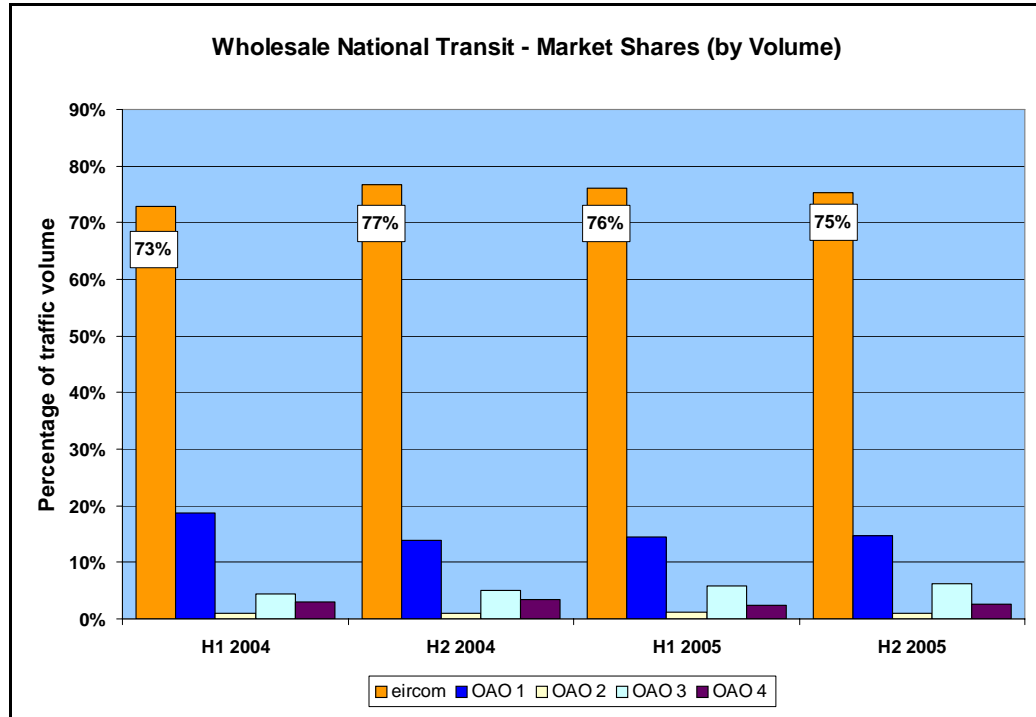
4.50 However, ComReg recognises that large market shares are not in themselves sufficient to form the basis of a finding of SMP and that other factors that contribute to SMP (and indeed potentially offset it) must also be taken into account. Therefore, ComReg does not view the existence of large market shares as in themselves being determinative of the question of whether or not SMP exists in the relevant market.

4.51 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 has analysed market share data over four periods from H1 2004 to H2 2005. Given the complexities of the data required, the fact that operators do not necessarily collect this data in the format required for market analysis purposes and the burden on operators of providing such complex data for a large number of periods, it is deemed appropriate to focus on the development of traffic share for the two most recent years. The market shares over this period are illustrated below (the shares of two operators were less than 0.1% and are not illustrated here). 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. Only self-supply by those OAOs that also offer a merchant transit product is now included. It is noted, however, that the even

⁴⁹ At paragraph 75.

Interconnection Market Review - Call Origination and Transit Services inclusion of this self-supply is likely to overestimate the share of OAOs. This is explained further in paragraph 4.52 below.

Figure 4.3: Market Shares in Wholesale National Transit Market



Source: ComReg

4.52 The above market shares include self-supply of transit traffic for all operators who offer a competing transit product in the merchant market, despite the fact that it is 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 is likely to underestimate the true size of eircom’s market share. However, ComReg has included such self-supply in order to illustrate the important position occupied by eircom in this market regardless of whether self-supply is included.

4.53 ComReg notes that eircom has consistently enjoyed a very high and stable share of transit traffic (73% or over) and that, save in exceptional circumstances, such high shares are evidence of the existence of a dominant position. Notwithstanding this, ComReg considers a range of other factors below before coming to an overall preliminary view on SMP.

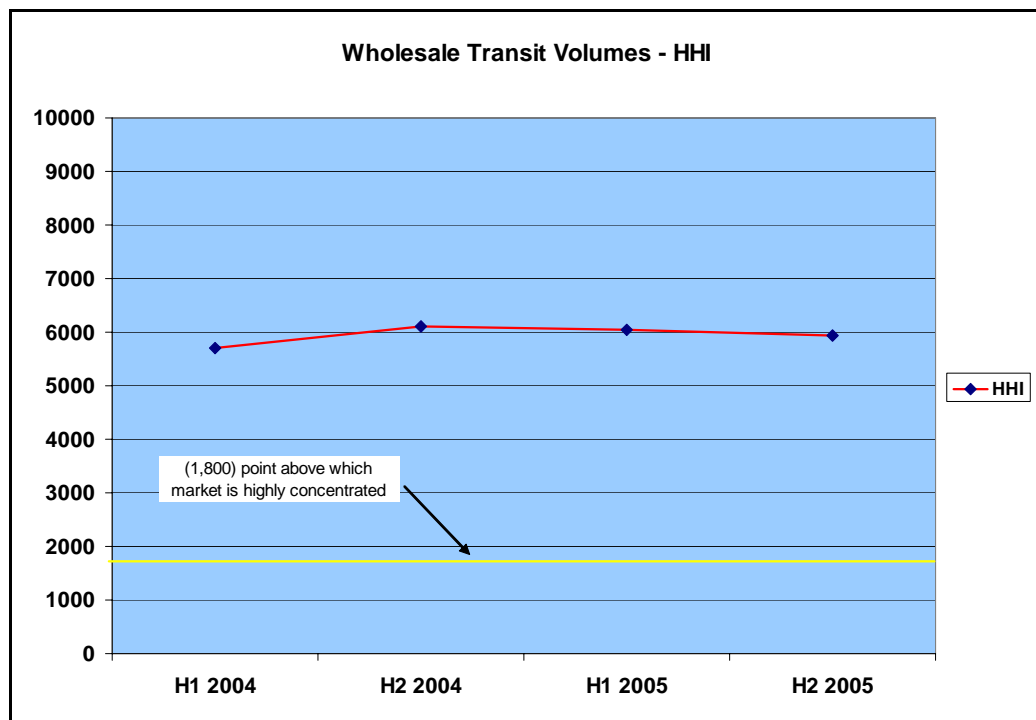
Market Concentration

4.54 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 are 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 are also considered before an overall view on SMP is made. Notwithstanding, measuring market shares and concentration levels is a useful first step in determining where potential concerns about market power arise.

4.55 The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration⁵⁰. It is given by the sum of the squares of market shares of the firms in the market. It can vary between 0, when the market is entirely fragmented (each firm has a market share close to 0) and 10,000 points, where there is only one firm in the industry which has 100% of the market. It is generally regarded that markets, in which the HHI is in excess of 1800 points, are highly concentrated. As illustrated in Figure 4.4 below, the concentration of the transit market based on volumes was just under 6,000 as at end 2005. Over the four periods the HHI actually rose and it is unlikely that it will decline anywhere near 1,800 points within the timeframe of the review. Thus, the market can be considered to be highly concentrated and likely to remain so within the timeframe of the review.

4.56 Notwithstanding the high market share and level of concentration in the wholesale call origination market, ComReg considers a range of additional factors below in coming to a preliminary view on SMP.

Figure 4.4: Levels of Concentration in National Transit Market



Source: ComReg

Lack of Existing Competition

4.57 There are currently six operators other than eircom offering transit services in Ireland. These are BT, Verizon, NTL, TNS, Colt Telecom and Smart Telecom. However, four of those operators have a market share of under 3%, two of which have a share less than 1%. With the exception of BT, no transit operator has a share greater than 10% even when self-supply is included.

4.58 BT is eircom’s next biggest competitor with a market share of 19% in H1 2004. This market share has, however, declined over recent periods to 14% in H2 2004 and H1 2005 rising only slightly to 15% in H2 2005 (eircom’s market share started at 73% and is now at 75% over that same period). BT’s market share is not expected to

⁵⁰ For example, the HHI is used in the US Merger Guidelines

Interconnection Market Review - Call Origination and Transit Services increase significantly over the period of this review. This is because a large proportion of BT's wholesale traffic is transit for mobile carriers and it is anticipated that this will decline as Meteor aligns with its parent. Further as eircom has ubiquity and represents over 90% of all fixed lines it may be likely that many operators would continue to use eircom for the majority of their fixed traffic rather than build direct interconnection to other fixed networks. The increasing direct interconnection by MNOs may further reduce the traffic volumes available to BT or other fixed operators going forward. Furthermore, as is discussed below, the market is relatively mature and in the presence of barriers to switching it is not anticipated that BT's market share will grow significantly over the period of the review.

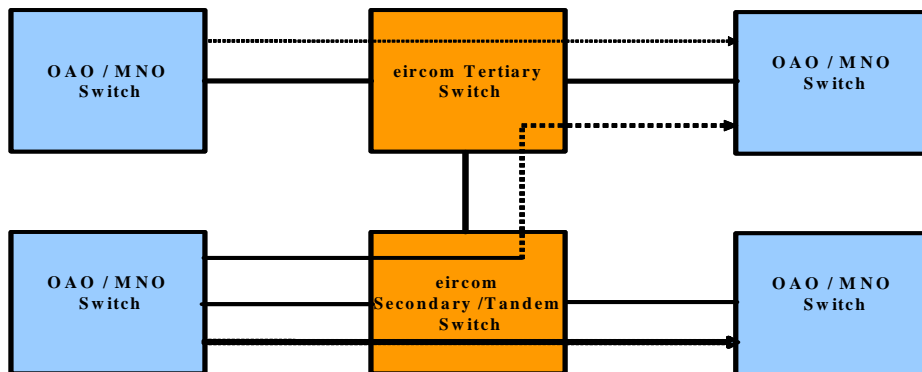
4.59 As such, ComReg is of the preliminary view that existing competition in the transit market is relatively weak and, absent regulation, would be unlikely to have any significant impact on eircom's ability to set its commercial terms and conditions independently of its competitors.

Ability to price independently

4.60 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. DQ) 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.

4.61 Currently eircom call origination and termination services (including Primary, Tandem and Double Tandem call routing) are charged to third parties based on cost recovery principals. 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.

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

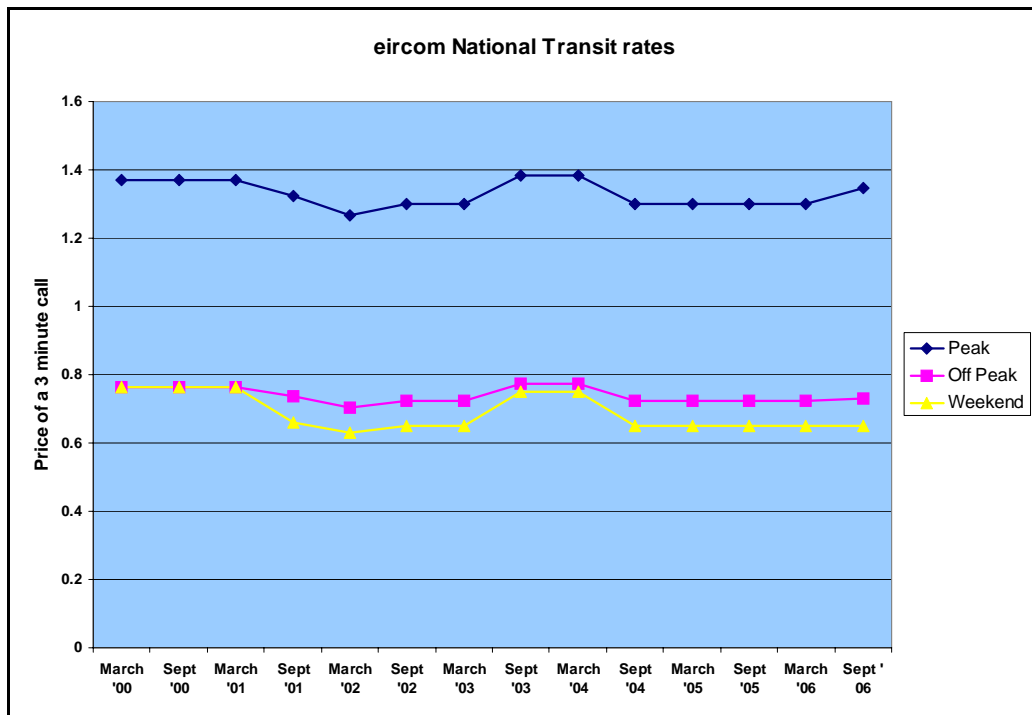


Source: ComReg

4.62 The following graph shows the price of National Transit services (as set out in Service Schedule 104 of the eircom RIO Price List) for a three minute call and illustrates the

Interconnection Market Review - Call Origination and Transit Services
 high level of stability in eircom's transit pricing over the past six 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



Source: ComReg

4.63 ComReg takes the preliminary view that, in the absence of regulation, it is 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 prices in negotiating with other operators. This preliminary view is further supported below in the discussion on barriers to entry/expansion, potential competition and countervailing buyer power. In the absence of constraints from existing or potential competitors and/or strong buyers in the relevant market, there is convincing evidence that eircom would, in the absence of regulation, have the ability to set prices above the competitive level.

Preliminary Conclusion

4.64 ComReg has analysed market share data over four periods from H1 2004 to H2 2005. 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.

4.65 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 declined by four percentage points between H1 2004 and H2 2005 and is not likely to experience a significant increase over the current review in light of the

Interconnection Market Review - Call Origination and Transit Services changes in transit of mobile traffic. Furthermore, no obvious pricing pressure has been exerted by OAOs to date.

Barriers to entry/expansion and potential competition

- 4.66 The previous section demonstrates that eircom has a high and stable market share in the wholesale transit market and that there is a lack of existing competition in the market place. However, while a high market share is suggestive of market power, it is important that an overall analysis is carried out in order to determine if eircom can act to an appreciable extent independently of its competitors (both existing and potential) and customers.
- 4.67 In the initial review, ComReg analysed actual and potential barriers to entry in the transit market. ComReg has now developed this analysis further to take account of developments in the market in the intervening period.
- 4.68 In order to assess the potential for a new entrant or for smaller existing operators (given there are a number of OAOs currently active in this market) to constrain eircom's commercial behaviour, ComReg has analysed both barriers to new entry and barriers to existing operators expanding in the relevant market (i.e., barriers to expansion). This involves 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 provisionally concludes that barriers to entry and expansion are significant and potential competition is unlikely to take place on a significant scale over the period of the review.

Sunk costs, Economies of scale and scope

- 4.69 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”⁵¹.

- 4.70 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 dominance⁵².
- 4.71 There are significant costs associated with entry into the transit market. Most of this will be sunk costs, as such costs will not be recoverable if the entrant decides to, or is forced to, exit the market. 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

⁵¹ 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.

⁵² Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, para. 122.

Interconnection Market Review - Call Origination and Transit Services 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*”.⁵³ A potential entrant has to consider whether prices would be high enough ex post entry to recover sunk costs.

