

#### Annex C to Response to Consultation

# Market Analysis – Interconnection markets Annex C – Views of Respondents

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#### **Annex C: Views of respondents**

- C.1 Four respondents agreed that the correct markets had been reviewed, and no other elements were proposed. One of these respondents indicated that some of the distinctions drawn in defining relevant markets depended on the period of the review, and that failure to establish the time period under consideration had consequences for the validity of the overall analysis.
- C.2 One respondent did not agree with ComReg's approach, and suggested that it represented the rollover and extension of the existing regulatory model. The respondent believed that this was unsustainable from a prospective viewpoint, leading to a high cost and inefficient regulatory regime.
- C.3 A total of 7 responses were received. Respondents were:

Alto Hutchinson 3 Ireland

Chorus MCI eircom Vodafone BT Ireland (formerly Esat BT)

C.4 Five respondents replied with some level of detail, and the other two provided text corrections and commented on specific issues.

#### **Market definition**

#### **Scope of Review**

- C.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.
- C.6 The EU Commission recommends, in its Relevant Markets Recommendation, that NRAs should analyse the relevant wholesale markets for:
  - Call origination on the public telephone network provided at a fixed location (including local call conveyance), where origination is delineated in such a way as to be consistent with the delineated boundaries for the markets for call transit and for call termination on the public telephone network provided at a fixed location;
  - Call termination on individual public telephone networks provided at a fixed location (including local call conveyance), where termination is delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call transit on the public telephone network provided at a fixed location; and
  - Transit services in the fixed public telephone network, where such services are delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call termination on the public telephone network provided at a fixed location.
- C.7 The Relevant Markets Recommendation defines call origination services as access or interconnection which can be provided in the form of minutes or capacity. Call

- origination may also be supplied together with switching and/or call conveyance services. The relevant market is considered to comprise of call origination for telephone calls, including accessing dial-up internet service provision.
- C.8 The Relevant Markets Recommendation considers that call termination is required in order to terminate calls. In Ireland, operators may interconnect at relatively high levels in the network and consequently call termination arrangements may, in practice, comprise call conveyance as well as local termination. However, since operators faced by a price increase in high level termination could purchase local call termination separately from the call conveyance part, it concludes that it makes sense to focus on local call termination as the relevant call termination market.
- C.9 The Relevant Markets Recommendation considers that a demand and supply-side substitutability analysis of call termination leads to the conclusion that the relevant markets are individual networks.
- C.10 ComReg has considered the appropriateness of these three market definitions and the appropriate delineation of the boundaries between the relevant markets for Ireland.
- C.11 In related consultations, ComReg has considered the downstream retail markets which require interconnection services as inputs. The markets defined can be seen in Market Analysis Retail Fixed Narrowband Access Markets ComReg document (04/94), and Market Analysis Retail Fixed Calls Markets ComReg document (04/95). The definition of markets containing other wholesale services which can be used as inputs to provide some of the same or similar retail services are found in the following ComReg documents; for example, Response to consultation and consultation on draft decision Market Analysis Wholesale unbundled access (including shared access) to metallic loops and sub-loops, ComReg document (04/40). Further, ComReg has considered a range of the issues surrounding termination, in the context of wholesale voice call termination on individual mobile networks; see Response to consultation and Notification to the EC on wholesale voice termination on individual networks, ComReg document (04/62a).

## Q. 1. Do you agree with the scope of ComReg's review of the interconnection market? Please elaborate on your response.

#### Views of respondents

C.12 Four respondents agreed with the scope of ComReg's review of the interconnection market. One respondent, while not disputing ComReg's definition of the wholesale call origination market, held the view that additional relevant call origination markets existed for each operator who provided exclusive access network infrastructure to end users. This respondent held the view that the termination of calls to service providers was not a wholesale market. The same respondent held the view that there should be two transit markets defined (a trunk transit market and a pure transit market) rather than one single national transit market. Following this initial split, the respondent proposed further segmentation of the pure transit market.

#### ComReg's position

C.13 In considering whether the market definition for wholesale **call origination** should be narrower, ComReg takes the view that the absence of pricing pressure exerted by other operators on the provision of "exclusive" access to specific locations indicates

- that in fact there are not separate markets. ComReg is of the view that the price setting behaviour of such operators is constrained by both demand-side and supply-side substitution pressures exerted in the market place and that the provision of such services falls within the national call origination market defined.
- C.14 ComReg maintains its position that **termination of calls to service providers** is a separate wholesale multi-network market. ComReg has defined wholesale markets that provide the wholesale inputs to the retail access and calls markets, appropriate to national circumstances.
- C.15 In considering whether the **transit** market should be narrower, ComReg maintains its view that there is no significant functional difference between the tandem conveyances of fixed domestic calls beyond the primary exchange. The proposal to further split a 'pure transit' market based on the varying technical requirements associated with each segment is undermined by the acknowledged ability of other fixed operators to either self-provide these services or provide these services to third parties. ComReg, thus, takes the view that the supply side characteristics of all such fixed transit services are sufficiently homogenous to justify defining a single national wholesale transit market.

### Wholesale Market Definition: Boundaries between Call Origination, Call Termination and Transit

- C.16 The wholesale elements required to supply retail telephone services are call origination, call conveyance and call termination. In exercising their powers to define the boundaries between the different types of interconnection service, NRAs must ensure that these elements sum to make the whole. As a result, transit is effectively defined by default, as the service, if any, between origination and termination.
- C.17 The EC treats call origination as intrinsically a local service, and termination as a service which, as outlined above, can contain call conveyance as well as local call termination, but which is more effectively considered as simply a local service.
- C.18 The EC delineates all carriage between tandem switches as transit. This leaves the call conveyance between call origination and call termination involving no or only one tandem switch to be placed in the category which the NRA considers most appropriate. It also considers that the delineation between call origination and transit services (and, presumably, between call termination and transit services) is a function of network topology and the boundaries can therefore be set so as to suit local circumstances.
- C.19 ComReg takes the view that because a particular item of equipment may perform different functions in conveying different call types, tandem/transit conveyance should be defined by reference to the routing of the call rather than the items of equipment used to route the particular call. For this reason, it intends to correlate the EC's terminology with eircom's existing definitions of primary, single tandem and double tandem conveyance.
- C.20 ComReg proposes to functionally define the boundaries of the relevant markets for 'origination' and 'termination' as congruent with those functions performed by a local exchange, directly connected to a customer in originating and terminating a call, in

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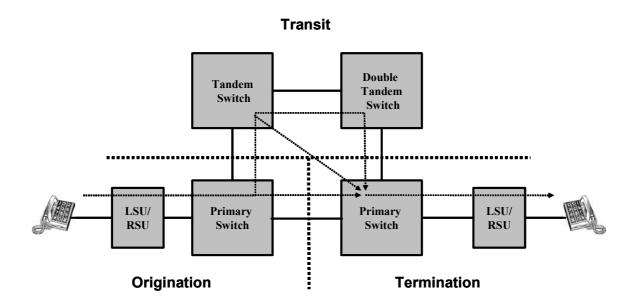
exactly the same way that eircom currently defines its primary origination and primary termination conveyance.<sup>1</sup>