- 4.72 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 easy 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 in order for an OAO to achieve widespread interconnection at the local level. In addition, to date, only one OAO (BT) has achieved direct interconnection with mobile networks. 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 an MNO to negotiate a direct interconnect agreement with that OAO. The significant sunk costs associated with such entry means that marginal costs per unit of output will fall with increasing production. By producing above the level that a new entrant might be able to produce at, eircom can 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 cannot enjoy the economies of scale enjoyed by eircom. 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 must entice customers away from the established incumbent. This is further hampered where barriers to switching also exist as is discussed further below.
- 4.73 Further, in relation to economies of scope, 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 lines, calls to mobiles and calls to NTCs). 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.
- 4.74 ComReg’s preliminary conclusion is that eircom enjoys significant economies of scale and scope in the transit market which act as a barrier to entry to this market. In addition, it is more difficult for new entrants or smaller existing operators to exploit the relevant economies of scale or scope where other barriers to entry or expansion exist. For example, as discussed below, the mature nature of the market and the existence of barriers to switching reinforce the extent to which economies of scale and scope hinder new entry and expansion.

Control of infrastructure not easily replicated

- 4.75 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.

⁵³ OECD, (DAF/COMP(2005)42), March 2006, Barriers to Entry, Paris, p. 22.

- 4.76 According to *The 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 operators⁵⁴. 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, eircom has control over infrastructure that is not easily duplicated. Its transit network is used by the vast majority of purchasers of fixed transit services in Ireland for the provision of retail calls to end users. Only two fixed operators have built out to more than half of the eircom primary exchanges, while the next largest fixed operator has only three exchanges compared to eircom's 15 tandem exchanges. In addition, it does not appear that all of these connections to eircom primary exchanges allow for the provision of voice narrowband services by the alternative fixed operators.
- 4.77 The high sunk costs and time involved in network build render it unlikely that further significant build by new or existing operators will take place over a 2/3 year timeframe. Although some alternative operators do have limited spare capacity (in some areas less than others), they would not have spare capacity to meet the needs of all OAOs. In addition, one large alternative operator believes that it would take 6 months delivery time to augment its capacity to provide additional transit services and is unlikely to do so unless there is a large non-transitory increase in available margins.
- 4.78 ComReg's preliminary conclusion is that eircom controls infrastructure that is not easily replicated and which acts as both a barrier to new entry and to existing transit operators expanding in the transit market.

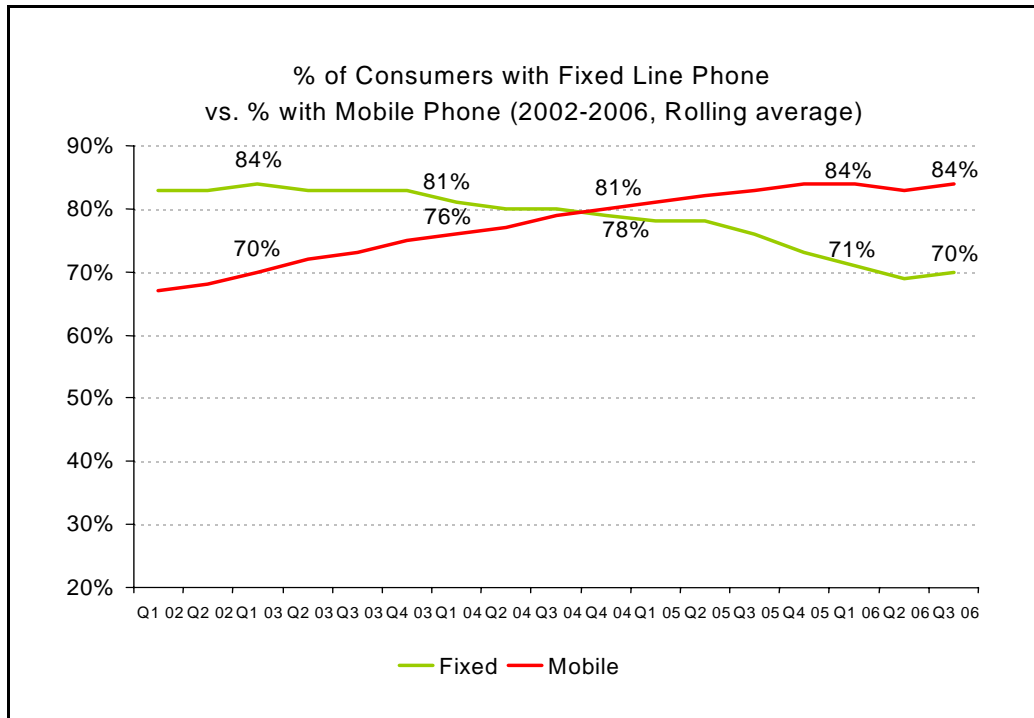
Market maturity and Barriers to switching

- 4.79 The level of market maturity and switching costs is also relevant in assessing the question of SMP. As outlined above, entry and expansion is more likely to be feasible in a growing or expanding market⁵⁵. 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.
- 4.80 Fixed line ownership has remained relatively static over the past 6/7 years and indeed, according to recent survey data, appears to be declining in more recent years. The recent Trend Survey Series/Wave 3, 2006 report indicates that since 2003 there has been an overall trend towards reduced fixed lined subscriptions within the home. Figure 4.7 outlines this trend below.

⁵⁴ SMP Guidelines, paras 81-82.

⁵⁵ 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.

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



Source: ComReg Doc 06/64

- 4.81 The extent to which the mature nature of the market acts as a barrier to entry is further underlined by the empirical evidence. As discussed below, a key factor cited by some respondents in their decision not to enter the fixed wholesale transit market is the mature nature of that market. As volumes are falling they do not consider it good commercial strategy to enter this market. The static or declining level of demand in this market also implies that existing operators have to win significant volumes from eircom’s customers in order to expand in this market.
- 4.82 In addition to the fact that demand is static (or even declining), consumers’ reluctance to switch suppliers can further work as a potential barrier to new entry and expansion in the market. In the transit market, since most wholesale customers are 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 may be prohibitive. Some operators have stated that in some instances the required build-out of extra capacity to alternate providers might outweigh the potential cost-saving. To overcome this, in some cases OAOs provide free interconnect paths to the customer.
- 4.83 Agreements are typically 12 months in duration and are unlikely in themselves to significantly inhibit switching. However, where there is no existing commercial relationship, the need to negotiate new interconnect/service level agreements may also constitute a barrier to switching and changing provider could take a number of months.
- 4.84 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.
- 4.85 Further, given eircom’s widespread interconnection and that it represents over 90% of all fixed lines one operator indicated it may be reluctant to reduce its reliance on eircom for the provision of fixed wholesale transit services. Furthermore, as transit

Interconnection Market Review - Call Origination and Transit Services represents only a small proportion of the overall cost of the call that operator considered there is less commercial incentive to actively seek alternative providers. Two other operators also noted that since the majority of fixed traffic terminates on eircom's network, it is more efficient to send fixed traffic to eircom rather than use other operators to transit calls destined to be terminated on eircoms' network.

- 4.86 ComReg's preliminary conclusion is that the mature nature of the market renders entry and expansion considerably more difficult. ComReg also concludes there are barriers to wholesale consumers switching in this market, which further contribute to the barriers to entry and expansion for new and existing suppliers of transit services. Further, given eircom's widespread interconnection, that it represents over 90% of all fixed lines and that transit only accounts for a small proportion of the overall cost of a call some operators may be reluctant to reduce their reliance on eircom for the provision of fixed wholesale transit services. The limited cost savings in comparison with the cost of the required build-out to alternative providers reduces the commercial incentive for wholesale transit customers to seek alternatives to eircom.

Vertical integration

- 4.87 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 stability⁵⁶.
- 4.88 eircom is vertically integrated in that, while it is an important undertaking in the upstream interconnection markets, it also has a significant presence in downstream retail markets. In the absence of regulation, eircom may 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.
- 4.89 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.
- 4.90 ComReg concludes on a preliminary basis 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

- 4.91 It is 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 is also important (particularly in the context of the wholesale transit market where there is a number of smaller existing transit providers) to determine whether existing

⁵⁶ Case 27/76 [1978] ECR 207, [1978] 1 CMLR 429, paras 69-81, 85-90.

Interconnection Market Review - Call Origination and Transit Services providers are likely to expand or grow to such an extent as to pose a viable competitive alternative over the period of the review. This is because the ability of an undertaking to act independently can be constrained by the potential for new competitors to enter or for smaller existing competitors to grow on a sufficient scale 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 has the ability to act independently which is characteristic of the existence of a dominant position.

- 4.92 As regards the scope for any further new entry into this market, there are significant sunk costs and economies of scale, scope and density associated with entry. As such, a number of operators have indicated their unwillingness to enter this market. The fixed calls market is mature and while they may have billing systems in place, transit represents 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 are falling they do not consider it good commercial strategy to enter this market.
- 4.93 In respect of direct interconnection, MNOs are increasingly interconnecting with each other for mobile-to-mobile traffic and are reducing their reliance on fixed network operators for transit of such calls (although they do typically continue to use fixed network operators for mobile transit overflow purposes). However, they still require interconnection with fixed network operators for mobile-to-fixed transit. This tendency towards direct interconnection for mobile-to-mobile calls is 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, but it is unlikely to have any significant impact on eircom's position in this market.
- 4.94 As regards the scope for existing transit providers to expand on a significant scale over the period of this review, it should be noted that in the transit market no fixed network operator other than eircom can provide general connectivity to all networks in Ireland. The mature nature of the market suggests 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 suggests that OAOs are unlikely to grow or expand on a significant scale over the timeframe of this review. This was underlined by the operators' responses. The ubiquity of eircom's network was cited as a key factor by a number of respondents making it unlikely that operators would switch in significant numbers to alternative providers over the review period. The majority (93%) of fixed line calls originate on eircom's network which gives it a further significant advantage in fixed-to-fixed and fixed-to-mobile transit. Further, the fact that transit only accounts 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 to alternative providers reduces the commercial incentive for wholesale transit customers to seek alternatives to eircom. As a result, a significant number of operators contacted indicated they have no plans to reduce their use of eircom's transit service for fixed calls significantly in the foreseeable future.
- 4.95 ComReg's preliminary view is that there is limited scope for further new entry or expansion in the relevant market over the period of this review. The lack of a viable competitive alternative in the transit market over the timeframe of the review suggests that, in the absence of regulation, eircom would be in a position to act independently when determining its commercial behaviour. This is characteristic of the existence of a dominant position. However, to complete the analysis ComReg also considers the

Interconnection Market Review - Call Origination and Transit Services
scope for any strong buyers to exert a possible constraint on eircom's behaviour over
this review.

4.95.1 Preliminary Conclusion

4.96 ComReg's preliminary 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 its economies of scale and scope, control of infrastructure not easily replicated, the mature nature of the market, barriers to consumers switching, 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

4.97 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 could occur in the transit market if, for example, a particular purchaser were sufficiently important to eircom to influence the price it was charged. The conditions where one might expect to observe countervailing buyer power could be when a customer accounts for a large proportion of eircom'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 must assess the effect that these potential alternatives have in constraining eircom's pricing behaviour by acting as a possible alternative for customers exercising their buyer power.

4.98 In the transit market it appears that, 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. No one purchaser is sufficiently large to influence the price that eircom could charge. In addition, a number of operators have indicated that they do not have any plans to significantly reduce their use of eircom's transit services in the foreseeable future. This is 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, there are a number of switching costs that would reduce the likelihood that significant numbers of wholesale transit customers would switch from eircom in response to a price increase.

4.99 Finally, the presence of strong buyers can only serve to counter a finding of dominance if it is likely that, in response to prices being increased above the competitive level, the buyers in question will pave the way for effective new entry or lead existing suppliers in the market to significantly expand their output so as to defeat the price increase. In fact, a number of the respondents 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.

4.99.1 Preliminary Conclusion

4.100 ComReg's preliminary conclusion is that there is insufficient countervailing buyer power 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 preliminary conclusion on market analysis: National Transit

- 4.101 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 countervailing buyer power and the level of barriers to entry and expansion in assessing eircom's ability to act independently of its competitors and customers.
- 4.102 ComReg has noted that eircom's market share has remained high and stable in excess of 70%, and has not been appreciably mitigated by other factors such as countervailing buyer power or a lowering of barriers to entry/expansion. Despite regulation, eircom's dominance of the transit market persists. ComReg's analysis shows that the barriers to entry/expansion in the wholesale transit market remain high and non-transitory over this review. The empirical evidence also shows that further new entry is unlikely to occur on a significant scale nor is 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 preliminary conclusion is that eircom has SMP in the market for wholesale transit services in Ireland.

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

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

- 4.103 In the initial review, ComReg proposed that international transit services did not fall within the same relevant market as national transit services. ComReg notes 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 intended to carry out an additional national consultation.
- 4.104 In the current review, ComReg has defined a wholesale market for outgoing international transit services. As the proposed market is not listed in the *Relevant Markets Recommendation*, the Explanatory Memorandum of the Recommendation⁵⁷ states that it is necessary that ComReg assess the market under three criteria to establish whether it should be subject to *ex ante* regulation. Such an assessment focuses on the general structure and characteristics of a market in order to identify those markets the characteristics of which suggest that they might be potentially susceptible to *ex-ante* regulation.

⁵⁷ See pages 9 - 12.

4.105 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 proved 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.

4.106 The market must meet *all three* criteria to justify regulation.

4.107 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 is of the view that it is appropriate to adopt a two year period for its prospective assessment.

4.108 In its analysis ComReg has adopted a 'modified greenfield approach' in that (i) all regulations which are unrelated to SMP are assumed to be maintained, (such regulations include specific obligations, which are imposed on the universal service provider, such as a uniform tariff requirement); and (ii) all SMP related regulations which are unrelated to the outgoing international transit market are assumed to be in place. As such, the analysis is 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

4.109 In the new draft Recommendation on relevant Markets (the Draft Recommendation), the European Commission (EC) expands on its views in relation to establishing each criterion.⁵⁸ 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.

⁵⁸http://ec.europa.eu/information_society/policy/ecomms/doc/info_centre/public_consult/review/recommendation_final.pdf - Pages 7-12

4.110 The EC identifies two types of barriers to entry⁵⁹ and to the development of competition in the electronic communications sector: (a) structural barriers; and (b) legal or regulatory barriers.⁶⁰

4.111 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.

4.112 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.

4.113 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 market⁶¹. 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, however ComReg would welcome respondents' views if they do not agree.

4.114 ComReg therefore analyses 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 consumers.

4.115 In this respect ComReg will therefore examine whether the industry is likely to/has experienced new entry and whether such entry has been or is likely in the future to be sufficient to limit any market power.

4.116 If respondents believe that it is appropriate to assess barriers to entry, structural or legal, under additional criteria, ComReg would welcome details of such suggestions.

(a) Level of sunk costs⁶² required for entry

⁵⁹ See pages 9-10

⁶⁰ It is also possible that certain (strategic) barriers to entry may arise as a result of the actions and reactions of the incumbents 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.

⁶¹ See page 10 of the Commission Recommendation in accordance with Directive 2002/21/EC.

⁶² A sunk cost is a cost, which is not recoverable.

- 4.117 ComReg has analysed actual and potential barriers to entry in the outgoing international transit market.
- 4.118 An initial analysis carried out by ComReg found that there were barriers to entry in international transit services although they were not insurmountable.⁶³
- 4.119 From the data collected as part of this current market review, there is evidence to suggest that while there are some structural barriers to entry into this market, they are not so substantial as to significantly deter entry. Since liberalisation, a number of competitors have entered the outgoing international transit market. There are currently nine operators active in the outgoing market with six active in the merchant market.
- 4.120 In order to enter the outgoing international transit services market an operator needs an international gateway, international transmission capability and respective agreements with terminating operators in foreign countries. Interconnection required with the relevant national network may be minimal and it appears possible to operate using just one international gateway switch. In addition, many providers of outgoing international transit services connect their Irish operations with their UK operations using a leased line, for example, from where they can 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 have an international presence.

(b) Economies of scope, scale and density

- 4.121 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.
- 4.122 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 conditions⁶⁴. 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.
- 4.123 It is ComReg's preliminary view that economies of scale, scope and density do not act as a major constraint such as to prevent entry into the outgoing international transit market.
- 4.124 For example, there are a number of operators active in the outgoing international transit market, which have a global presence and may be in a position to gain a viable customer base (i.e., a minimum efficient scale) within a sufficiently short period of

⁶³ See ComReg Document No. 04/106a, p.38

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

Interconnection Market Review - Call Origination and Transit Services time so as to benefit from economies of scale. In addition, a number of respondents consider that no one international access provider has a significant competitive advantage over other providers.⁶⁵ Further, the number of operators active in the outgoing market suggests that the minimum efficient scale is not so considerable as to pose a significant barrier to new entry into this market (as can be seen below, unlike the national transit market, there are four OAOs accounting for over 50% of the outgoing international transit market).

4.125 ComReg however would seek respondents' views on whether, in the presence of wholesale regulation, any operator has substantial economies of scale, scope and density.

(c) Control of infrastructure not easily duplicated

4.126 As outlined above, in order to enter the outgoing international transit services market an operator needs 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 appears possible to operate using just one international gateway switch.

4.127 As such, ComReg considers that control of infrastructure not easily replicated does not act as a significant structural barrier to entry in this market.

4.128 However, ComReg would appreciate respondents' views on whether any operator has a significant infrastructural advantage and whether this advantage may act as a substantial barrier to entry in the outgoing international transit market.

(d) Technological advantages or superiority

4.129 With regard to the operation of the outgoing international transit market, ComReg has no reason to believe that any entity has a significant technological advantage. ComReg welcomes any input from respondents which may support or contradict this proposition.

(e) Barriers to switching for consumers

4.130 ComReg has examined whether barriers to entry/expansion exist in the market as a result of switching barriers among users.

4.131 Examples of costs that a consumer 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.

4.132 However, evidence from operators would suggest that switching barriers do not present a significant difficulty in the context of this market.

4.133 A number of users of third-party outgoing international transit services have indicated that they have a choice of operator and are able to switch from one operator to another with relative ease. Indeed, some operators purchase from a number of different international transit providers at any one time. One operator stated further that it determines its carriers for particular routes on a monthly basis which would suggest low switching costs.

⁶⁵ Operator responses to the International Transit Data Direction issued by ComReg, 18 July 2005

4.134 However, ComReg would appreciate any further views respondents might have on the nature and likely extent of any barriers to switching in the outgoing international transit market.

Preliminary conclusion

4.135 ComReg is of the preliminary view that while barriers to entry exist, the evidence suggests that they are not insurmountable. Therefore the initial view is that the market does not pass the first criterion of the three criteria test and should not be subject to ex-ante obligations. ComReg, however, welcomes any input from respondents which may support or contradict this proposition

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.

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

4.136 In the event that it is found that the market *is* 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.

4.137 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.

4.138 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.

4.139 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.

4.140 ComReg assesses the second criterion under the following headings:

- a) Market share;
- b) Existing competition;
- c) Price developments; and
- d) Barriers to expansion.

(a) Market Share

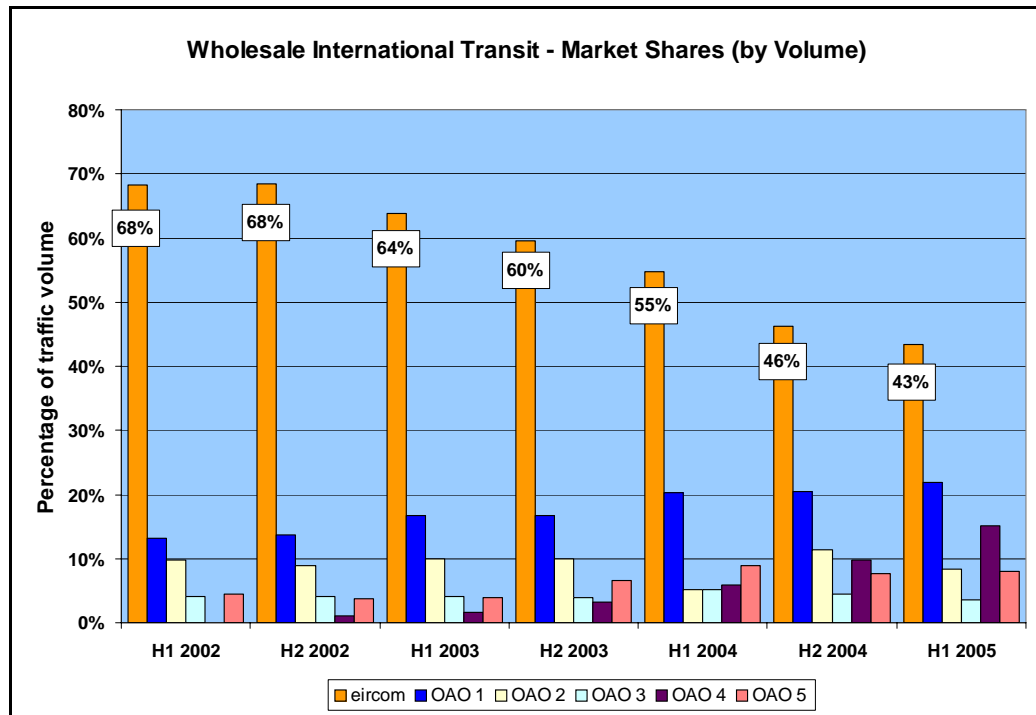
4.141 ComReg has examined the market shares in the international transit market. It is important to consider the behaviour of market shares over time, as this will indicate

Interconnection Market Review - Call Origination and Transit Services trends in the market and will contribute to an assessment of whether or not the market may tend towards competition in the lifetime of this review.

4.142 ComReg obtained traffic information from operators in July 2005. Accordingly ComReg has analysed market share data from H1 2002 to H1 2005, and the view of market developments is therefore based on a period of over two years.

4.143 As shown by the figure below, eircom’s market share of outgoing international traffic (by volume) has steadily declined from 68% in H2 2002 to 43% in H1 2005. These market shares include self-supply by all operators active in the merchant market.

Figure 4.8: Market Shares in Outgoing International Transit Market



Source: ComReg

4.144 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.⁶⁶

4.145 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

⁶⁶ Telegeography, Global Traffic Statistics and Commentary, 2006, pp.24-7

Interconnection Market Review - Call Origination and Transit Services international infrastructure and in-country operations in their international negotiations. As such, BT Ireland, C&W, Verizon and large international carriers have an opportunity to leverage their level of bilateral agreements and traded volumes from multiple markets in their rate negotiations.

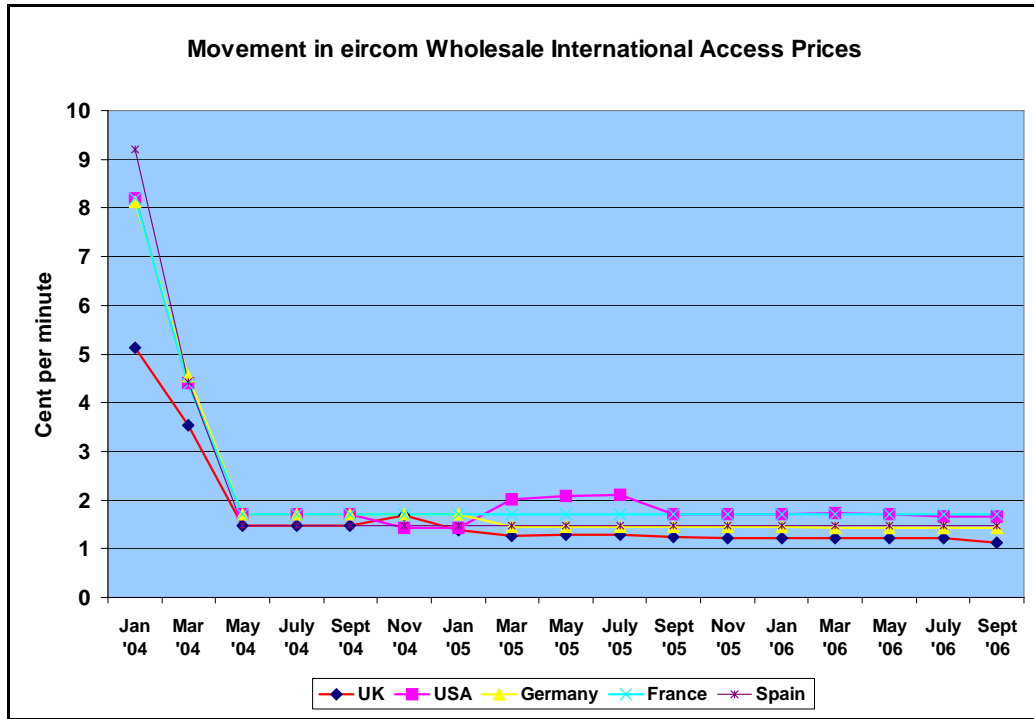
(b) Existing Competition

4.146 The analysis of market share indicates that eircom’s share of the outgoing international transit market as of end of H1 2005 was 43% by volume which had declined considerably from 68% in H2 2002. The main competitors in the outgoing international transit services market are BT Ireland, Verizon, Cable & Wireless and Colt Telecom. The increased level of consumer choice, relatively low customer switching costs and evidence of increasing switching activity from the operators’ responses would also appear consistent with a tendency towards effective competition in this market.

(c) Price developments

4.147 ComReg has considered price developments for outgoing international transit services since January 2004 to October 2006. 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).⁶⁷

Figure 4.9: Development in eircom Wholesale International Access Prices



Source: ComReg

4.148 ComReg notes that all such data should be considered in light of the impact of the existing regulatory pricing constraints. eircom’s prices are currently regulated and any proposed price change must be notified to ComReg.

⁶⁷ 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.

- 4.149 Pricing developments appear to indicate significant adjustments in response to competitors in the outgoing international transit services market over the period 2004-2006. 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.
- 4.150 ComReg would appreciate views from respondents on whether they consider these pricing patterns would affect conclusions in respect of the second criterion.

(d) Barriers to expansion

- 4.151 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.
- 4.152 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 which indicates relatively low customer switching costs and an increasing level of customer switching activity, ComReg proposes that there are no significant barriers to providers of outgoing international transit services growing or expanding in this market.
- 4.153 However, ComReg would welcome any information respondents may have regarding the cost associated with expanding their provision of outgoing international transit services.

Preliminary conclusion

- 4.154 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. At this point however, ComReg has not taken a final position but seeks views from interested parties on the above preliminary assessment of the outgoing international transit market.

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.

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

- 4.155 If it is found to be the case that the international transit market meets the first two criteria set out above, the final decision as to whether *ex-ante* regulation is appropriate will 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. In any event, ComReg's conclusions in relation to the first

Interconnection Market Review - Call Origination and Transit Services
two criteria are preliminary at this juncture and thus the third criterion must be assessed.

- 4.156 For the purposes of assessing the third criterion it is assumed, without prejudice to the earlier discussion under the first two criteria above, that there are certain high and non-transitory entry barriers to this market and the market has characteristics such that it will not tend over time towards effective competition. That is, it is assumed that the first two criteria are fulfilled although this has not been shown to be the case. It is therefore considered whether competition law would be sufficient to redress any potential market failures that may arise under these assumed market conditions.
- 4.157 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 that market, e.g., via predatory pricing.
- 4.158 The sufficiency of competition law to deal with such potential competition problems *ex post* is considered below. It should be noted that any preliminary views expressed regarding the potential for competition problems in the relevant market and/or the sufficiency of competition law to deal with any such problems are without prejudice to any other relevant markets that may be identified. It should be noted further that any such preliminary views are also without prejudice to any potential application of competition law in the market concerned and any other relevant markets that may be defined.
- 4.159 The recent Commission consultation on a Draft Commission Recommendation on relevant product and service markets susceptible to *ex ante* regulation⁶⁸ 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. 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 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.
- 4.160 In respect of the potential for **exploitative behaviour** in the outgoing international transit market, it is suggested that competition law may be sufficient to deal with any

⁶⁸ Available from:

http://europa.eu.int/information_society/policy/ecom/comm/doc/info_centre/public_consultation/review/recommendation_final.pdf

Interconnection Market Review - Call Origination and Transit Services such potential market failures going forward. For example, it has not been shown that there is 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 in that regard, it is further suggested that competition law would have the relevant instruments to potentially deal with any such exploitative behaviour *ex post* were it to arise. For example, Section 5(2)(a) of the Competition Act, 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. It should be noted, however, that this is a preliminary assessment and ComReg would appreciate any views respondents may wish to express on this issue.

- 4.161 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 has 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.⁶⁹ 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.
- 4.162 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 is not clear that *ex-ante* intervention is required in advance to prevent such behaviour emerging, particularly where there is 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. Thus, it is proposed that competition law is equipped to deal with potential restrictions of competition arising in one market as a result of market power held in associated markets.⁷⁰
- 4.163 The above analysis suggests that competition law may be well-placed to address any potential market failures in the outgoing international transit market going forward. It is not clear that the nature of competition in this market to date is 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

⁶⁹ *AKZO Chemie BV v Commission; Compagnie Maritime Belge Transports v Commission; and Deutsche Post AG.*

⁷⁰ *Commercial Solvents v Commission or Tetra Pak II.*

Interconnection Market Review - Call Origination and Transit Services insufficient where it is 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. In that regard, ComReg would welcome respondents' views on the forgoing analysis and any potential advantages/disadvantages that could result in the outgoing international transit market if competition law was deemed sufficient and *ex-ante* regulation removed. Respondents should clearly set out any potential competition problems or failures they anticipate in this market and why competition law would be sufficient/insufficient to deal with any such potential problems.

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.

Overall preliminary conclusion on Market Analysis Wholesale International Transit

- 4.164 In this review, ComReg has presented its preliminary assessment as to whether the outgoing international transit services market is susceptible to *ex ante* regulation. In respect of the first criterion above, ComReg proposes that entry barriers do not appear to deter entry significantly in this market but seeks views from interested parties on whether they consider there to be any significant and non-transitory barriers to entry present in this market.
- 4.165 In relation to the second criterion, whether this market tends towards effective competition, ComReg has examined the nature and extent of existing competition, market shares, pricing trends and any barriers to expansion. At this point, evidence may indicate that the outgoing international transit market is tending towards effective competition. ComReg has not taken a final position but seeks views from interested parties.
- 4.166 As regards the third criterion, ComReg has 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 could be argued that competition law may be well-placed to address any potential market failures in the outgoing international transit market going forward. ComReg seeks views from respondents on any potential competition problems or market failures they may envisage in this market. Furthermore, were such strategies to arise, ComReg seeks views as to whether competition law provides the appropriate instruments to effectively address any such potential market failures.

Q. 11. Do you believe that the outgoing international transit services market meets all the 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.

5 Proposed 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
- 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 Proposed Market Remedies

Regulatory background

- 6.1 The initial consultation⁷¹ and response to consultation⁷² outlined the basis for the setting of remedies proposed by ComReg.
- 6.2 ComReg is obliged, under Regulation 9(1) of the *Access Regulations*⁷³, 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 some of the obligations set out in Regulations 10 to 14 of the *Access Regulations* as ComReg considers appropriate.
- 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 would be applied with the permission of the European Commission per 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, to propose remedies for any potential market failures.

Competition problems in the interconnection markets

- 6.6 In the initial review, ComReg outlined actual and 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 were 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 anticipate the appearance of a particular competition problem based on the incentives of an SMP undertaking to engage in such behaviour, which in turn will be based on the results of the market analysis. 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.
- 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 market since the time of the

⁷¹ Market Analysis: Interconnection markets (04/106)

⁷² Market Analysis: Interconnection markets, Response to Consultation and Draft Decision (05/37a)

⁷³ S.I. No 305 of 2003 – European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003.