- C.21 Origination services incorporate carriage from the end-user's local loop, including the concentrator (local or remote (Local Subscriber Unit or Remote Subscriber Unit in the diagrams that follow)), but excluding the subscriber's line card in its entirety, through the primary switching stage to the next element in the call routing. The Line Unit is the concentrator of the exchange, which may either be local to, or remote from the main switching element itself. The Subscriber Line Card is a PCB (Printed Circuit Board) which forms the interface between the local loop and the access network. The functions on the card are necessary for the proper operation of the loop and they are dedicated to line by line and cannot be shared. ComReg classifies these as entirely within the bundled local loop that eircom wholesale provides to its retail arm. An OAO, on unbundling a line, provides its own Subscriber Line Card to attach to eircom's unbundled loop. ComReg has argued that the costs of the card must be considered as a whole as costing and exchange at PCB level is questionable, while further subdivision of cost within a card is increasingly arbitrary. Thus the total cost of the line card is ascribed to the access network, and none to the core network, when the line card is provided by eircom wholesale to eircom retail. An OAO renting an unbundled loop finds that it comes without a line card and has to provide its own, bearing the total cost of the card.
- C.22 Thus, in the case of an own exchange call (which is a call originating and terminating on the operators own network and which is on the same exchange), local call conveyance takes the call from the local loop to the mid point of the switch and local call termination completes the call, from that mid point to another local loop served by the same exchange. Where a local call is not an own exchange call, origination and termination are carried out by different local exchanges and the transmission plant between these exchanges is shared between the services. Primary call origination similarly takes the call from the local loop to a local point of interconnection and primary call termination receives the call at that point and roots it to the terminating local loop.
- C.23 Transit conveyance then comprises all other elements of call routing, involving at least one tandem exchange. Transit will therefore embrace the tandem and double tandem elements of calls which eircom currently classify as 'call origination/termination tandem' and call 'origination/termination double tandem', while these calls will also involve either call origination or termination, respectively. Transit exchanges may be part of the originating operator's network, the terminating operator's network, or a third parties' network. In the case of multifunctional exchanges, the same exchange may originate or terminate some calls and transit other calls (when local loops which it serves are not involved in either the inbound or outbound leg of the call).
- C.24 While the majority of tandem switches are specifically designed for the purpose of switching calls between other exchanges, (i.e. they operate together with primary exchanges), multi-functional exchanges are capable of performing both functions. Such exchanges function as tandem exchanges when connecting two inter-exchange ports across their switch block and as primary/local exchanges when they connect an end-user port to an inter-exchange port, or to another end-user port. Handling end-users is more expensive than passing traffic between exchanges so that simple tandem

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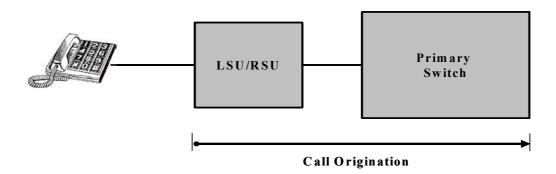
<sup>&</sup>lt;sup>1</sup> <u>www.eircomwholesale.ie</u> – eircom Reference Interconnect Offer, Annex A of the Standard Contract

- exchanges offer cost advantages. However, where space is limited and/or expensive i.e. central Dublin, it may make sense to install multi-function exchanges.
- C.25 eircom's current tandem and double tandem call origination charges incorporate elements of both call origination and transit. This method of charging is sensible for calls involving both call origination and transit and reflects the fact that the transit stage can involve either one or two tandem exchanges.
- C.26 The elements of the relevant wholesale services can be illustrated as follows:



#### **Market Definition: Call Origination**

C.27 Origination services provide primary switching functionality at the beginning of a call. They incorporate carriage from the end of the end-user's local loop (which loop includes the subscriber's line unit, or card, in its entirety), through the primary switching exchange, including the concentrator (local or remote - Local Subscriber Unit or Remote Subscriber Unit in the diagram below), to the next stage in the call routing (either call termination or transit).



- C.28 ComReg takes the view that the scope of the wholesale market definition is conditioned by the extent to which operators require access and origination services to be able to provide the relevant range of retail narrowband services. Thus, demand for call origination services stems from:
  - indirect service providers (Carrier Pre-Selection (CPS), Carrier Selection (CS), Carrier Access (CA)) purchasing simple call conveyance from the Access Provider (currently eircom's call origination services) possibly together with Wholesale Line Rental (WLR); and
  - terminating (and transit) providers seeking to carry and/or terminate calls (including self-provision of call termination by the originating operator).
- C.29 In defining the relevant wholesale origination services market, ComReg has addressed the following issues:
  - whether fixed origination services, self-provided access and origination services using owned facilities, and/or purchased facilities and/or leased facilities belong in the same relevant product market;
  - whether self-supply should be included in the relevant product market, together with wholesale services provided to third party retail service providers;
  - whether wholesale services provided over different fixed networks belong in the same relevant product market;
  - whether the supply of wholesale metered and unmetered call origination services belong in the same market;
  - whether origination services provided for the provision of retail calls to end-users and calls to service providers fall within the same relevant market; and
  - whether origination services for retail calls to DQ and OA services (and subsequent call completion) fall into the market into which other origination services to service providers fall.

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

#### Demand-side substitutability

- C.30 Call origination on the public telephone network provided at a fixed location entails the conveyance of a switched call from the end-user customer's access network through the primary switching exchange to the next stage in the call routing. In addition, ancillary billing, collection and credit and risk management services are ordinarily provided alongside the carriage services.
- C.31 Call origination can be 'self-provided' by a network operator (who provides the enduser network connection, local access network and the transmission services over the connection) or provided by such a network operator to third party service providers. Therefore, a new entrant service provider could consider constructing an alternative end-user network connection, to avoid having to acquire origination services. A small

amount of such green field alternative end-user network connection construction occurred historically through the construction of cable networks. However, there has been little brown field upgrading of installed uni-directional cable networks to facilitate the provision of retail voice telephony services. ComReg does not believe that, within the timeframe of the review, additional cable network construction (either greenfield or brownfield) is likely to occur that would provide alternative end-user network connections. Likewise, Fixed Wireless Access (FWA) also needs to be considered in this market definition. Currently, eircom and BT Ireland provide services in the 3.5 GHz and 26GHz band via FWA. Both voice and Internet services can be delivered to end-users over these platforms. At present, the service tends to be limited to specific areas and, to some extent, the use of narrowband FWA can be seen as choice of supply by the supplier (since eircom and BT Ireland are currently the only operators of narrowband FWA services), rather than a choice of product demanded by the user. There are currently close to 2,000 users of narrowband FWA in Ireland representing approximately 0.1% of exchange lines.

- C.32 Because of the sheer cost of construction of alternative local access networks, ComReg does not believe that the construction of such alternative end-user connections is a viable large scale substitute for origination services for providers seeking to provide retail voice call services.
- C.33 Short of constructing an alternative network, a service provider may purchase or lease the end-user network connection from the network operator (e.g. acquire an unbundled local loop or a leased line including partial circuits). However, ComReg's preliminary view is that purchasing or leasing the end-user connection is not a substitute for call origination. A service provider acquiring a leased line, including the local tail terminating at the end-user's network termination point, is not acquiring a service that is functionally equivalent to wholesale origination services. A leased line provides the purchaser with control of the end-user network access point, rather than with switched carriage between that access point and the primary switching switch. It provides dedicated, rather than switched, capacity and, with an appropriately conditioned leased line, the purchaser can provide a broad scope of services to the end-user.
- C.34 OAOs could acquire wholesale leased lines or partial private circuits to extend their networks to the customer's premises, at least for larger customer sites. However, this requires a substantial financial commitment which creates a barrier to the use of leased lines, given the inherent risk that the traffic volumes generated might not warrant the expenditure made to acquire the capacity. The pricing of origination services and terminating segments of leased lines, respectively, reflects the functional differences, and is such that it is unlikely that service providers would promptly switch between wholesale origination services and leased lines or vice versa, in response to a 5 to 10% increase in price.
- C.35 Local Loop Unbundling (LLU) allows other companies to take over the control of the local loop facilities of the infrastructure owner. The service provider uses its own switching equipment and extends the 'unbundled local loop' to its own switching facilities, as appropriate.
- C.36 There is a significant difference in the functionality provided by wholesale switched call origination and by Unbundled Loop Metallic Path (ULMP). Unbundled local loops give the purchaser control over the end-user's network access point and make possible the provision of a broad scope of services, going well beyond the functionality of wholesale switched origination services. However, ComReg has noted

in its review of the retail fixed narrowband access market that, although ULMP can be used to provide voice services, currently the product is used predominantly for the provision of broadband access<sup>2</sup>. Where ULMP lines have been purchased by OAOs (and only a few hundred have been since the introduction of LLU in 2001), they are used to provide high capacity data services. All the information available to ComReg indicates that this pattern of use is unlikely to change in the foreseeable future.

- C.37 There is a substantial pricing differential between wholesale call origination services and unbundled local loops. The disparity is particularly stark if the OAO is not intending to provide the full range of retail narrowband services over such unbundled loops (to allow the OAO to take some advantage of economics of scope to spread the costs). Furthermore, in order to offer call origination services by purchasing an unbundled local loop, it would be necessary to offer a competing national network service equivalent to eircom's. A supplier would have to un-bundle in excess of 1,000 exchanges each of which involves considerable time and costs, and to provide physical connectivity to each of those exchanges. It is unlikely that a supplier would enter the market with a view to only providing wholesale call origination services.
- C.38 It is not envisaged that a purchaser of wholesale call origination would react to a price increase of wholesale call origination services, in the range of 5 to 10%, by a hypothetical monopolist, by purchasing an unbundled local loop or by green-field construction of alternative networks.

#### Supply-side substitutability

C.39 The key question for supply-side substitutability is whether a supplier of end-user network connections (either on a leased or purchased basis) could switch with relative ease, in a timely fashion, to providing wholesale origination services to third party service providers, in response to a 5 to 10% increase in price by a hypothetical monopolist provider, and *vice versa*. ComReg takes the view that the cost (and price) differentials and functionality differences, between the provision of end-user connections, on one hand, and wholesale call origination on the other hand, are such that suppliers would not respond to a 5 to 10% increase in price by switching supply.

#### **Conclusion**

C.40 ComReg's conclusion is that construction of alternative facilities and/or purchased and/or leased network connections, are not in the same relevant product market as fixed origination services.

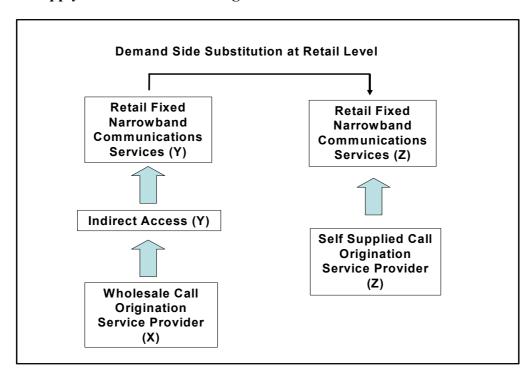
#### Should self-supply be included in the same relevant product market?

C.41 ComReg has considered whether it is appropriate to include self-supplied wholesale origination services in the relevant product market. It is clear that suppliers of wholesale origination services both self-supply origination functionality and supply wholesale origination services to third parties (in addition to the underlying local access service). The balance of administrative practice of the European Commission has been to exclude self-supply for the purpose of defining markets. However, the Commission derogates from this general principle in circumstances in which it has determined that the characteristics of particular markets are such that self-supply exerts competitive pressure on sales to third parties. It is also important to recall that, in the absence of historical regulatory intervention, there would be few (if any)

<sup>&</sup>lt;sup>2</sup> See ComReg Doc. 04/94 – Market Analysis – Retail Fixed Narrowband Access Markets 10 ComReg 05/37b

- communications 'access markets'. It is clear, the sector displays strong differentiating characteristics from other sectors.
- C.42 In effect, the hypothetical monopolist (X) supplying wholesale call origination services to indirect access providers (Y) would be subject to a competitive constraint from integrated fixed network operators (Z) at the retail level. An increase in the price of wholesale call origination would, in turn, translate into an increase in the retail price of fixed voice telephony services that incorporate the wholesale product, assuming that the increase at the wholesale level is passed through to the retail level. As a result, indirect access providers (Y) are likely to lose customers to the integrated monopolist supplier of wholesale call origination services (Z). Accordingly, the hypothetical monopolist supplier of wholesale call origination services (X) would lose sales, while the self-supplied call origination functionality of the integrated firm would increase sales. The competitive constraint on the hypothetical monopoly supplier would come from demand.

#### **Self Supply of Wholesale Call Origination Services**



C.43 It would appear that inclusion of self-supply of call origination functionality in defining the relevant product market, reflects economic principle and is consistent with emerging Community jurisprudence and European Commission practice.

#### Conclusion

C.44 ComReg's conclusion is that self-supply should be included in the relevant product market, together with wholesale services provided to third party retail service providers.

### <u>Is there a single relevant market for the supply of wholesale metered and unmetered call origination services?</u>

#### Demand-side substitutability

- C.45 Fixed wholesale origination services are provided both as minutes and as capacity (i.e. on a metered basis and on an unmetered basis, such as FRIACO). Functionally, both metered and unmetered wholesale origination services can be used to provide the same retail service. The difference lies entirely in the charging arrangements. 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.
- C.46 The viability of doing so is solely a matter of the pricing of both services. The 'capped' nature of many retail unmetered services (i.e. with metered charging beyond the capped usage) further highlights the substitutability. Table C.1, below, illustrates how both inputs are currently used in Ireland.
- C.47 It is clear from Table C.1 that both metered and unmetered wholesale services are acquired by service providers wishing to provide both metered and partially unmetered services at the retail level. All providers of 'unmetered' services offer a capped product. Thus, any attempt to draw a clear distinction between supply of metered and un-metered wholesale services by reference to the retail services provided would be unsustainable.