Interconnection Market Review - Call Origination and Transit Services initial review, and to consider whether the types of potential competition problems identified are still likely to occur in the absence of SMP regulation.

6.8 According to settled case law,

“ dominance is 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, its customers and ultimately of the consumers.”⁷⁴

6.9 An undertaking which is dominant 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 competitive pressure to prevent this. In addition, a firm which was dominant in an upstream market could use its market power to leverage into a downstream market. A firm which was dominant in one market could also attempt to leverage power horizontally into a related market.

6.10 It is however important to note that in any discussion of possible competition problems and of the incentives for an operator to exert its SMP, it is not necessary for ComReg to point to examples of abuse that have occurred. While such examples would be corroborative, the nature of ex ante regulation is that it is concerned with guarding against this in advance.

6.11 In the initial review ComReg described the types of competition problem which may arise in the interconnection markets, and provided examples of these problems in the Irish markets. This review draws on the previous analysis, and focuses on assessing any changes in the nature of the competition problems from the time of the initial review.

6.12 Generally, the types of competition problems likely to arise in the interconnection markets in the absence of regulation are associated with possible vertical and horizontal leveraging as well as excessive pricing.

6.13 Vertical leveraging arises where an operator has dominance at a wholesale level and can potentially transfer this power into related retail markets. In the interconnection markets, a vertically-integrated SMP operator has control of the wholesale inputs necessary for an entrant to offer a retail service, and is in a position to control the use of these inputs and so affect the competitive conditions in the downstream retail markets.

6.14 Horizontal leveraging involves an undertaking which is dominant in one market using its market power to exert undue influence in other markets. An example of this in respect of an operator that is dominant in the origination market would be the potential to exert influence in the wholesale transit market.

6.15 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 nor is there likely to be over the period of the review. In light of the fact that barriers to entry in the wholesale call origination markets are high and non-transitory, there is limited scope for potential competition and there is insufficient countervailing buyer power, it may be argued that there is significant scope and incentives for an SMP operator to sustain prices above

⁷⁴ DG Competition Discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, Brussels, Dec 2005.

Interconnection Market Review - Call Origination and Transit Services competitive levels for the period of the review. This is because such high prices would be unlikely to be undermined by significant new entry or expansion in the market given the obstacles involved. As will be shown in the vertical leveraging section such high prices may also have the effect of restricting competition in downstream markets and further reinforcing entry barriers at the upstream level.

- 6.16 eircom's position as a vertically integrated operator with market power in the retail access and wholesale interconnection markets means that, absent regulation, it would have the potential and the incentive to leverage market power into related markets, both horizontally and vertically linked. Such behaviour could also potentially reinforce entry barriers in the upstream interconnection markets.

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 assessment and the imposition of remedies. Given the identified actual and potential competition problems arising from SMP in the interconnection markets, ComReg is obliged to impose obligations on undertakings identified as having significant power 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. Accordingly, ComReg proposes to impose appropriate obligations on the SMP operator that ComReg believes will encourage efficient investment and innovation, protect consumers and further promote competition in the interconnection markets.
- 6.18 Where problems have been identified in specific markets and an undertaking(s) has been designated as having SMP, ComReg will select remedies based on the nature of the potential competition problem identified and ensure they are proportionate and justified. Where possible, consideration will be given to a range of remedies so that the least burdensome effective remedy can be selected thus conforming to the principle of proportionality. In the initial consultation ComReg presented alternative regulatory options to address identified 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 the response to consultation, ComReg adopted a preferred option. The current review focuses upon the preferred option and assesses whether market conditions justify an amendment to 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 section eight) in accordance with the Ministerial Direction (issued by the Minister for Communications Marine & Natural Resources in accordance with section 13 of the Communications Regulation Act, 2002) published in February 2003.
- 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, 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 a designation of SMP has been proposed, to impose at least one obligation⁷⁵. Therefore some form of ex ante regulation is required.

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

Proposed Remedies

6.22 In the following sections, ComReg addresses the potential competition problems which it considers could arise in the relevant markets, in the absence of regulation, as a result of the preliminary designation of SMP.

6.23 ComReg then sets out the detailed remedies that it proposes to impose on SMP operators to address the potential competition problems identified. ComReg has set out remedies that it considers to be appropriate at this time and in the prevailing market conditions. It is important that the selection of remedies will encourage 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 in the long-term.
- Seeking to promote a competitive environment where the competition is not solely price based.

6.24 This analysis is repeated for each identified relevant market.

Wholesale Call Origination Market

Potential competition problems in the wholesale call origination market

6.25 In this current review, ComReg has arrived at the preliminary 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, such as excessive pricing, and vertical and horizontal leveraging.

6.26 ComReg's overall approach to identifying and analysing actual and potential competition problems was discussed above. Specific problems associated with the market for wholesale call origination could include the following:

Possible Exploitative Behaviour

6.27 In light of ComReg's preliminary finding that eircom has a position of SMP in the market for wholesale call origination, it is considered that eircom may engage in behaviour that exploits its wholesale consumers via such practices as excessive pricing.

6.28 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

⁷⁵ See *The SMP Guidelines* paragraphs 21 and 114.

Interconnection Market Review - Call Origination and Transit Services innovation) to bring them down to competitive levels nor is there likely to be over the period of the review⁷⁶. In light of the fact that barriers to entry are high and non-transitory in the wholesale call origination market, there is limited scope for potential competition and there is a lack of countervailing buyer power, it may be argued that there is significant scope and incentives for the SMP operator to sustain prices above competitive levels for the period of the review. This is because such high prices would be unlikely to be undermined by significant new entry or expansion in the market given the obstacles involved. As will be shown in the vertical leveraging section below, such high prices may also have the effect of restricting competition in downstream markets and further reinforcing entry barriers at the upstream level.

Possible Vertical leveraging

6.29 Vertical leveraging may arise when a firm controls an input that is essential for a potentially competitive downstream industry 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. As is clear from the forgoing market analysis, it is ComReg's preliminary view that to compete effectively in downstream retail markets OAOs are heavily dependent on eircom for its upstream wholesale call origination service. This significant dependence is unlikely to change over the period of this review. It is thus proposed that as eircom's wholesale customers are also its downstream competitors, eircom would, in the absence of regulation, have considerable scope and incentives to influence competitive conditions on downstream markets and further reinforce entry barriers at the upstream level. The main types of vertical leveraging that could potentially arise are detailed below.

- Denial of access: examples include an outright denial of access or a constructive refusal of access for example by way of delaying tactics such as protracted negotiations for new entrants, discriminatory use or withholding of information, quality discrimination, strategic design, disproportionate entry criteria as well as unreasonable terms and conditions associated with access, etc.
- Leveraging by price means: an example of this type of leveraging includes 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.

Possible Horizontal Leveraging

- 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 cross subsidisation from the SMP market.

⁷⁶ OFT (April 2004) OFT 414a, Draft Guideline on Assessment of Conduct, para. 2.6.

Q. 13. Do you agree 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 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?

Appropriate Obligations: wholesale call origination market

- 6.30 As demonstrated in the Section on Market Analysis Section 4, eircom is the only network operator currently in a position to offer ubiquitous wholesale call origination products in the Irish market. ComReg therefore holds the preliminary 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.
- 6.31 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 problems identified above. In assessing what is proportionate, ComReg will take account of the effectiveness of obligations for dealing with the problems identified, and take account of the costs associated with the obligations.
- 6.32 In this market, ComReg has considered whether it would be possible to remedy 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 eircom would have little incentive to offer fair and reasonable interconnection terms to OAOs it competes against in related downstream markets.
- 6.33 ComReg is of the preliminary view therefore that at a minimum the appropriate suite of obligations needed to remedy 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.
- 6.34 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 problems over the lifetime of this review, in the future ComReg may rely on other, less onerous, obligations.
- 6.35 If the wholesale call origination market were, for example, to become more competitive, ComReg may not need to rely upon mandated access regulations. 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.

Proposed remedies: wholesale call origination

- 6.36 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 the Market Analysis Section, eircom is the only network operator currently in a position to offer ubiquitous wholesale call origination 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.
- 6.37 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

Access to and use of specific network elements and associated facilities

- 6.38 ComReg proposes that eircom should continue to interconnect networks and network facilities on the basis of a reasonable request. Obligations can 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.'⁷⁷
- 6.39 ComReg's analysis of the competition problems strongly suggests that wholesale access obligations are necessary so as to promote more effective competition in retail markets. Absent regulatory intervention, it is 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 is 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.
- 6.40 At present eircom is obliged to offer access at the wholesale interconnect level for all the services listed in the Reference Interconnect Offer (RIO). All of these services are 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 interconnected calls. The RIO is not a static document. It evolves to reflect the introduction of new products and services, and ComReg notes that any regulation should incorporate the ability of the RIO to develop.

⁷⁷ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, ARTICLE 12(1).

- 6.41 ComReg has considered two possible approaches to ensuring that other operators have access to wholesale call origination products. One option is that ComReg could mandate access to, and use of, all of eircom's call origination facilities. ComReg considers this option to be overly interventionist and prescriptive.
- 6.42 Another option is 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 require. Such an access obligation would require eircom to meet reasonable requests for access to, and use of, specific network elements and associated facilities.
- 6.43 ComReg considers the latter option to be preferable as it allows OAOs the flexibility to request products according to their needs, and requires eircom to only develop products for which there is interest.
- 6.44 ComReg's preliminary view therefore is that it is 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 are not successful any such request will be reviewed in the context of Regulation 13 (4) of the Access Regulations.
- 6.45 For these reasons and given the nature of the competition problems which might arise in this market, ComReg has had to come to the preliminary conclusion that an access obligation is necessary.
- 6.46 **Preliminary Conclusion: ComReg should continue 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.**

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

- 6.47 Pursuant to Regulation 13(2) (i) of the Access Regulations ComReg proposes that eircom should be required to continue to interconnect networks or network facilities. This obligation is necessary to maintain eircom's obligation to interconnect with existing and new OAOs and ensure that the market functions. 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 is prevented.
- 6.48 **Preliminary Conclusion: eircom should continue to interconnect networks or network facilities as part of its Access obligation.**

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.

- 6.49 ComReg proposes that eircom should continue to have an obligation pursuant to Regulation 13(2)(c), not to withdraw access to facilities already granted, unless this has been approved by ComReg. If the withdrawal has a significant impact on the market ComReg may then decide that a public consultation is necessary as a means of approval for withdrawal of the facility.

- 6.50 ComReg is of the preliminary view that this obligation is necessary to ensure that OAOs have the certainty to provide retail services to the marketplace and compete with eircom.
- 6.51 In addition ComReg notes that the gradual migration to next generation network technology might well give rise to an increase in possible cases where eircom might wish to withdraw access to existing facilities. ComReg has considered the issue with regards withdrawal of access where an operator may be required to retain facilities already in place in a time when it is re-designing its network architecture and redeploying network infrastructure and where, access facilities, if not withdrawn, could impede development.
- 6.52 It is proposed that eircom should continue to seek ComReg approval before withdrawing access to existing facilities, and that ComReg's decision will be proportionate and justifiable and will take into account the potential impact on the market.
- 6.53 **Preliminary Conclusion: ComReg proposes that eircom should continue to have an obligation not to withdraw access to facilities already granted, as part of its Access obligation, unless this has been approved by ComReg.**

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.

- 6.54 ComReg proposes to oblige eircom to continue to provide specified information which supports existing call origination services. This obligation is 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 is necessary for the provision of existing call origination services.
- 6.55 ComReg proposes 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.
- 6.56 ComReg notes that the RIO is an evolving document and that the specific information required to support call origination services will change over time.
- 6.57 **Preliminary Conclusion: ComReg proposes to oblige eircom to continue to provide specified information which supports call origination services as part of its Access obligation.**

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

- 6.58 ComReg proposes to continue to impose the obligation on eircom to meet reasonable access requests and to address any disputes accordingly. This obligation is pursuant to Regulation 13(1) of the Access Regulations.
- 6.59 ComReg considers that access seekers may need to avail of other products which are included within the definition of the relevant wholesale market that will allow them to develop retail offerings to compete in the retail market. An access remedy is the only remedy which allows 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 are not successful, any such requests will be reviewed in the context of Regulation 13(4) of the Access Regulations.
- 6.60 ComReg is of the preliminary view that an SMP operator should not have to meet requests that are unreasonable, or are not technically feasible. In assessing whether requests are reasonable, ComReg notes that such requests should not constitute an undue burden on the SMP operator. This means that a request which is 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 is willing to pay.
- 6.61 **Preliminary Conclusion: ComReg proposes to continue to impose the obligation on eircom to meet reasonable access requests as part of its Access obligation.**

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

- 6.62 ComReg believes that, pursuant to Regulation 13 (3) of the Access Regulations, eircom’s call origination services should be provided on terms and conditions which are fair, reasonable and timely. In this regard ComReg believes that the terms and conditions should be supported by the Service Level Agreement (‘SLA’). SLAs should ensure that eircom have an incentive to provide products and services which are fit for purpose and treat OAOs the same as its own retail arm. ComReg propose to consult with industry on SLAs once the market reviews have been completed. The proposed consultation will focus on the terms and conditions of the SLA and will ensure that the SLA remains useful and effective. Currently ComReg’s view is that the SLA is important in order to allow OAOs to approach eircom and ensure that their requests for new or amended products are treated promptly and appropriately. In addition, pursuant to Regulation 13(2)(b) of the Access Regulations ComReg is also of the preliminary view that eircom should have the obligation to negotiate in good faith with the undertakings requesting access.
- 6.63 **Preliminary Conclusion: eircom should continue to provide call origination services on terms and conditions which are fair, reasonable and timely. These terms and conditions should be supported by Service Level Agreements as part of its Access obligation.**

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.

6.64 ComReg proposes 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 provides 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.

6.65 In the current review ComReg emphasises that OAOs should be given the same notice/information in provision of wholesale call origination services as eircom provides to its retail arm. In addition to this ComReg, as well as OAOs, should be given reasonable pre notification of plans which the incumbent may have with regards restructuring of their network where interconnection services will be affected.

6.66 **Preliminary Conclusion: ComReg proposes 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.**

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?

6.67 Pursuant to Regulation 10(2) of the Access Regulations ComReg believes that eircom should continue to provide call origination services on an unbundled basis. The level of unbundling should not be less than that offered at the time to its retail division or subsidiaries.

6.68 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.

- 6.69 **Preliminary Conclusion: ComReg believes that eircom should continue to be required to provide call origination services on an unbundled basis as part of its Access obligation.**

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.

- 6.70 ComReg is of the preliminary view 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 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.
- 6.71 Unless the provision of certain products is mandated, ComReg is of the preliminary view that there may be an incentive for eircom to limit access or make access more difficult. It is obviously essential for OAOs to have open access to technical interfaces, protocols, and OSS such as is necessary for them to take up the mandated product and allow them to compete with eircom at the retail level.
- 6.72 **Preliminary Conclusion: 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 Operational Support Systems or similar software necessary to ensure fair competition in the provision of services as part of its Access obligation.**

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.

- 6.73 In addition to the access obligations described above, ComReg proposes to impose obligations relating to transparency, non-discrimination and price control on eircom. These obligations are a justified means of addressing competition problems in the call origination market, and are also necessary to support the proposed access obligations.

Transparency

- 6.74 ComReg proposes that a transparency obligation should continue to be imposed on the SMP operator, eircom. It is stated as part of the Access Directive⁷⁸ 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'.
- 6.75 Transparency is a necessary means of ensuring that ComReg and OAOs can observe price and non-price terms and conditions for eircom's wholesale call origination

⁷⁸ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, Article 9.

Interconnection Market Review - Call Origination and Transit Services products. A transparency obligation is required to support any accounting separation obligations, 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 competition problems relating to cross subsidisation, price discrimination and the application of price squeezes.

6.76 ComReg has considered the existing level of publication of data per the Reference Interconnect Offer ('RIO'). eircom currently publishes a full suite of reference documentation in relation to interconnect products, including call origination services. However, ComReg is of the preliminary 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.

6.77 Preliminary Conclusion: ComReg proposes that a transparency obligation should continue to be imposed on the SMP operator.

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.

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

6.79 Preliminary Conclusion: ComReg proposes that eircom should continue to publish a Reference Offer for call origination services on its wholesale website as part of its Transparency obligation.

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.

6.80 In considering the imposition of an access obligation, ComReg noted that eircom should be required to continue to provide information necessary to support call origination services. It is 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 website⁷⁹, and would make provision for the evolution of the RIO documentation, and for the introduction of new products and services.

⁷⁹ www.eircomwholesale.ie/regulatory/

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

- 6.81 ComReg proposes to ensure that eircom 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.
- 6.82 **Preliminary Conclusion: ComReg proposes that eircom should be required to continue to publish appropriate manuals and documentation for new and existing Call Origination services as part of its Transparency obligation.**

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.

- 6.83 As provided for by Regulation 10 (2) of the Access Regulations, the RIO shall be sufficiently unbundled so as to ensure that other undertakings availing of such facilities are not required to pay for facilities which are not necessary for the service requested and such offer shall 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.
- 6.84 eircom shall 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 will either approve or amend the proposed changes within a further 3 (three) weeks. eircom shall 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.
- 6.85 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 effect⁸⁰.

⁸⁰ International Access Rates are the exception to this.

6.86 The RIO Price List is published on the eircom wholesale website, and consists of the following documents –

- RIO Change Matrix
- RIO Price List marked version
- RIO Price List unmarked version

6.87 ComReg is of the preliminary view that these obligations should be maintained as it is necessary to provide OAOs with sufficient notice of any changes to the eircom RIO, and it is useful for ComReg to be notified in advance. It is proposed that this process should apply to all the documents relating to the call origination market.

6.88 **Preliminary Conclusion: ComReg proposes to continue to ensure that the current process for publishing and updating the RIO is maintained as part of its Transparency obligation.**

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

6.89 ComReg proposed in the initial review to consult further on the issue of itemised billing. Since the time of the initial review, eircom has been providing itemised billing on an ad hoc basis as requested by other operators. There have been no recent complaints. ComReg therefore proposes that a consultation is disproportionate and unjustifiable at this time.

6.90 It must be noted however that it is general practice in any industry that prior to payment of any bill a full breakdown of what the bill relates to is 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.

6.91 ComReg will continue to monitor the process and will ensure that eircom continue to provide a satisfactory level of granularity so that eircom bills can be reconciled in an efficient manner to operator systems.

6.92 **Preliminary Conclusion: ComReg proposes that eircom’s billing should be sufficiently granular for OAO purposes, but that a public consultation at this time is neither necessary nor proportionate.**

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.

Non-discrimination

6.93 ComReg proposes to continue to impose the remedy of non-discrimination on eircom.

6.94 In general non-discrimination⁸¹ requires 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 provides for its own services, or those of its subsidiaries or partners’. A non-discrimination obligation requires that third party access seekers are treated no less favourably than the operator’s internal divisions.

6.95 ComReg’s preliminary view is that in addition to transparency, a non-discrimination obligation should be applied on eircom. ComReg regards the application of an obligation of non-discrimination on eircom as necessary for dealing with 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 is an essential complement to other obligations, particularly transparency and access.

6.96 In particular ComReg proposes that eircom be required to provide information and services to alternative operators in timescales, on a basis, and of a quality, which are at least as good as those provided to eircom’s retail arm and associates⁸². In addition to this it is important that information gained by eircom as a result of their provision of wholesale call origination services to another operator is 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 maybe in a position at a retail level to use this call information to target new customers hence giving eircom an advantage over OAOs.

6.97 Furthermore ComReg proposes that eircom should be required to apply 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 are such to ensure that OAO’s and eircom’s retail arm are presented with the same costs for equivalent services in a transparent manner.

6.98 It should be noted that the rationale for ex-ante obligations is not the identification of a particular abuse that has occurred but rather the existence of a position of SMP

⁸¹ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, Article 10.

⁸² 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.

Interconnection Market Review - Call Origination and Transit Services enjoyed by an operator on a relevant market and where scope and incentives exist for it to engage in anti-competitive behaviour. The imposition of a SMP obligation is intended to guard in advance against anti-competitive abuses occurring.

6.99 Preliminary Conclusion: ComReg proposes to continue to impose the remedy of non-discrimination on eircom.

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.

6.100 An issue highlighted by OfCom in a consultation paper⁸³ included the fact that alternative operators (“OAOs”) suffer a cost disadvantage in handling local calls when compared to that of the incumbent (BT). For certain types of calls, i.e calls that are originated and terminated on the same local exchange (incumbents exchange) or adjacent local exchange which have a direct link between them, OAOs suffer a routing inefficiency known as ‘tromboning’ which results in a cost disadvantage in handling local calls when compared to the incumbent. The tromboning effect means that it costs OAO’s more to carry a local call than the incumbent. In the past this difference has not been material, due to large margins enjoyed by the Incumbent Retail Unit on most calls. But as margins are reduced, which has become more evident in light of recent talktime packages, the difference now appears to be material. Ultimately, as the incumbent retail call charges continue to move towards cost, OAO’s may be unable to compete in the local calls market, or even the national calls market.

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?

Price control and Cost Accounting

6.101 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 problems related to possible inefficient investments undertaken by a dominant

⁸³ OfCom Document: Addressing the local call disadvantage consultation, 15 march 2005

Interconnection Market Review - Call Origination and Transit Services 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.

- 6.102 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.
- 6.103 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.
- 6.104 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

- 6.105 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 the obligation that interconnection services are offered at cost-oriented prices. 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.
- 6.106 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.
- 6.107 The principle that only efficiently incurred costs can be recovered through interconnection charges is that, in ComReg's preliminary 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.
- 6.108 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;

- Interconnection Market Review - Call Origination and Transit Services
- facilitating effective means of interconnection;
 - being sufficiently transparent; and
 - being non discriminatory and non-preferential.

Products subject to Price Control

- 6.109 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 is proposing to continue to mandate the provision by eircom of access to these interconnect origination services.
- 6.110 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.
- 6.111 In addition to the “deemed to be regime”, eircom also provide what is 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 OAO’s would no longer have to pay for network elements they did not require, and it encouraged more efficient network based routing so enabling OAO’s to benefit from points of interconnect at the primary level. The preliminary conclusion of the initial review required that NEHO continued to be provided to those operators in a position to avail of it.

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 not longer be provided to those Operators in a position to avail of it? Please provide detail in support of your response.

- 6.112 ComReg is of the preliminary view that any new services introduced into the call origination market subsequent to this market review will be covered by the same pricing principles. This is because new services in the same markets would be expected to be subject to the same competitive conditions as existing services.
- 6.113 The payphone access charge (PAC) also falls within this market. This is a supplemental charge for calls originating from payphones. For standard calls, the costs associated with the local access network are recovered through the line rental and therefore local access network costs are excluded from the computation of origination prices. In the special case of calls originating from payphones there is no associated line rental, and so the local access network costs incurred to support payphones would go un-recovered without this supplemental charge.
- 6.114 In order to allow for the provision of the facility to call freephone numbers from payphones it has 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

Interconnection Market Review - Call Origination and Transit Services and other costs involved in maintaining them in addition to normal interconnect charges.

- 6.115 Currently there is a special pricing mechanism used to arrive at the PAC which is 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 has 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 it may now be appropriate to consult on the application of the PAC and whether it is still appropriate to the market circumstances.

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.

- 6.116 ComReg also regulate the order handling charges associated with Carrier Pre-Select, Single Billing through Wholesale Line Rental, Non Geographic Number Portability and Geographic Number portability which form part of the interconnect price list on the eircom wholesale website. This involves an annual review of process, costs and volumes to ensure that the most appropriate cost oriented charges are in place to facilitate competition. ComReg has over the past number of years intervened and issued decisions on the most appropriate pricing mechanism to use when setting charges. The current process involves 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 is not envisaged that this process will change during the period of this review.

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

Form of Price Control

- 6.117 ComReg propose 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 C.
- 6.118 The interconnection rates arrived at in recent years would appear to have achieved the aim of encouraging competition and investment. The rates have not seen material change and more recently the market saw a further progression with the setting of forward looking rates to March 2007⁸⁴. In this information note ComReg noted that the rates set to March 2007 would remain in place as final rates until such time as revised rates are required based on the current pricing methodology, or a wholesale price cap regime is implemented, whichever is the earlier.
- 6.119 ComReg 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

⁸⁴ ComReg Document 06/23 'Information Notice – Interconnection Rates for 2004/05, 2005/06 and 2006/07'

Interconnection Market Review - Call Origination and Transit Services 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.

- 6.120 The application of the forward looking long run incremental cost (FL-LRIC) method has been preferred to other cost methods such as fully distributed historical costs, and has been recommended by regulatory organisations such as the Independent Regulators Group (IRG).⁸⁵ This is because it leads to a set of prices that reflect the real resource costs taken into consideration when investment decisions are made by operators. The application of this method has been used in the past and is commonly seen in other countries as the most appropriate to achieve the desired results.
- 6.121 **Preliminary Conclusion: ComReg believe the current FL-LRIC Top Down Model should be maintained as an approach to setting call origination rates pending the outcome of the consideration of a wholesale price cap.**

Q. 39. In your opinion do you have 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.

- 6.122 In the responses to the initial review there was a general agreement among operators that moving to a wholesale price cap regime would be desirable. ComReg has taken note of this and has over the past two years been engaged in a significant project in preparation for such a move. It is hoped that a decision on whether to implement such a cap will be concluded in the coming months. In light of this ComReg has decided to consult industry on the principle issues surrounding a wholesale price cap and this is attached in Annex C to this consultation.

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

Cost Accounting Systems

- 6.123 A cost accounting system⁸⁶ will be necessary where an obligation has 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 has been proposed as an appropriate obligation to be imposed on eircom and therefore ComReg proposes to impose a further obligation with regard to cost accounting systems on eircom.
- 6.124 In order to demonstrate cost orientation of a service or product, it is necessary for eircom to establish cost accounting systems that capture, identify, value and attribute

⁸⁵ Regulatory Accounting in Practice, A Report prepared by the IRG Accounting Separation Working Group, ERG (06) 23, April 2006.

⁸⁶ Cost accounting is the process of tracking, recording and analysing costs associated with the products or activities of an organisation.

Interconnection Market Review - Call Origination and Transit Services relevant costs to its services and products in accordance with agreed regulatory accounting principles, such as cost causality. A key part of this process is the stage which identifies those parts of the underlying activities or elements that directly support or are consumed by those services or products. These elements are referred to as network components. As these components are frequently used to provide more than one product or service, it is also necessary to determine how much of each component is used for each service or product that should be cost-oriented. The service/product costing methodology applies the utilisation of these components to the appropriate service product. This information is used by eircom and ComReg in establishing the most accurate cost oriented prices for wholesale services and without such information these prices would be not be possible to ascertain.

- 6.125 ComReg is of the preliminary view that 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.
- 6.126 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 form part of the cost of an SMP service ComReg needs 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 of Cost Accounting Systems can provide greater assurances in monitoring non discrimination and address the competition problems identified.
- 6.127 ComReg is of the preliminary view that this obligation will not be overly time consuming and impose a heavy burden on eircom as they already have such systems in place in order to prepare their existing set of separated accounts and these systems have been in place for some years now. Also given the size of such organisations, it is generally accepted accounting practice to have such systems in place to be in a position to prepare monthly and annual accounts that can support internal business decision making and price setting where appropriate.
- 6.128 **Preliminary Conclusion: ComReg proposes 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.**

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

Accounting separation

- 6.129 Accounting Separation⁸⁷ will help disclose possible market failures and provide evidence in relevant markets of the presence or absence of discrimination and price squeeze. It will make visible the wholesale prices and internal transfer prices of a dominant operator's products and services. It can also provide ComReg with relevant data which will allow it to perform its duties to ensure prices are not set in a predatory manner or at an excessive level and provide greater certainty about the costs and volumes for a given service.
- 6.130 An obligation of non-discrimination can require, inter alia, the imposition of financial reporting regimes in order to monitor eircom's compliance with such an obligation. With regard to the proposed designation of eircom as having SMP in this market and the proposal to impose an obligation of non-discrimination as a means to remedy the competition problems discussed earlier, ComReg believes it would also be appropriate to impose an obligation of accounting separation upon eircom in this market.
- 6.131 ComReg is proposing 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 discriminate in favour of its own retail activities in such a way that may have a material effect on competition. The obligation of accounting separation will 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.
- 6.132 ComReg proposes to implement the accounting separation obligation on a service and/or product basis. ComReg believes it is not sufficient to implement such an obligation at a market level as it is important to discourage possible cross-subsidisation of pricing at a service level. Operators dominant in relevant markets 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 is the division of services, and the activities which underlie them, between relevant markets. These relevant markets may be a regulated market designated with SMP or a non SMP designated market. Therefore NRAs need to be able to ascertain to what extent services in non SMP markets may impact on services supplied in SMP markets. In order to determine the information required for regulatory purposes, it is 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 are being provided on a non discriminatory basis.
- 6.133 As discussed earlier, in deciding upon the imposition of obligations to support the remedy of competition problems, ComReg must ensure that the obligation is based on the nature of the problem identified, justifiable and proportionate in the light of

⁸⁷ 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.

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

- 6.134 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 does not consider that this obligation will 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.
- 6.135 **Preliminary Conclusion: 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 all the 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 the intention 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.**

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.

The Wholesale National Transit Market

- 6.136 As set out in Section 3, it is proposed to define the transit market as the switching/routing of calls between primary points of interconnection. ComReg recognises that the transit market is characterised by the concentration of traffic at a relatively limited number of geographic locations where economies of scale available to competing operators are such that one might potentially expect to see some level of development of competing infrastructure to occur.
- 6.137 ComReg is aware that a certain amount of investment has been made in alternative transmission network, including the government-backed investments in the MANs and ESB's network. However, as assessed in the Market Analysis in Section 4, ComReg does not believe that alternative networks will provide effective competition in this market in the timeframe of the review.
- 6.138 ComReg would, over the longer term, hope to see the gradual emergence of infrastructure based competition in this market. When applying obligations on eircom

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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

- 6.139 In light of ComReg's preliminary finding that eircom has a position of SMP in the wholesale transit market, it is considered that eircom may engage in behaviour that exploits its wholesale consumers via such practices as excessive pricing.
- 6.140 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 innovation) to bring them down to competitive levels nor is there likely to be over the period of the review⁸⁸. In the wholesale transit market it is considered there is currently a lack of effective existing competition. In light of the fact that barriers to entry/expansion are high and non-transitory and there is insufficient countervailing buyer power, it may be argued that there is significant scope and incentives for the SMP operator to sustain prices above competitive levels as such high prices would be unlikely to be undermined by new entry or expansion in the market over the period of this review given the obstacles involved. As will be shown in the vertical leveraging section below, such high wholesale prices may also have the effect of restricting competition in downstream markets and reinforcing entry barriers at the upstream level.