**Table C.1: Retail un-metered internet products** 

Product	Wholesale Product	Hours per month	Cost per Month	Notes	Excess On- Peak Per Minute	Excess Off- Peak Per Minute	Min. Contract
UTVip XL	Un-metered	180	€24.95		3.8c	0.95c	3 months
IOL Anytime	Un-metered		€29.99	24/7	3.8c	1.3c	1 year
Eircom	Un-metered	150	€29.99	Anytime	5.07c	1.26c	1 month
Anytime							
UTVip Lite	Un-metered	30	€9.99		3.8c	0.95c	3 months
IOL	Metered	80	€21.99		3.8c	1.3c	1 month
Netsmart	Metered	50	€14.99	Off Peak			
	Metered	30	€9.99	Only			
Eircom: Flat	Un-metered	60	€19.99		5.07c	1.26c	1 month
Rate 60							
Eircom: Flat	Un-metered	25	€9.99				
Rate 25							

Source: ComReg Consultation on Interconnection Markets – Doc. 04/106

C.48 One operator has also explained to ComReg how it utilises Carrier Access and Carrier Select codes (both metered wholesale products) to provide a full range of services, differentiated by their retail pricing and corresponding periods of unmetered access, and how these services dovetail with those it provides using an unmetered wholesale product.

- C.49 ComReg has considered current pricing differentials, the limited price trend developments for unmetered products and available qualitative evidence concerning usage patterns.
- C.50 The information available to ComReg appears to suggest that, while consumers would consider obtaining an internet package with unlimited internet access for a monthly fee, households spend, on average, only 32 hours a month on-line. Survey data indicates that 50% of those surveyed would be interested in availing of a partial flatrate internet service that provided up to 30 hours per month with a monthly subscription fee. As a result, truly unlimited internet access services are likely to be perceived as excessive by many. It appears that the partial flat-rate services (e.g. the capped style described above) have been developed to meet consumer demand.

#### Supply-side substitutability

C.51 ComReg takes the view that supply-side substitutability is such that it is clear that a hypothetical monopolist supplier of metered wholesale fixed origination services would be unable to profitably raise prices by 5 to 10%, because suppliers of unmetered wholesale fixed origination services would be in a position to enter the market immediately, at virtually no cost.

#### **Conclusion**

C.52 ComReg's conclusion is that the supply of wholesale metered and unmetered call origination services belong in the same relevant market.

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

- C.53 Only the operator with control over the end-user connection (the local loop) can provide origination services on that particular network. Origination services are acquired by a number of different types of buyers: by an OAO CPS service provider; by the retail arm of the originating network operator; or by a terminating operator.
- C.54 Where the retail services sought to be provided are calls to end-users, origination services are provided either to OAO CPS providers or are self-supplied by the originating operator. Where the retail services sought to be provided are calls to a service provider, origination services are provided to a terminating operator. The providers of both types of retail services acquire "end-to-end" connectivity (i.e. origination, termination and, where necessary transit) from their service provider (which might or might not be vertically integrated with the provider of originating/ terminating services). Pricing of these services depends on the type of call made and how the relevant providers are compensated.

#### Origination of calls to end-users

C.55 In the case of calls to an end-user (charged, at the retail level, on a calling party pays basis), the calling end-user is price sensitive. The end-user has the ability to choose its originating operator, based on the level of pricing at the retail level. This ability to choose an originating operator imposes an indirect pricing constraint on the wholesale price offered for origination.

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<sup>&</sup>lt;sup>3</sup> Amarach Consumer Trend Watch – May 2003

- C.56 At the wholesale level, *a priori*, from the perspective of an operator demanding wholesale call origination (i.e. the demand-side), a purchaser of call origination will seek to acquire origination from an entity able to enable it to reach almost all endusers. Hence a ubiquitous network (such as eircom's) cannot be substituted by fragmented networks (such as the existing alternative networks in Ireland), given the small number of subscribers for which these networks can provide origination services.
- C.57 However, on the supply-side, eircom can switch to supply origination services in response to a price increase of 5 to 10% by a hypothetical monopolist, supplies in relation to all but a *de minimis* number of end-users, quickly and at little cost. Thus, it appears that there is one-way substitutability between the OAOs and eircom.
- C.58 In addition, it is also important to consider the role of the indirect retail pricing constraint imposed by self-supply (including self-supply by OAOs). This appears to put self-originated calls (by both OAOs and eircom) into the same relevant wholesale market as origination services provided to third parties.
- C.59 ComReg, therefore takes the view that wholesale call origination for calls to end-users is a multi-network operator market in the sense that the market includes:
  - (i) wholesale call origination provided by a nationwide network (such as eircom's); and
  - (ii) self-provided calls provided by all operators (independent of network size).

#### Origination of calls to service providers

- C.60 In the case of calls to service providers, ComReg notes that the indirect retail pricing constraint identified above also impacts on the relevant wholesale origination services acquired for the provision of end-to-end connectivity to service providers. It does so in relation to the end-user's choice of originating operator (where it has such a choice) because the end-user chooses that operator on the basis of the calls in relation to which it is price sensitive (e.g. calling-party-pays tariffed calls to end-users). As highlighted in the Market Analysis: Retail Calls Markets ComReg Document 04/95, an end-user chooses to purchase a bundle of call services. The end-user does not choose its access provider (i.e. the operator able to provide origination services) separately for calls to end-users and calls to service providers. Hence, the calling-party-pays choice has an indirect effect in relation to wholesale origination services provided for all calls (including calls to service providers).
- C.61 Directory enquiry services (including call completion services) can be considered to be a call to a service provider. Further, since they are charged on a calling-party-pays basis at the retail level, the indirect effect of the choice made by the end-user at the retail level, flows through to the wholesale level. There are only two providers of these services (Conduit and eircom). ComReg has no evidence to suggest that the origination services supplied for the purposes of providing directory enquiry services are functionally any different to such services provided for other calls to service providers or that they are provided on terms or other conditions that create significantly different dynamics of supply. As such, it appears that directory enquiry calls are part of the single relevant product market for wholesale call origination services.
- C.62 Moreover, the wholesale inputs required to provide other services such as operator assisted services and related call completion services are purchased at the wholesale

- level in the same way that such inputs are acquired for other calling-party-pays services.
- C.63 On balance, ComReg takes the view that there is a single relevant product market for wholesale origination services for calls to end-users and calls to service providers. This includes both such origination services provided for directory enquiry services, operator assisted services and call completion services.

#### **Conclusion**

C.64 ComReg's conclusion is that there is a single multi-network relevant market for wholesale call origination services.

#### Is the relevant geographic market Ireland?

- C.65 ComReg proposed that the relevant geographical market for call origination is Ireland. A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas.<sup>4</sup>
- C.66 According to the EC Guidelines, in the electronic communications sector, the definition of the geographical scope of the relevant market is generally determined with reference to the area covered by a network, and to the existence of legal and other regulatory instruments.
- C.67 Origination services are offered to and by all operators in Ireland on terms that do not differentiate by reference to geographic location. In particular, the charges are geographically averaged. Further, geographic averaging at the retail level exerts an indirect uniform pricing constraint on wholesale call origination pricing.

#### **Summary Conclusions: call origination**

- C.68 ComReg proposes that there is a relevant market for wholesale call origination services on the public telephone network provided at a fixed location.
- C.69 Thus the relevant product market is defined such that;
  - The relevant market does not include alternative facilities or purchased or leased network connections, which would be capable of delivering fixed origination services;
  - it is appropriate to include self-supply of fixed origination services in the relevant market;
  - wholesale origination services provided over different fixed networks belong in a single multi network relevant product market;
  - the supply of wholesale metered and unmetered call origination services belong in the same relevant market; and
  - directory enquiry services and operator assisted services and other call completion services are part of the relevant market for wholesale call origination services.

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<sup>&</sup>lt;sup>4</sup> See the Commission Notice on Market Definition, SMP Guidelines, [ComReg's Market Data Information Notice] and United Brands v. Commission, [1978] ECR 207, for additional guidance.

- C.70 The relevant geographic market is Ireland.
  - Q. 2. Do you agree with the product market definition of the market for wholesale call origination services? Please elaborate on your response.
  - Q. 3. Do you agree that the relevant geographic market for wholesale origination services is Ireland? Please expand in your response.

#### Views of respondents

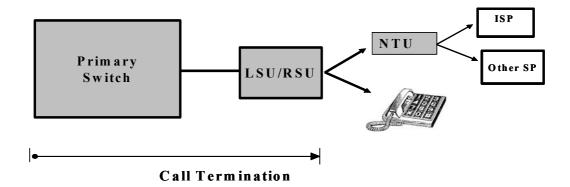
- C.71 Three respondents agreed with the product market definition of the market for wholesale call origination services. One respondent, while not disputing ComReg's definition of the wholesale call origination market, proposed that where a single supplier provides exclusive access to specific locations, the exclusive ownership and control of the specific access network delineates each case as a separate market. The respondent did, however, accept that this case is not part of the Recommendation on Relevant Markets.
- C.72 Three respondents agreed with ComReg's conclusion that the relevant geographic market for wholesale call origination services is the Republic of Ireland. One of these respondents also noted that the level of retail pricing complexity that would be introduced by geographically de-averaged call origination services would be high. In addition the development of the underlying LRIC cost models and separated accounts for such an arrangement would be complex. One respondent did, however, reiterate its view that where a single supplier provides exclusive access to specific locations, the exclusive ownership and control of the specific access network delineates each case as a separate geographical market.

#### ComReg's position

- C.73 ComReg recognises that there may be circumstances where a single supplier provides access to a specific location. However, where it is economically viable for an OAO to provide access in the first place, ComReg is of the view that alternative suppliers could build out to the location and offer call origination services, in response to a small but significant price increase. Such demand and supply-side substitutability would act as a constraint on the pricing behaviour of suppliers to specific locations.
- C.74 Because of the high probability of supply side substitution, ComReg feels that it would be inappropriate to define each location as a separate market.

#### **Market Definition: Call Termination**

C.75 Termination services provide primary switching functionality at the terminating end of a call. They incorporate carriage from the end of the previous stage in the call routing (either call origination or transit), through the primary switching exchange, including the concentrator (local or remote - Local Subscriber Unit or Remote Subscriber Unit in the diagram below), to the end-user's local loop, including the subscriber's line unit, or card, in its entirety.



NTU: Network Terminating Unit ISP: Internet Service Provider

SP: Service Provider

LSU: Local Subscriber Unit RSU: Remote Subscriber Unit

- C.76 Wholesale call termination services are required to be able to terminate retail calls. As a result, demand for wholesale fixed termination is driven by downstream retail voice telephony services. In essence, if end-user (X) (using a network connection on fixed network (A)) calls end-user (Y) (at a geographic number that is associated with a network termination point on fixed network (B)) or seeks to acquire the service associated with a non-geographic number assigned to a service provider hosted by fixed network (B), fixed network operator (A) provides an origination service and fixed network operator (B) provides a termination service. Only where the retail call is an on-net call are wholesale origination and termination services provided on the same network.
- C.77 In defining the wholesale call termination market(s), ComReg has considered the following factors:
  - whether termination services for calls to end-users and calls to service providers fall within the same relevant product market;
  - whether relevant markets for termination of calls to end-users and termination of calls to service providers are single-network markets
  - whether self-supply should be included in the relevant markets;
  - whether the relevant market for wholesale call termination for calls to service providers on the public telephone network provided at a fixed location includes voice and data calls;
  - whether the relevant market for termination of calls to service providers includes all call types

C.78 the scope of the relevant geographic market.

### <u>Do termination services for calls to end-users and calls to service providers fall within the same relevant product market?</u>

- C.79 Calls to end-users are typically calls to geographic and mobile numbers and hence require geographic termination services. They are terminated by the network operator controlling the termination point with which the called geographic number is associated, for a charge imposed on the calling party. They are priced on a calling-party-pays basis.
- C.80 Calls to service providers, which are typically calls to non-geographic numbers, are terminated by the network operator routing the call to the termination point associated with the relevant number, hence non-geographic termination services. There are a number of different types of non-geographic voice traffic, including freephone, premium rate, shared cost, universal access and dial-up Internet access services. These are charged using differential charging models, depending on the type of call. For example, the total retail charge for freephone services is borne by the called party. Premium rate services are charged to the calling party. Other shared cost services are charged to both the called and calling parties.
- C.81 ComReg's Consultation on Fixed Retail Calls Markets<sup>5</sup> has concluded that a demand side analysis shows that these retail services are not functional substitutes and do not exert pricing pressure on each other. However, an analysis of supply-side substitutability shows that suppliers of any such services would be able to switch supply to any other such services quickly and at reasonable cost in response to a 5 to 10% price increase by a hypothetical monopolist supplier of the latter service.

#### Functional substitutability

C.82 Termination services for calls to end-users and calls to service providers are acquired by originating operators or CPS operators seeking to terminate fixed calls (i.e. such operators acquire termination services to be able to supply end-to-end connectivity to retail service providers). Further, they are self-supplied by terminating operators seeking to offer such connectivity to retail service providers. Thus, termination services for both calls to end-users and service providers are functionally equivalent services

#### Pricing

- C.83 There are clearly differences in the terms and conditions on which different retail services are provided which have the potential to affect demand. In particular, there would appear to be differences in the pricing (and payment) structures that are relevant. The competitive dynamics in the interconnection markets are, to a large part, are shaped by the payment flows (based on calling-party-pays; called-party-pays or shared costs).
- C.84 As an end-user or a service provider requires end-to-end connectivity, these payment flows are examined in their entirety, across call origination, transit and call termination:
  - Calls to end-users (for directly connected calls) collection of retail charges by originating operator (also operating as the supplier of retail services); originating operator retains its portion of the retail sum (reflecting billing costs, bad debts, credit control, collection and conveyance) and pays the balance to the terminating operator for termination;

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<sup>&</sup>lt;sup>5</sup> ComReg document (04/95).