Possible Leveraging

- 6.141 In the absence of *ex ante* regulation, it is very unlikely that eircom would have any incentive to offer access to its facilities on reasonable terms to an OAO with which it competes on downstream retail markets and possibly also on the upstream wholesale market for fixed transit. Even taking the self supply of OAOs into account, it is proposed that eircom continues to have a position of SMP in the wholesale market for fixed transit services. This is further protected by continuing barriers to entry and expansion and a lack of countervailing buyer power. In light of this continuing SMP in the provision of a key input for downstream retail markets, ComReg considers that, in the absence of regulation, eircom could have considerable scope and incentives to influence competitive conditions on downstream retail markets and/or restrict competition/raise entry barriers at the upstream wholesale level. Such potential leveraging/exclusionary behaviour could be achieved by the following means:
- Denial of access: examples include an outright denial of access or a constructive refusal of access for example by way of delaying tactics such as protracted negotiations for new entrants, discriminatory use or withholding of information, quality discrimination, strategic design, disproportionate entry criteria as well as unreasonable terms and conditions associated with access, etc.
 - Leveraging by price means: an example of this type of leveraging includes 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. Currently the charges which eircom can

⁸⁸ OFT (April 2004) OFT 414a, Draft Guideline on Assessment of Conduct, para. 2.6.

Interconnection Market Review - Call Origination and Transit Services charge are regulated at a wholesale level and ComReg believes that this regulation has to date ensured that such problems have been minimised.

- 6.142 ComReg has also been involved in setting charges on the basis of FL-LRIC for transit calls from the inception of the service. This is necessary going forward to prevent the possibility of excessive pricing.
- 6.143 Even with mandated access it is also possible that, were eircom to have control over the terms and conditions of that access, problems of a price nature such as margin squeeze (price discrimination) could occur which could potentially restrict competition in downstream markets and reinforce entry barriers at the upstream level.

Appropriate Obligations: wholesale national transit market

- 6.144 As demonstrated in the section on Market Analysis Section 4, 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 preliminary 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.
- 6.145 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 problems identified. In assessing what is proportionate, ComReg will take account of the effectiveness of obligations for dealing with the problems identified, and take account of the costs associated with the obligations.
- 6.146 In this market, ComReg has considered whether it would be possible to remedy 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 eircom would have little incentive to offer fair and reasonable interconnection terms to OAOs it competes against in related downstream markets.
- 6.147 ComReg believes therefore that at a minimum the appropriate suite of obligations needed to remedy 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.
- 6.148 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 problems over the lifetime of this review, in the future ComReg may rely on other, less onerous, obligations.
- 6.149 If the wholesale transit market were, for example, to become more competitive, ComReg may not need to rely upon mandated access regulations. 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.

Proposed remedies: wholesale national transit market

- 6.150 Given the preliminary 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

Interconnection Market Review - Call Origination and Transit Services network to enable them to compete in related markets. As demonstrated in the section on Market Analysis Section 4, 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.

6.151 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

6.152 ComReg proposes, 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 can 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.

6.153 ComReg has considered and concluded that the competition problems in this market cannot 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 does not. Furthermore, in the case of single (third party) transit, the majority of OAOs rely on eircom to deliver calls from/to their network to/from alternative operators' networks and have to purchase transit for this. A requirement on the SMP provider to provide wholesale access to its network is needed to facilitate competition in downstream markets by enabling competitors to compete without the need to invest in a ubiquitous network.

6.154 It is 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 is 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 is a barrier to entry in this market.

6.155 Currently and within the period of this review, it is clear that OAOs will 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.

6.156 **Preliminary Conclusion: ComReg proposes to continue to impose an Access obligation for wholesale national transit services on eircom.**

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.

6.157 ComReg proposes, pursuant to Regulation 13(2)(i) of the Access Regulations, that eircom should continue to be required to interconnect networks or network facilities. This is necessary to maintain eircom's obligation to interconnect with existing and new OAOs. 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 is prevented.

6.158 **Preliminary Conclusion: ComReg proposes that eircom should continue to be required to interconnect networks or network facilities as part of its Access obligation.**

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.

6.159 ComReg proposes that eircom should continue to have an obligation pursuant to Regulation 13(2)(c), not to withdraw access to facilities already granted, unless this has been approved by ComReg. If the withdrawal has a significant impact on the market ComReg may then decide that a public consultation is necessary as a means of approval for withdrawal of the facility.

6.160 ComReg is of the preliminary view that this obligation is necessary to ensure that OAOs have the certainty to provide retail services to the marketplace and so compete with eircom.

6.161 In addition ComReg notes that the gradual migration to next generation network technology might well give rise to an increase in possible cases where eircom might wish to withdraw access to existing facilities. ComReg has considered the issue with regards withdrawal of access where an operator may be required to retain facilities already in place in a time when it is re-designing its network architecture and redeploying network infrastructure and where, access facilities, if not withdrawn, could impede development.

6.162 It is proposed that eircom should continue to seek ComReg approval before withdrawing access to existing facilities, and that ComReg's decision will be proportionate and justifiable and will take into account the potential impact on the market.

6.163 **Preliminary Conclusion: ComReg proposes that eircom should continue to have an obligation not to withdraw access to facilities already granted, unless this has been approved by ComReg as part of its Access obligation.**

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.

- 6.164 ComReg proposes, pursuant to Regulation 13(2)(c) and 13 (3) of the Access Regulations, to oblige eircom to continue to provide specified information which supports 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 are necessary for the provision of existing transit services.
- 6.165 ComReg is of the preliminary 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.
- 6.166 ComReg notes that the RIO is an evolving document and that the specific information required to support wholesale transit services will change over time.
- 6.167 **Preliminary Conclusion: ComReg proposes to continue to oblige eircom to provide specified information which supports existing and future call transit services as part of its Access obligation.**

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.

- 6.168 ComReg proposes to continue to impose the obligation on eircom to meet reasonable access requests and to address any disputes accordingly. This obligation is pursuant to Regulation 13(1) of the Access Regulations.
- 6.169 ComReg considers that access seekers may need to avail of other products which are included within the definition of the relevant wholesale market that will allow them to develop retail offerings to compete in the retail market. An access remedy is the only remedy which allows 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 are not successful any such requests will be reviewed in the context of Regulation 13(4) of the Access Regulations.
- 6.170 ComReg believes that an SMP operator should not have to meet requests that are unreasonable, or are not technically feasible. In assessing whether requests are reasonable, ComReg notes that such requests should not constitute an undue burden on the SMP operator. This means that a request which is 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 is willing to pay.

- 6.171 **Preliminary Conclusion: ComReg propose to continue to impose the obligation on eircom to meet reasonable access requests as part of its Access obligation.**

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.

- 6.172 ComReg is of the preliminary view that, pursuant to Regulation 13 (3) of the Access Regulations, eircom's call origination services should be provided on terms and conditions which are fair, reasonable and timely. In this regard ComReg is of the preliminary view that the terms and conditions should be supported by the Service Level Agreement ('SLA'). SLAs should ensure that eircom have an incentive to provide products and services which are fit for purpose and treat OAOs the same as its own retail arm. ComReg propose to consult with industry on SLAs once the market reviews have been completed. The proposed consultation will focus on the terms and conditions of the SLA and will ensure that the SLA remains useful and effective. Currently ComReg's view is that the SLA is important in order to allow OAOs to approach eircom and ensure that their requests for new or amended products are treated promptly and appropriately. In addition, pursuant to Regulation 13(2)(b) of the Access Regulations ComReg is of the preliminary view that eircom should have the obligation to negotiate in good faith with the undertakings requesting access.
- 6.173 **Preliminary Conclusion: eircom should continue to provide call origination services on terms and conditions which are fair, reasonable and timely. These terms and conditions should be supported by Service Level Agreements as part of its Access obligation.**

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.

- 6.174 Pursuant to Regulation 10(2) ComReg is of the preliminary view 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.
- 6.175 In terms of clarity, the basis for this provision is to ensure that OAOs are not required to buy products that they do not need in order to provide their services, as this would have the effect of reducing their efficiency and ability to compete.
- 6.176 **Preliminary Conclusion: ComReg are of the opinion that eircom should continue to provide call transit services on an unbundled basis as part of its Access obligation.**

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.

- 6.177 Comreg proposes that eircom should continue to be required to provide access to transit services to competitors at an equivalent standard and at an equivalent time as the retail arm.
- 6.178 Furthermore ComReg proposes that eircom should be required to provide competitors with information necessary for access to its transit services at an equivalent time as the retail arm.
- 6.179 **Preliminary Conclusion: eircom should continue to be required to provide access to transit services to competitors at an equivalent standard and at an equivalent time as to its own retail arm as part of its Access obligation.**

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?

- 6.180 ComReg is of the preliminary view 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.
- 6.181 If the provision, by eircom, of certain products is mandated ComReg believe that there may be an incentive for eircom to limit access or make access more difficult. It is obviously necessary for OAOs to have open access to technical interfaces, protocols, and OSS such as is necessary for them to take up mandated products and allow them to compete with eircom at the retail level in winning customers.
- 6.182 **Preliminary Conclusion: Eircom should continue to grant open access to technical interfaces, protocols, or other key technologies and should be required to provide such Operational Support Systems ('OSS') or similar software necessary to ensure fair competition in the provision of services as part of its Access obligation.**

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.

6.183 ComReg considers that it is 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.

6.184 **Preliminary Conclusion: 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.**

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.

6.185 ComReg proposes pursuant to Regulation 13 (2) (h) of the *Access Regulations* to continue to require eircom to provide such operational support systems (OSS) or similar software necessary to ensure fair competition in the provision of services.

6.186 **Preliminary Conclusion: eircom should continue to provide such operational support systems (OSS) or similar software necessary to ensure fair competition in the provision of services as part of its Access obligation.**

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

Transparency

6.187 ComReg proposes that a transparency obligation should continue to be imposed on the SMP operator, eircom. It is stated as part of the Access Directive⁸⁹ 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’.

6.188 Transparency is a necessary means of ensuring that ComReg and OAOs can observe price and non-price terms and conditions for eircom’s wholesale call transit products. A transparency obligation is required to support any accounting separation obligations, as this would allow the calculation of costs and prices (i.e. internal price

⁸⁹ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, Article 9.

Interconnection Market Review - Call Origination and Transit Services transfers) to be rendered visible. This would also allow ComReg to monitor compliance with any non-discrimination obligations, and address competition problems relating to cross subsidisation, price discrimination and the application of price squeezes.

- 6.189 ComReg has considered the existing level of publication of data per the Reference Interconnect Offer ('RIO'). eircom currently publishes a full suite of reference documentation in relation to interconnect products, including call transit services. However, 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.
- 6.190 **Preliminary Conclusion: ComReg proposes that a transparency obligation should continue be imposed on the SMP operator.**

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

- 6.191 In considering the implementation of the transparency obligation, ComReg proposes 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*.
- 6.192 **Preliminary Conclusion: ComReg proposes that eircom should continue to publish a Reference Offer for call transit services on its wholesale website as part of its Transparency obligation.**

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.

- 6.193 In considering the imposition of an access obligation, ComReg noted that eircom should be required to continue to provide information necessary to support call transit services. It is proposed that a transparency obligation would continue eircom's obligation to publish the set of specified information as described in paragraph 6.190 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.

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

- 6.194 ComReg propose to continue to ensure that eircom publish a Reference Offer containing details of access to facilities already granted.
- 6.195 ComReg is of the preliminary view 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

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eircom Switched Transit Routing Price List. All these documents are included on the
eircom wholesale website.

- 6.196 In addition to the above ComReg considers it appropriate to require eircom to publish a reference offer for transit services that is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are 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. ComReg has imposed a similar unbundling obligation on eircom in both the call origination market and the end-user call termination market. ComReg believe that the optimal way to meet this obligation in the three markets is to require eircom to continue publishing the services that fall within these markets, in the same format as they are published in the most recent version of the RIO. ComReg further proposes 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.
- 6.197 ComReg proposes to ensure that eircom 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.
- 6.198 **Preliminary Conclusion: ComReg proposes that eircom should continue to publish a Reference Offer containing details of access of facilities already granted. ComReg proposes that eircom should be required to continue to publish appropriate manuals and documentation for new and existing Call Transit services as part of its Transparency obligation. ComReg is of the preliminary view that eircom should 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. ComReg also proposes that eircom should be required to publish one reference offer for three markets – call origination market, eircom call termination and transit as part of its Transparency obligation.**

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?

6.199 As provided for by Regulation 10 (2) of the Access Regulations, the RIO shall be sufficiently unbundled so as to ensure that other undertakings availing of such facilities are not required to pay for facilities which are not necessary for the service requested and such offer shall 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.

6.200 eircom shall 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 will either approve or amend the proposed changes within a further 3 (three) weeks. eircom shall 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.

6.201 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

Interconnection Market Review - Call Origination and Transit Services list. The updated RIO price list is circulated to OAOs 21 days before the changes come into effect⁹⁰.

6.202 The RIO Price List is published on the eircom wholesale website, and consists of the following documents –

- RIO Change Matrix
- RIO Price List marked version
- RIO Price List unmarked version

6.203 ComReg is of the preliminary view that these obligations should be maintained as it is necessary to provide OAOs with sufficient notice of any changes to the eircom RIO, and it is useful for ComReg to be notified in advance. It is proposed that this process should apply to all the documents relating to the call origination market.

6.204 **Preliminary Conclusion: ComReg proposes to continue to ensure that the current process for publishing and updating the RIO is maintained as part of its Transparency obligation.**

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

6.205 ComReg proposed in the initial review to consult further on the issue of itemised billing. Since the time of the initial review, eircom has been providing itemised billing on an ad hoc basis as requested by other operators. There have been no recent complaints. ComReg therefore proposes that a consultation is disproportionate and unjustifiable at this time.

6.206 It must be noted however that it is general practice in any industry that prior to payment of any bill a full breakdown of what the bill relates to is 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.

6.207 ComReg will continue to monitor the process and will ensure that eircom continue to provide a satisfactory level of granularity so that eircom bills can be reconciled in an efficient manner to operator systems.

6.208 **Preliminary Conclusion: ComReg proposes that eircom’s billing should be sufficiently granular for OAO purposes, but believes that a public consultation at this time is neither necessary nor proportionate.**

⁹⁰ International Access Rates are the exception to this.

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.

Non-discrimination

6.209 ComReg proposes to continue to impose the remedy of non-discrimination on eircom.

6.210 In general non-discrimination requires 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’. The general non-discrimination obligation requires that third party access seekers are treated no less favourably than the operator’s internal divisions.

6.211 ComReg considers that competition problems such as the strategic design of products would persist in this market even where a transparency obligation has been imposed. Therefore in addition to a transparency obligation. ComReg is of the preliminary view that a non-discrimination obligation should be imposed on eircom.

6.212 ComReg considers that eircom must provide information and services to alternative operators in timescales, on a basis, and of a quality, which are at least as good as those provided to eircom’s retail arm and associates.

6.213 It can be noted that the rationale for ex-ante obligations is not the identification of a particular abuse that has occurred but rather the existence of a position of SMP by an operator on a relevant market and where scope and incentive exists for it to engage in anti-competitive behaviour. The imposition of a SMP obligation is intended to guard in advance against anti-competitive abuses occurring.

6.214 **Preliminary Conclusion: ComReg propose to continue with the imposition of a non-discrimination obligation on eircom.**

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.

6.215 It is important that information gained by eircom as a result of their provision of transit services to another operator is not used by eircom’s downstream arms in any manner. The main reason being that eircom wholesale would have visibility of information regarding calls from other operators and therefore maybe in a position at a retail level to use this call information to target new customers hence giving eircom an advantage over OAOs. In other words ComReg believes that eircom’s downstream arms should not have privileged access to eircom wholesale.

- 6.216 **Preliminary Conclusion: ComReg believe that eircom's downstream arm should not have privileged access to eircom wholesale as part of its Non-discrimination obligation.**

Q. 68. Do you agree that eircom's downstream arms should have the same access to eircom wholesale as alternative operators? Please provide detail in support of your response.

Price control and Cost Accounting

- 6.217 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 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.
- 6.218 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.
- 6.219 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.
- 6.220 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

- 6.221 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 the obligation that interconnection services are offered at cost-oriented prices. 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.
- 6.222 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.

- 6.223 The principle that only efficiently incurred costs can be recovered through interconnection charges is one that, in ComReg's preliminary 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.
- 6.224 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

- 6.225 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 website⁹¹.
- 6.226 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 in the interconnection market as a whole 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

- 6.227 ComReg proposes 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 C.
- 6.228 The interconnection rates arrived at in recent years would appear to have achieved the aim of encouraging competition and investment. The rates have not seen material change and more recently the market saw a further progression with the setting of forward looking rates to March 2007⁹². In this information note ComReg noted that the rates set to March 2007 would remain in place as final rates until revised rates are required based on the current pricing methodology, or a wholesale price cap regime is implemented, whichever is the earlier.

⁹¹ www.eircomwholesale.ie/regulatory/

⁹² ComReg Document 06/23 'Information Notice – Interconnection Rates for 2004/05, 2005/06 and 2006/07'

- 6.229 ComReg 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.
- 6.230 The application of the forward looking long run incremental cost (FL-LRIC) method has been preferred to other cost methods such as fully distributed historical costs, and has been recommended by regulatory organisations such as the Independent Regulators Group (IRG)⁹³, as it leads to a set of prices that reflect the real resource costs taken into consideration when investment decisions are made by operators. The application of this method has been used in the past and is commonly seen in other countries as the most appropriate to achieve the desired results.
- 6.231 **Preliminary Conclusion: ComReg believe the current FL-LRIC Top Down Model should be maintained as an approach to setting call transit rates pending the outcome of the consideration of a wholesale price cap.**

Q. 69. 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. 70. 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.

- 6.232 In the responses to the 2004 initial review there was a general agreement among operators that moving to a wholesale price cap regime would be desirable. ComReg has taken note of this and has over the past two years been engaged in a significant project in preparation for such a move. It is hoped that a decision on whether to implement such a cap and the details of any such cap will be concluded in the coming months. In light of this ComReg has decided to consult industry on the principle issues surrounding a wholesale price cap and this is attached in Annex C to this consultation.

⁹³ Regulatory Accounting in Practice, A Report prepared by the IRG Accounting Separation Working Group, ERG (06) 23, April 2006.

Q. 71. Do you agree that ComReg should consider possible approaches to, and implementation of, a wholesale price cap?

Cost Accounting Systems

- 6.233 A cost accounting system⁹⁴ will be necessary where an obligation has 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 has been proposed as an appropriate obligation to be imposed on eircom and therefore ComReg proposes to impose a further obligation with regard to cost accounting systems on eircom.
- 6.234 ComReg is of the view that 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 can provide greater assurances in monitoring non discrimination and address the competition problems identified.
- 6.235 ComReg does not consider that this obligation will be overly time consuming and impose a heavy burden on eircom as they already have such systems in place in order to prepare their existing set of separated accounts and these systems have been in place for some years now. Also given the size of such organisations, it is generally accepted accounting practice to have such systems in place to be in a position to prepare monthly and annual accounts that can support internal business decision making and price setting where appropriate.
- 6.236 **Preliminary Conclusion: ComReg proposes 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 such time as any further consultations are completed.**

Q. 72. Do you believe that the obligation to maintain cost accounting systems should be imposed on eircom? Please provide detail in support of your response.

Accounting separation

- 6.237 Accounting Separation⁹⁵ will help disclose possible market failures and provide evidence in relevant markets of the presence or absence of discrimination and price squeeze. It will make visible the wholesale prices and internal transfer prices of a

⁹⁴ Cost accounting is the process of tracking, recording and analysing costs associated with the products or activities of an organisation.

⁹⁵ 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.

Interconnection Market Review - Call Origination and Transit Services dominant operator's products and services. It can also provide ComReg with relevant data which will allow it to perform its duties to ensure prices are not set in a predatory manner or at an excessive level and provide greater certainty about the costs and volumes for a given service.

- 6.238 An obligation of non-discrimination can require, *inter alia*, the imposition of financial reporting regimes in order to monitor eircom's compliance with such an obligation.
- 6.239 ComReg is proposing that eircom as an SMP operator should have an obligation not to unduly discriminate. The obligation of accounting separation will 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.
- 6.240 ComReg proposes to implement the accounting separation obligation on a service and/or product basis. ComReg believes it is not sufficient to implement such an obligation at a market level as it is 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 are being provided on a non discriminatory basis.
- 6.241 As discussed earlier, in deciding upon the imposition of obligations to support the remedy of competition problems, ComReg must ensure that the obligation is 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 is designed to help provide evidence from eircom which may demonstrate the presence or absence of price discrimination. In this regard, ComReg is of the preliminary view that the imposition of an obligation of accounting separation upon eircom would be justifiable and based upon the nature of the problem identified.
- 6.242 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 does not consider that this obligation will 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.
- 6.243 **Preliminary Conclusion: 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 all the outstanding market reviews. In the interim, ComReg is proposing that eircom be required to maintain the existing level of accounting separation, until any further consultations are completed.**

Q. 73. 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.

Wholesale International Transit Market

6.244 Following on from the market analysis on the outgoing International Transit market ComReg has provisionally concluded that eircom no longer has SMP in this market and hence this market is currently competitive. ComReg therefore proposes removing previously imposed obligations within this market. These obligations include the following:

- Transparency;
- Non-discrimination;
- Access to and use of specific network elements and associated facilities;
- Price Control and Cost Accounting; and
- Accounting Separation.

6.245 An assessment has been carried out on the impact of removing these obligations in the Regulatory Impact Assessment Section 8 below. ComReg proposes to monitor the situation in this market, if obligations were withdrawn in particular as competition has been encouraged through the existence of these obligations.

7 Other services necessary for the provision of Interconnection

Capacity Based Interconnection Products

- 7.1 Earlier in this document, ComReg has set out its views as to the appropriate obligations to be imposed on the markets for call origination and transit markets. It is important to note that these obligations cannot be availed of without certain ‘supporting’ products which are necessary in order to avail of mandated obligations. These are known as capacity based interconnection products.
- 7.2 ComReg considers the products described in Service Schedules 002 (Interconnect Paths) and 005 In Span Interconnection (‘ISI’) in eircom’s current Reference Interconnect Offer on the eircom wholesale website (www.eircomwholesale.ie) and eircom RIO Network Price List (also on the eircom wholesale website) fall within the definition of these capacity based products. 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 cannot be effected and therefore ComReg intends to mandate the provision of capacity based interconnection products outside the market review process; that is without a designation of SMP or without definition of a relevant market. ComReg notes the statement of the EU Commission in its *Explanatory Memorandum to the Recommendation on Relevant Markets*, in which it explicitly addresses the question of imposing SMP remedies in an area outside a defined market. The EU 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* states:
- “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 considers 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* provides ComReg with discretionary powers to ensure adequate access, interconnection and interoperability. In particular, without prejudice to measures that may be taken regarding undertakings with significant market power, ComReg is able to impose, to the extent that it is necessary to ensure end to end connectivity, obligations referred to in Regulations 10 to 14 of the *Access Regulations* inclusive on undertakings that control access to end-users, including in justified cases the obligation to interconnect their networks where this is not already the case.
- 7.6 ComReg notes that with ISI, the precise position of the handover to eircom is not mandated by eircom but is 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 is mandated, then the question of whether or not CSH/CSI is also mandated is

Interconnection Market Review - Call Origination and Transit Services largely academic. ComReg also notes that the relevant market for CSH/CSI would be a national one, whereas the fibre infrastructure being rolled out by the MANs and by the ESB, only covers a limited number of routes and locations. Thus there is no guarantee that the MANs or the ESB would have the required infrastructure in the right place to always facilitate ISI.

- 7.7 ComReg is of the preliminary view that it is not the case that merely having the choice between CSH/CSI and ISI makes the market for interconnect links a competitive one. ComReg's reasoning is that the alternate fibre infrastructure is only available at a limited number of locations, whereas the relevant market for interconnect links is a national one. In areas where alternate infrastructure is not available, the only realistic product available to the OAO, as ComReg understands, would be CSH/CSI. If that product is 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.
- 7.8 ComReg interprets 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, will continue to be supplied under the current terms and conditions. This means the current obligation to provide such products on a reasonable request basis continues. Obligations in respect of transparency and non discrimination also continue. These products will remain subject to price control as in the current regime. Such charges are 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.

Q.74. Do you agree that ComReg should mandate capacity based interconnection products in this manner? Please provide detail in support

Fixed SMS

- 7.9 Fixed SMS is available at a wholesale level and is 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 will be covered through the Wholesale Line Rental provision for Non Discrimination. As such it is 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 is not significant currently and therefore it is not considered proportionate or justifiable to impose further remedies at this time. However ComReg will monitor the market for SMS from fixed lines and should problems arise that are contrary to the above then this will be examined in further detail.

Q. 75. Do you agree with the above position taken by ComReg in relation to Fixed SMS? Please provide detail in support of your response.

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

- 7.10 The charges for access to eircom's DQ and OA services in its RIO include both the costs of conveyance and the labour costs of the operator. Nothing has come to the attention of ComReg since the initial review that would indicate a need to investigate the labour costs of providing a DQ service and therefore no change is proposed currently in this regard.

Q. 76. 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.

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 proposed 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.
- 8.2 In conducting RIA ComReg will take into account the RIA Guidelines⁹⁶, 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.
- 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.

⁹⁶ See “RIA Guidelines: How to conduct a Regulatory Impact Analysis”, October 2005, www.betterregulation.ie

The RIA

Description of policy context and objectives

- 8.6 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 Markets⁹⁷ 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 Regulations*⁹⁸ 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.
- 8.7 Regulation 9(1) of the Access Regulations⁹⁹ states that: *“Where an operator is designated as having significant market power on a relevant market as a result of a market analysis carried out in accordance with Regulation 27 of the Framework Regulations, the Regulator shall impose on such operator such of the obligations set out in Regulations 10 to 14 as the Regulator considers appropriate”*. Furthermore, paragraph 21 of *The SMP Guidelines*¹⁰⁰ 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 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

⁹⁷ 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.

⁹⁸ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003, S. I. No. 307 of 2003

⁹⁹ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

¹⁰⁰ 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)

Interconnection Market Review - Call Origination and Transit Services Regulatory Impact Assessment¹⁰¹. 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 provisionally found that the market is not effectively competitive and has provisionally 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 least 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 It is proposed 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 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 competition problems identified in this market.

¹⁰¹ 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.

- **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 competition 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 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.
Option 2-Access Obligation			
eircom	Competitors	Consumers	Overall Impact
Positive impact on	Negative impact on	Negative impact on	Positive impact

<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>on eircom; Highly negative impact on competition and consumers.</p>
<p>Option 3-Access, Transparency & Non-Discrimination Obligations</p>			
<p>eircom</p>	<p>competitors</p>	<p>consumers</p>	<p>Overall impact</p>
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>
<p>Option 4-Access, Transparency, Non-Discrimination & Accounting Separation Obligations</p>			
<p>eircom</p>	<p>competitors</p>	<p>consumers</p>	<p>Overall impact</p>
<p>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</p>	<p>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</p>	<p>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</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>

wholesale level.	wholesale markets.	innovation levels to decline.	
Option 5-Access, transparency, Non-discrimination, Accounting Separation & Price Control & Cost Accounting Obligations			
eircom	competitors	consumers	Overall impact
<p>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 conditions.</p>	<p>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.</p>	<p>Positive impact on consumer welfare: Consumers benefit from increasing choice of fixed provider and resulting lower prices and possibly enhanced service and innovation levels.</p>	<p>Negative impact on eircom (although regulation already in place); Positive impact on competition and consumers.</p>

* 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.

Preliminary 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.

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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.

Q. 77. 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

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 proposed 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 Guidelines¹⁰², 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, 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

¹⁰² See “RIA Guidelines: How to conduct a Regulatory Impact Analysis”, October 2005, www.betterregulation.ie

Interconnection Market Review - Call Origination and Transit Services 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

- 9.6 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 Markets¹⁰³ 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 Regulations*¹⁰⁴ 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 Regulations¹⁰⁵ states that: *“Where an operator is designated as having significant market power on a relevant market as a result of a market analysis carried out in accordance with Regulation 27 of the Framework Regulations, the Regulator shall impose on such operator such of the obligations set out in Regulations 10 to 14 as the Regulator considers appropriate”*. Furthermore, paragraph 21 of *The SMP Guidelines*¹⁰⁶ 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.
- 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*

¹⁰³ 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.

¹⁰⁴ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003, S. I. No. 307 of 2003

¹⁰⁵ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003, S.I No. 305 of 2003.

¹⁰⁶ 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)

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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 Assessment¹⁰⁷. 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 provisionally found that the market is not effectively competitive and has provisionally 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 least 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 It is proposed 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 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

¹⁰⁷ 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.

- 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 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 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.

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- **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 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
<p>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 competition at wholesale level.</p>	<p>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.</p>	<p>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.</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>
Option 2-Access Obligation			
eircom	Competition	Consumers	Overall Impact
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>
Option 3- Access, Transparency & Non-Discrimination Obligations			

eircom	Competition	Consumers	Overall Impact
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>
Option 4- Access, Transparency, Non-Discrimination & Accounting Separation Obligations			
eircom	Competition	Consumers	Overall Impact
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>Positive impact on eircom; Highly negative impact on competition and consumers.</p>
Option 5- Access, Transparency, Non-Discrimination, Accounting Separation & Price Control & Cost Accounting Obligations			
eircom	Competition	Consumers	Overall Impact
Negative impact	Positive impact on	Positive impact on	Negative

<p>on Eircom: Existing regulatory burden on eircom remains. Wholesale price cap affords eircom more flexibility than the existing price control measure in setting wholesale prices in response to market conditions.</p>	<p>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</p>	<p>consumer welfare: Consumers benefit from increased choice of fixed provider and resulting lower prices and possibly enhanced service and innovation levels.</p>	<p>impact on eircom (although regulation already in place); Positive impact on competition and consumers.</p>
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* 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
<p>Negative impact on Eircom: Eircom would be subject to obligations which might hinder its ability to compete effectively in a</p>	<p>Neutral impact on competition: OAOs would benefit from certainty of regulated access to eircom international gateway</p>	<p>Neutral impact on consumers: Regulated access to the eircom international gateway infrastructure further lowers the barriers to entering</p>	<p>Negative impact on eircom; Neutral impact on competition and consumers.</p>

potentially competitive market.	infrastructure. OAOs competing at the wholesale level would also possibly have more pricing flexibility than eircom. However, not clear such intervention proportionate given nature of existing competition in this market.	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.	
Option 2- Withdraw some Existing Obligations			
eircom	OAOs	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- Withdraw Obligations			
eircom	OAOs	Consumers	Overall Impact
Positive impact on Eircom: Eircom would benefit from withdrawal of regulatory	Neutral impact on competition: OAOs would have reduced certainty of access to eircom international	Neutral impact on consumers: No appreciable difference as the wholesale market would appear to	Positive impact on eircom Neutral impact on

<p>obligations in terms of removal of regulatory burden and improved flexibility to compete in the market place.</p>	<p>gateway infrastructure. However, a number of providers of such services are already in place. In addition, insufficient evidence to suggest that eircom would discontinue offering this service to OAOs on similar terms.</p>	<p>already be tending towards effective competition. Retail prices should as a result continue to benefit from increasing competition at wholesale level.</p>	<p>competition and consumers.</p>
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* 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.