- Calls to end-users (for CPS calls) collection of retail charges by CPS operator (as the supplier of retail services); CPS operator pays originating operator its origination charge, retains its portion of the retail sum (reflecting billing costs, bad debts, credit control, collection and conveyance) and pays the balance to the terminating operator for termination; and
- Calls to service provider collection of retail charge by terminating operator from the service provider (as the supplier of the end-to-end connectivity service to the paying party); terminating operator pays the originating operator and, where relevant, the CPSO and/or transit provider<sup>6</sup>.
- C.85 Retail charges for calls to end-users are set and collected by the originating or CPS operator. Competition between originating and CPS operators exerts downward pressure on such retail prices.
- C.86 The retail pricing structure for calls to end-users (based on a calling-party-pays principle) ensures that there is little pressure on termination rates from retail customers (other than when the retail service provider passes through increases in termination rates to retail customers who, as a result, become aware of such increases)<sup>7</sup>.
- C.87 It is important to recall that the charges for retail calls to service providers include sums not referable to the underlying services provided, and are effectively determined at the outset by the service provider (through its selection of the particular number range e.g. whether it is a freephone or a premium rate number). The portion of the retail revenue that is paid to the service provider (or, in the case of freephone calls (charged on a called-party-pays basis), retained by the service provider after paying the terminating operator) is determined through negotiation between the service provider and the terminating network operator.
- C.88 Providers of retail calls to service providers ordinarily acquire end-to-end connectivity from the operator providing termination services. However, it is important to note that within the market for call termination for calls to service providers, there can be different payment flows depending on the type of retail call for which the termination services are acquired.
- C.89 Call termination services provided for calls charged on a calling-party-pays basis is used to provide calls such as internet access or premium rate numbers. The competitive dynamic evolves from the ability of the service provider to negotiate the price of termination.
- C.90 Call termination services provided for calls charged on a shared cost basis is used to provide calls to a local number. Again, the service provider has the ability to negotiate the price of termination.
- C.91 Call termination services provided for calls charged on a called-party-pays basis is primarily used for freephone calls. The called-party-pays principle means that the service provider has a clear incentive to minimise the charges it pays, or maximise those it receives, but this incentive is reflected in the commercial terms of its retail relationship with its host (terminating) network, not the inter-operator interconnect charges. In essence, the pricing pressure exerted by service providers on the terminating network operator means that, from a demand side analysis, there is a

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<sup>&</sup>lt;sup>6</sup> Annex B illustrates these payment structures.

<sup>&</sup>lt;sup>7</sup> For example, Belgacom passed through Telenet's increased termination charge to callers following Telenet's 2002 attempt to increase that termination charge.

- separate multi-network market for call termination services for calls to service providers.
- C.92 Although there are different payment mechanisms and flows for each of these different call categories, ultimately the ability of the service provider to negotiate with the network operator means that these calls fall within the same relevant market for call termination services on multiple networks for calls to service providers.
- C.93 As noted, the revenue flows between the terminating operator (or host) and the service provider is the subject of commercial negotiation.
- C.94 ComReg has no evidence that the negotiations between the service provider and the (hosting) terminating operator impose any kind of constraint on the terminating operator's power over (termination) price (although it clearly impacts on the revenue share earned by the terminating operator). More particularly, it appears that such negotiations create an incentive for the terminating operator to increase the termination retention, at the expense of the origination charge, to enable the terminating operator to offer the service provider a larger portion of the total retail revenues (or, in some instances, charge the service provider less), to reduce the extent to which it has to sacrifice its termination charge.
- C.95 It is clear that there are a range of indirect pressures on the price setting mechanisms for termination services for retail services for calls to end-users (calling-party-pays) and calls to service providers (both called-party-pays and shared costs). However, the data available to ComReg suggests that the negotiation between originating and terminating operators remains the primary competitive driver.
- C.96 eircom's origination and termination rates have been regulated since 2000. As a result, they represent ComReg's surrogate for competitive prices, calculated using FL-LRIC (Forward Looking Long Run Incremental Cost) cost models, rather than the result of negotiations between the parties. Further, the so-called "deemed to be" regime effectively imposes eircom's rates on OAOs. The settlement fee between the originating and terminating operators is calculated by deducting the originating operator's call origination costs from the retail price for the call, as with all calls to service providers of any type. In the Irish context, the retention rate of eircom is regulated and it imposes the same rate on all other operators through the "deemed to be" regime. This works as a mechanism for cost recovery by OAOs whereby their costs are 'deemed to be' equivalent to the FLRIC costs which eircom incurs to perform the same function. We can illustrate this by looking at eircom's RIO where they describe the relationship between schedule 105 – access to eircom premium rate services, and schedule 205 - access to OAO premium rate services as follows: "\* Service Schedule 205 quotes the eircom regulated retentions for Premium Rate calls. The settlement is derived from these regulated retentions on the principle of retail minus retention. The reciprocal settlement for OAO access to eircom Premium Rate Service can be viewed in Service Schedule 105. The Principle of Reciprocity applies." Which is to say that eircom recovers its costs from the retail charge paid when calling an OAO PRS and settles the balance on the OAO (schedule 205), where the customer is calling an eircom PRS the OAO deducts the same sum (which is deemed to be equal to its costs) from the retail charge and settles the balance on eircom. Thus the existence of this deemed to be regime means that few conclusions can be drawn from the actual charges currently paid.

#### Supply-side substitutability

C.97 To provide termination for calls to end-users, which requires geographic call termination, a nationwide local access network is needed, to be able to offer wholesale

geographic call termination services. In contrast termination for calls to service providers requires non-geographic termination and thus can be provided without ubiquitous coverage (e.g. in a concentrated area such as a business park). This means that it could be relatively easier for new entrants to begin providing termination services for calls to service providers than termination services for calls to end-users. The economics of supplying these access points, which are likely to handle a lot of traffic, are different from those of supplying a nationwide network of low-traffic geographic termination points.

C.98 A hypothetical monopolist provider of call termination services for end-users in response to a price increase of 5 to 10% could, theoretically, enter the market for termination services for calls to service providers (non-geographical termination), but the reverse is not also the case. Although there are indeed high barriers to entry to the provision of calls to service providers, there are quite significant long-term barriers to entry to the provision of termination services for calls to end-users. Given the different payment flows which operate in the market and the fact that there is only possibly one-way supply side substitution, we consider that there are separate relevant markets for termination on single networks for calls to end-users and for termination on multiple networks for calls to service providers.

#### Conclusion

- C.99 ComReg considers that there are different market structures depending on the type of call being made. This suggests that there are separate relevant markets for call termination for calls to end-users on each fixed network and call termination for calls to service providers. In the market for call termination on all networks for calls to service providers, there are a range of payment principles based on the type of call provided; however, the ability of the service provider to negotiate with the terminating network operator ensures that these call types fall within the same multi-network relevant market.
  - 1.1 Having defined a market for termination of calls to service providers, a market not listed in the Commissions Recommendation, ComReg must assess whether this is a market that is potentially susceptible to ex-ante regulation using the Three Criteria test:
    - Whether there are high and persistent barriers to entry
    - Whether the market is one that tends towards a competitive outcome
    - Whether competition law is sufficient to address any competition problems
  - 1.2 ComReg has addressed this in the Market Analysis section below.

### <u>Are the relevant markets for termination of calls to end-users and termination of calls to service providers single-network markets?</u>

C.100 ComReg proposed that the relevant product market for wholesale fixed termination services for calls to end-users was defined by each individual fixed termination provider. This is a single network market structure. The relevant product market for wholesale fixed termination service for calls to service providers was characterised as a multi-network market.

- C.101 The provision of non-geographic termination, which does not require a ubiquitous network, means that entry in response to a price rise in the range of 5 to 10%, by a hypothetical monopolist, would be possible relatively promptly when compared with termination to end-users. Given that market entry is possible in response to a price rise by a hypothetical monopolist supplier, the market structure for termination of calls to service providers is multi-network.
- C.102 However, a fixed service provider wishing to terminate a call on a particular fixed number to an end-user can only terminate it on the network to which that number is assigned (whether or not the call is delivered to the terminating network directly from the originating network or by an intermediate third party transit provider). The call would be unsuccessful if an attempt were made to terminate it on another network.
- C.103 However, ComReg takes the view that it would be inappropriate to adopt a narrow market definition defining termination on each individual fixed number as a separate and distinct relevant product market. It believes that such an approach is inappropriate because fixed operators providing termination services are unable to discriminate (in relation to price or any other condition of provision) in relation to termination charges imposed for calls made to individual fixed numbers.
- C.104 ComReg considers that there are relevant product markets for wholesale fixed termination services provided by each individual fixed termination provider for the provision of retail calls to end-users (i.e. each operator's termination service falls within its own distinct market, and is not substitutable for the termination service provided by other operators). Any provider of retail fixed narrowband services cannot acquire termination services on a network other than the network to which the terminating number is assigned. Accordingly, it would be profitable for a hypothetical monopolist supplier of wholesale termination services to increase its termination charges by 5 to 10% (i.e. termination on another network is not a demand-side substitute).
- C.105 The current rates for termination (described as local or primary termination in a number of the published tariff offerings) do not suggest that eircom's termination rates and the OAOs' termination rates exert competitive pressure on each other. The current rates are set out below.

Table 3.2: Comparison of eircom (to OAO) and OAO (to eircom) termination charge for 3 minute call

	Peak c	Off-peak c	Weekend c
eircom	1.736	0.969	0.868
Budget	3.124	1.562	1.257
C&W	3.124	1.562	1.257
BT Ireland	2.640	1.380	1.260
Chorus	3.066	1.619	1.371
NTL	1.929	1.067	0.936
Energis	1.929	1.067	0.936
MCI	3.124	1.562	1.257
Colt	1.929	1.067	0.936
Access	2.329	1.465	1.337

Source: based on eircom Switched Transit Routing and Price List – Issue 38

C.106 The current rates charged by all of NTL, Energis and COLT are between 7 and 11% above eircom's rates. ComReg notes that the NTL and Energis rates dropped in 2002

and 2003, respectively. However, the next cluster of operators' charge geographic termination rates that are approximately 35 to 80% above eircom's rates, and have remained static at that level since the year 2000. Finally, BT Ireland's geographic termination charges were between approximately 130% and 180% above eircom's, and had remained static at that level since the year 2000. However, in April 2005 all BT Ireland geographic termination rates were reduced and are now between 42% and 52% above eircom's.

- C.107 ComReg has no evidence of price sensitivity at the retail level that suggests either sensitivity to wholesale termination rates or consideration of the identity of the provider of termination services. Nor does ComReg's consumer survey data indicate that calling parties have any visibility of the identity of the operator providing termination services for a particular call. Further, there is little, if any, publication to end-users of termination charges. As a result, most callers in Ireland are unaware of the identity of the operator terminating the calls that they make or the charge differentials between terminating operators. The lack of termination pricing awareness limits the competitive significance of the identity of the terminating operator, were callers aware of its identity.
- C.108 Retail price sensitivity can only impose a competitive constraint on termination rates if the retail party paying for the service can bypass the terminating network (i.e. there are demand-side substitutes at the retail level which constrain (or arguably might constrain) the ability of a fixed network operator to raise its termination charges). ComReg has considered, at some length in its Consultation on Fixed Retail Calls Markets<sup>8</sup>, the ability of retail end-users to use substitute services to replace fixed-to-fixed voice telephony calls. In that analysis, ComReg concludes that, while fixed-to-mobile calls are in the same market, mobile-to-mobile calls are not such substitutes. The prices of fixed-to-mobile calls continue to include a significant premium over fixed-to-fixed call charges (reflecting the significantly higher mobile termination charges that continue to be imposed). Pricing data, for example, shows that fixed to mobile calls are significantly more expensive than fixed to fixed calls.
- C.109 It is clear that a new entrant to the market responding to a hypothetical 5 to 10% increase above the competitive price would need to both operate a local access network that would allow it to terminate calls and win the called customer from the hypothetical monopolist, at the retail level (and to port the called number). The barriers to entry created by the need to build a nationwide network from scratch would be enormous and would effectively prevent any such entry. Without a pre-existing local access network, a potential entrant could not respond to such a price increase.

#### **Conclusion**

C.110 ComReg concludes that the relevant product market for wholesale fixed termination services for calls to end-users is provided by each individual fixed termination provider. This is a single network market structure. The relevant product market for wholesale fixed termination service for calls to service providers is characterised as a multi-network market.

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<sup>&</sup>lt;sup>8</sup> ComReg document (04/95).

### <u>Is self-supply included in the relevant markets for termination of</u> calls to end-users and calls to service providers?

- C.111 ComReg has considered whether it is appropriate to include self-supplied wholesale termination services in the relevant product markets. Termination services for calls to end-users are usually self-supplied between the wholesale and retail arm of a network operator. A number of undertakings self-supply termination functionality and supply wholesale termination services to third parties. The balance of administrative practice of the European Commission has been to exclude self-supply for the purpose of defining markets. However, the Commission derogates from this general principle in circumstances in which it has determined that the characteristics of particular markets are such that self-supply exerts competitive pressure on sales to third parties. It is also important to recall that, in the absence of historical regulatory intervention, there would be few (if any) communications 'access markets'. The sector clearly displays strong differentiating characteristics from other sectors. ComReg takes the preliminary view that taking self-supply of for both calls to end-users and calls to service providers call termination functionality in defining the relevant product market both reflects economic principle and is consistent with emerging Community jurisprudence and Commission practice.
- C.112 As in the discussion of call origination, the competitive constraint on the hypothetical monopoly supplier would come from demand.

#### Conclusion

C.113 ComReg concludes that self-supply for termination for calls to end-users (geographic termination) and calls to service providers (non-geographic termination), should be included in the relevant product market.