Preliminary 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.

Q.78. 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

Annex A: Draft Decision Instruments

PLEASE NOTE: The Draft Decision Instruments below are 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-Origination

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 Recommendation¹⁰⁸ and is made by the Commission for Communications Regulation ("ComReg"):

- i. Having had regard to sections 10 and 12 of the Act of 2002¹⁰⁹;
- ii. Having taken account, of its functions under Regulation 6 (1) of Access Regulations¹¹⁰;
- 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 Minister¹¹¹;
- vi. Having taken the utmost account of the EU Commission's Recommendation and the SMP Guidelines¹¹²;

¹⁰⁸ EU Commission Recommendation of 11 February, 2003 on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

¹⁰⁹ The Communications Regulations Act, 2002.

¹¹⁰ S.I. No. 305 of 2003 the Access Regulations 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.

¹¹¹ Policy Directions made by Dermot Ahern T.D. (the then) Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

¹¹² Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

- Interconnection Market Review - Call Origination and Transit Services
- vii. Having taken account of the submissions received in relation to document No. [●]; and
 - viii. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations¹¹³, 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 document entitled *Market Analysis: Interconnection Markets* (Document No. 04/106) dated 22 October, 2004. Document Nos. 05/37a, 05/37b, 05/37c and 05/37d form part of this Decision Instrument.

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. 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.

4 SMP Obligations¹¹⁴

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 for access to, and use of, such wholesale access products, features or additional associated facilities, by undertakings requesting access or use

¹¹³ S.I. No. 307 of 2003 the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transposes Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

¹¹⁴ 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.

Interconnection Market Review - Call Origination and Transit Services of such access products, features or additional associated facilities, which form part of 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;
- ii. Pursuant to Regulation 13 (2) (c) of the Access Regulations, not withdraw access to facilities already granted without the prior approval of ComReg and continue to provide such facilities in accordance with existing terms and conditions and specifications;
- iii. 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;
- iv. 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
- v. 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 the wholesale access products, features or additional associated facilities, which are described in:

- i. Service Schedules 002 relating to Interconnect Paths and 005 relating to In Span Interconnection (both as amended from time to time) in eircom's current Reference Interconnect Offer (Version 3.14)(as amended from time to time);
- ii. eircom's RIO Network Price List (Version 2.3)(as amended from time to time);
- 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 eircom's wholesale website.

6 Conditions 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 service level agreements ("SLAs") with Other Authorised Operators ("OAOs") 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;
 - ii. Apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provide services and information to others under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners; and
 - iii. Ensure that information and services are provided to OAOs according to timescales, on a basis, and of a quality, which are at least equivalent to those provided to eircom's retail arm and associates.
- 7.2 Without prejudice to the generality of paragraph 7.1, eircom shall provide access to other undertakings (requesting access in accordance with paragraphs 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 paragraph 8.1, eircom shall:
- i. Publish on its wholesale website, and keep updated, a reference offer ("RO") in respect of the services and facilities referred to in section 5;
 - ii. Ensure that the RO 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 RO 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 RO contains details of the terms and conditions of access in respect of facilities already granted.
- 8.3 Without prejudice to the generality of paragraphs 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

Interconnection Market Review - Call Origination and Transit Services amended from time to time) and eircom RIO Price List Version 1.64 (as amended from time to time)¹¹⁵.

- 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.
- 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 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 other 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”).
- 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 eircom’s RO for interconnection, in respect of charges for PAC, Near End Handover and FRIACO.
- 10.3 Pursuant to Regulation 14 (1) of the Access Regulations eircom shall comply with all of the obligations in relation to cost accounting applicable to it prior to the date of this Decision Instrument until such time as ComReg makes a decision consequent to 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 Continuation in Force of Decision Notices and Directions

- 12.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg

¹¹⁵ These documents are currently published on the eircom wholesale website – www.eircomwholesale.ie

Interconnection Market Review - Call Origination and Transit Services relating to the Market in force immediately prior to the effective date of this Decision Instrument, are continued in force by this Decision Instrument and eircom shall comply with same.

13 Effective Date

- 13.1 This Decision Instrument shall be effective from the [•] day of [•] 2007 until further notice by ComReg.

Mike Byrne
Chairperson
The Commission for Communications Regulation
Dated the [•] day of [•] 2007

[DRAFT] DECISION INSTRUMENT-TRANSIT

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 Recommendation¹¹⁶ and is made by the Commission for Communications Regulation ("ComReg"):

- i. Having had regard to sections 10 and 12 of the Act of 2002¹¹⁷;
- ii. Having taken account, of its functions under Regulation 6 (1) of Access Regulations¹¹⁸;
- 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 Minister¹¹⁹;
- vi. Having taken the utmost account of the EU Commission's Recommendation and the SMP Guidelines¹²⁰;
- vii. Having taken account of the submissions received in relation to document No. [●]; and
- viii. Pursuant to Regulations 25, 26 and 27 of the Framework Regulations¹²¹, and Regulations 9, 10, 11, 12, 13 and 14 of the Access Regulations.

¹¹⁶ 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.

¹¹⁷ The Communications Regulations Act, 2002.

¹¹⁸ S.I. No. 305 of 2003 the Access Regulations 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.

¹¹⁹ Policy Directions made by Dermot Ahern T.D. (the then) Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004.

¹²⁰ Commission Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.

- 1.2 This Decision Instrument is based on the market analysis and reasoning conducted by ComReg in relation to the market for wholesale national call transit services on the public telephone network at a fixed location, related to the consultation document entitled *Market Analysis: Interconnection Markets* (Document No. 04/106) dated 22 October, 2004. Document Nos. 05/37a, 05/37b, 05/37c and 05/37d form part of this Decision Instrument.

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 for wholesale national call transit services on the public telephone network at a fixed location 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. 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 Market defined in this Decision Instrument.

4 SMP Obligations¹²²

- 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 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, which form part of the Market.

¹²¹ S.I. No. 307 of 2003 the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 which transposes Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services.

¹²² 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.

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;
- ii. Pursuant to Regulation 13 (2) (c) of the Access Regulations, not withdraw access to facilities already granted without the prior approval of ComReg and continue to provide such facilities in accordance with existing terms and conditions and specifications;
- iii. 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;
- iv. 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
- v. 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 the wholesale access products, features or additional associated facilities, which are described in:

- i. Service Schedules 002 relating to Interconnect Paths and 005 relating to In Span Interconnection (both as amended from time to time) in eircom's current Reference Interconnect Offer (Version 3.14)(as amended from time to time);
- ii. eircom's RIO Network Price List (Version 2.3)(as amended from time to time);
- 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 eircom's wholesale website.

6 Conditions 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 service level agreements ("SLAs") with Other Authorised Operators ("OAOs") 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;
 - ii. Apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provide services and information to others under the same conditions and of the same quality as eircom provides for its own services or those of its subsidiaries or partners; and
 - iii. Ensure that information and services are provided to OAOs according to timescales, on a basis, and of a quality, which are at least equivalent to those provided to eircom's retail arm and associates.
- 7.2 Without prejudice to the generality of paragraph 7.1, eircom shall provide access to other undertakings (requesting access in accordance with paragraphs 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 paragraph 8.1, eircom shall:
- i. Publish on its wholesale website, and keep updated, a reference offer ("RO") in respect of the services and facilities referred to in section 5;
 - ii. Ensure that the RO 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 RO 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 RO contains details of the terms and conditions of access in respect of facilities already granted.
- 8.3 Without prejudice to the generality of paragraphs 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)¹²³.

¹²³ These documents are currently published on the eircom wholesale website – www.eircomwholesale.ie

Interconnection Market Review - Call Origination and Transit Services
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.

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 to the details of and implementation of accounting separation obligations and cost accounting obligations.

10 Obligations Relating to Price Control and Cost Accounting

10.4 Pursuant to Regulation 14 (1) of the Access Regulations, the prices charged by eircom to any other 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").

10.5 Pursuant to Regulation 14 (1) of the Access Regulations eircom shall comply with all of the obligations in relation to cost accounting applicable to it prior to the date of this Decision Instrument until such time as ComReg makes a decision consequent to 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 Continuation in Force of Decision Notices and Directions

12.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg relating to the Market in force immediately prior to the effective date of this Decision Instrument, are continued in force by this Decision Instrument and eircom shall comply with same.

13 Effective Date

13.1 This Decision Instrument shall be effective from the [●] day of [●] 2007 until further notice by ComReg.

Mike Byrne

Chairperson

The Commission for Communications Regulation

Dated the [•] day of [•] 2007

Annex B: 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.

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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 C: Wholesale Price Cap

- 9.26 In Section 6 of this consultation, ComReg asked whether operators think it is 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 03/16¹²⁴. 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.
- 9.27 As explained previously in this 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.
- 9.28 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.
- 9.29 Currently the main control in place that prevents excessive pricing and protects consumers is the obligation of cost-orientation.
- 9.30 ComReg has completed a full analysis of the Origination and Transit interconnect market to determine if eircom can act to an appreciable extent independently of its competitors and customers. It provisionally 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.
- 9.31 A price cap on fixed interconnection markets would constitute a remedy flowing from Regulation 14 of the **Access Regulations 2003**. In summary, ComReg proposes that 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;
 - 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.

¹²⁴ Consultation Paper on Fixed Interconnection Charging Mechanisms

- 9.32 On the basis of the market analysis, ComReg believes it is 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.
- 9.33 **Preliminary conclusion:** For the purposes of this market review, 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

- 9.34 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.
- 9.35 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 Information¹²⁵. 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 100, 101 and 102. ComReg however must review the eircom model for cost orientation prior to approving the final rates.
- 9.36 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 are in the final stages of completing the modelling process. The primary purpose of this model is to evaluate proposals from eircom regarding Wholesale pricing and to inform it as to likely future trends.
- 9.37 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 will have used external benchmarks in the BU modelling process and expert opinion in some instances where considered more appropriate. ComReg is of the preliminary view that basing modelling on the actual costs and network configuration/utilisation of the operator whose network was being modelled is the only way to avoid bias. It is commonly accepted practice 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 preliminary 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 preliminary 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.

¹²⁵ http://www.eircom.ie/bveircom/pdf/2006_cca_lrlic.pdf

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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.

9.38 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 preliminary 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 preliminary view that great care needs to be taken, for example when considering the selection of the rate of return if investment in new generation technology is to be encouraged.

9.39 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)

9.40 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.

9.41 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

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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.

Q. 79. 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 detail your response.

Q. 80. 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.

Q. 81. 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 bi-lateral 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.

Q. 82. 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.

Q. 83. 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 ins upport of your response.

Q. 84. 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.

Q. 85. 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?

Q. 86. 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 your response.

Q. 87. 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.

Annex D: Consultation Questions

- 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. 10
- 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. 38
- 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. 44
- 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. 49
- 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. 49
- Q. 6. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response. 50
- Q. 7. Do you agree with the above preliminary conclusions regarding market analysis? Please provide a reasoned response. 62
- 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. 67
- 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. 70
- 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. 73
- Q. 11. Do you believe that the outgoing international transit services market meets all the 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. 74
- Q. 12. Do you agree with the principles ComReg proposes to adopt when selecting obligations in this market? 79
- Q. 13. Do you agree 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 businesses? 81
- 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? 81
- Q. 15. Do you agree that an access obligation for call origination should be imposed on eircom? Please provide details in support of your answer. 83
- 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. 83
- 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. 84
- 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. 85

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Q. 19. Do you agree that eircom should have an obligation to meet reasonable requests for access as described above? Please detail your response. 85

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. 86

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. 86

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. 86

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? 86

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. 87

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. 87

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. 88

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. 88

Q. 28. Do you agree that eircom should publish specified information which supports call origination services? Please provide detail in support of your response. 89

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. 89

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. 89

Q. 31. In your opinion is the current process for updating of the RIO adequate? Please provide detail in support of your response 90

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. 91

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. 91

Q. 34. Do you agree that a non-discrimination obligation applied to eircom is necessary to remedy 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 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. 92

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? 92

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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 not longer be provided to those Operators in a position to avail of it? Please provide detail in support of your response. 94

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. 95

Q. 38.In your opinion do you have 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..... 96

Q. 39.Do you agree that ComReg should consider possible approaches to, and implementation of, a wholesale price cap? 96

Q. 40.Do you believe that the obligation to maintain cost accounting systems should be imposed on eircom? Please detail your response. 98

Q. 41.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..... 99

Q. 42.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. 103

Q. 43.Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please provide detail in support of your response..... 103

Q. 44.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. 104

Q. 45.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. 104

Q. 46.Do you agree that eircom should have an obligation to meet reasonable requests for access? Please provide detail in support of your response. 105

Q. 47.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. 105

Q. 48.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. 105

Q. 49.Do you agree that eircom should provide unbundled transit services as part of its Access obligation? Please provide detail in support of your response. 106

Q. 50.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. 106

Q. 51.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?.... 106

Q. 52.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..... 107

Q. 53.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. 107

Q. 54.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 107

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Q. 55. Do you agree that an obligation of transparency should be imposed on eircom? Please provide detail in support of your response. 108

Q. 56. 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. 108

Q. 57. Do you agree that eircom should publish specified information which supports call transit services? Please provide detail in support of your response. 108

Q. 58. Do you agree that eircom should be required to publish a Reference Offer containing details of access to facilities already granted? 110

Q. 59. 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. 110

Q. 60. Is there additional information eircom should provide to ComReg or industry or both? Please provide detail in support of your response. 110

Q. 61. 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. 110

Q. 62. 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? 110

Q. 63. In your opinion is the current process for updating of the RIO adequate? Please provide detail in support of your response. 111

Q. 64. 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. 112

Q. 65. 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. 112

Q. 66. 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. 112

Q. 67. Do you agree that eircom's downstream arms should have the same access to eircom wholesale as alternative operators? Please provide detail in support of your response. 113

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. 115

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. 115

Q. 70. Do you agree that ComReg should consider possible approaches to, and implementation of, a wholesale price cap? 116

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. 116

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. 118

Q. 73. Do you agree that ComReg should mandate capacity based interconnection products in this manner? Please provide detail in support. 120

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. 121

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

Interconnection Market Review - Call Origination and Transit Services not suitable for ex-ante regulation? Please provide evidence to support your answer.	121
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.....	129
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.....	140
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 detail your response.	158
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.	158
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 bi-lateral 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.	159
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. .	159
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.	159
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.	159
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?.....	159
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 your response.	159
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.	160

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: <ul style="list-style-type: none"> 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 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.
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 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 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 price, quality or functionality) from that of the incumbent's is not clear given their continued dependence on the incumbents wholesale inputs.
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 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.	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 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 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. 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:

SMP Criteria	Relevance to SMP Assessment	Relevance to Transit 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 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: <ul style="list-style-type: none"> • 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 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 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 advantages and the sustainability of those advantages	This criterion is not that relevant as it would appear that the competitive

undertaking	that may arise from the large size of an undertaking relative to its competitors.	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 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 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.	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 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

	production) entering the market (e.g. in response to a price increase) within the timeframe considered by the review.	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 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 transit services in Ireland appear limited in their ability to switch suppliers, self-supply or reduce/cease consumption of transit services in response to a price increase by the incumbent, by virtue of the 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, although there has been a significant level of stability in the incumbent's transit pricing over the past 6 years..