## <u>Does the relevant market for wholesale call termination for calls to service providers on the public telephone network provided at a fixed location include termination of voice and data calls?</u>

- C.114 The EU Commission Recommendation states that:
  - "....the relevant wholesale call termination market [wholesale call termination as part of Internet service provision] does not [fulfil the criteria to warrant identification in the Recommendation] for the purpose of this Recommendation."
- C.115 However, it goes on to note that, this generalisation may not be true for all member states:
  - "However, in certain Member States it maybe that there is less choice of terminating operators or that one or more operators that have market power on originating access are in a position to more fully exert that market power with respect to call termination. The more limited choice may occur because operators may need to build out networks in order to terminate dial-up calls under un-metered arrangements."
- C.116 ComReg believes that Ireland is one of these 'exceptional' Member States. As described above in relation to termination services used to provide calls to service providers, there is still limited alternative network construction, and local loop unbundling is still in its infancy. Further, the market is affected by the fact that the two biggest ISPs (i.e. eircom.net and Ireland On-line) are owned by eircom and BT

Ireland, respectively. This ownership structure means that, contrary to the EC's observation:

- "In general, ISPs will have a wide choice with respect to terminating operators and there is evidence of ISPs switching terminating operators,"; the largest ISPs have no choice in relation to the identity of their provider of termination services.
- C.117 The EU Commission Recommendation goes on to consider the relationship between termination charges and switching incentives:
  - "Since any terminating charge is incorporated into the overall amount that is charged by the ISP (and faced by the end-user), and end-users can switch between competing ISPs, ISPs have an incentive to minimise the termination charges that they pay."
- C.118 ComReg notes that this is not the case in Ireland. It would appear to suggest that ISPs pay for termination services. While an ISP may receive payment from its host (or, for that matter, make payments to its host), it does not pay the terminating operator for termination. As described above in relation to other termination services for calls to service providers, the charges that it pays or receives form part of its retail relationship with its host. An ISP has a clear incentive to minimise the charges that it pays, or to maximise those it receives, but these are the commercial terms of its retail relationship with its host, not interconnect payments to other operators.
- C.119 ComReg notes that its assessment of the Retail Calls Market concluded that dial-up calls to internet were in the same market as other calls. While ComReg recognises that there is no demand side substitution between termination of a voice or data call, it is ComReg's view that supply side substitution maintains common pricing constraints between termination of voice and data calls.
- C.120 ComReg notes that retention rates associated with termination do not differentiate between voice and data calls. The settlement fee between the originating and terminating operators is calculated by deducting the originating operator's call origination costs from the retail price for the call, and this applies to all calls to service providers of any type. In the Irish context, the retention rate of eircom is regulated and it imposes the same rate on all other operators through the "deemed to be" regime.
- C.121 A provider of termination of voice calls to a service provider would readily be able to switch to provide termination of data calls, given a small but significant price increase, and vice versa.

#### Conclusion

C.122 ComReg maintains that the market for the termination of calls to service providers includes voice and data calls.

### <u>Does the relevant market for termination of calls to service providers</u> include all call types?

- C.123 As part of the consultation process, ComReg has considered whether the market for termination of calls to service providers includes all types of call, and concludes that it does.
- C.124 At the retail level, a service provider wants to be able to provide callers with information or value-added services using non-geographic numbers. The caller may pay a variable charge depending on the type of service used. Services provided through the use of non-geographic numbers include sales and marketing, customer support, information services and dial-up internet access. In order to offer these

- services, the service provider may purchase termination services to allow freephone, or premium rate services, or local rate access.
- C.125 The question to be considered is the extent to which different types of service constitute different markets. ComReg's assessment is that, on the demand side, service providers are likely to view the range of services as complementary rather than substitutable. While some services could be seen to substitute for others for example, a service provider offering local rate access could easily switch to national rate access in response to a price increase this would not be the case for all services. This is likely to be determined by the associated pricing mechanism, so that, for instance, premium rate services, which are used by the service provider to generate revenue, would be unlikely to substitute for freephone services.
- C.126 However, on the supply side, ComReg considers that there is a high level of potential substitution in response to a small but significant, non-transitory increase in the price of one category of service. An operator which can terminate one type of non-geographic call can terminate all types, and indeed operators generally do offer a range of service types. This suggests that operators do practise supply-side substitution.

#### Conclusion

C.127 ComReg concludes that the market for termination to service providers includes all call types.

#### **Relevant Geographic Market**

C.128 Termination services are offered to and by all operators in Ireland on terms that do not differentiate by reference to geographic location. Thus, ComReg proposed that there is a single national market for supply of wholesale termination services.

#### **Summary Conclusions: call termination**

- C.129 ComReg has drawn the following conclusions about the fixed wholesale markets for call termination:
  - Termination of calls to end-users and termination of calls to service providers are in separate markets
  - Both markets include self-supply
  - The market for termination of calls to service providers includes voice and data calls, and includes all call types
  - The relevant geographic market is Ireland

- Q. 4. Do you agree with the above preliminary conclusions on market definition for wholesale call termination services? Please expand in your response. Do you agree that the relevant geographic market for wholesale termination services is Ireland? Please expand in your response.
- Q. 5. Do you agree that the relevant geographic market for wholesale termination services is Ireland? Please expand in your response.

#### Views of respondents

C.130 Four respondents agreed with ComReg's conclusions on market definition for wholesale call termination services to end users, and three of those respondents agreed with ComReg's market definition for wholesale call termination services to service providers. The fourth respondent, however, argued that while there were differences between the termination of calls to end-users and the termination of calls to service providers, the provision of calls to service providers was a retail market.

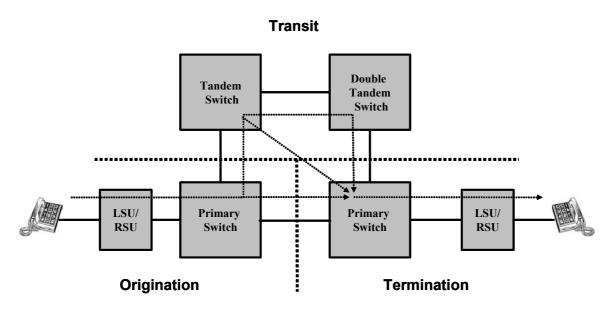
#### ComReg's position

- C.131 ComReg notes that all respondents agreed that termination of calls to end-users and termination of calls to service providers were in different markets.
- C.132 ComReg believes that the concern expressed by one respondent that the market for termination of calls to service providers was a retail market is best addressed by clarifying the market definition. ComReg notes that termination of calls to service providers is the termination to non-geographic numbers, where that termination is concerned with the provision of an information or value added service to end-users. The retail market is the purchase by service providers of the service, such as premium rate or dial-up internet, from an operator. ComReg is not concerned with this retail market, except in understanding that its characteristics shape demand at a wholesale level. The wholesale interconnection market for termination of calls to service providers concerns the ability of operators to purchase the wholesale inputs necessary to offer information or value added services to their customers, who are the service providers. The operators are not buying a retail service, and this is not a retail market.
- C.133 ComReg maintains its view, therefore, that termination of calls to service providers is a wholesale market, and that both demand and supply side characteristics indicate that termination to end-users and termination to service providers are in different markets.

#### **Market Definition: Transit**

C.134 ComReg proposes to functionally define the boundaries of the relevant markets for 'origination' and 'termination' as congruent with those functions performed by the primary switching exchange directly connected to the calling or called customer, in exactly the same way that eircom currently defines its primary origination and primary

termination conveyance. As illustrated below, transit conveyance comprises all other elements of call routing for national calls and involves at least one tandem exchange. Thus, while transit includes the switched tandem conveyance of a call either originating on a fixed network in Ireland or terminating on a fixed network in Ireland, or both, across a third-party's Irish fixed network, transit will also now embrace the tandem and double tandem elements of national calls which eircom currently classify as 'call origination/termination tandem' and call 'origination/termination double tandem'. These calls will also involve either or both call origination and termination.



- C.135 ComReg's analysis to define the relevant product market for call transit on public telephone networks provided at a fixed location entails consideration of the following factors:
  - whether transit interconnection services fall into a distinct relevant product market not including alternative facilities;
  - whether self-supply should be included in the relevant product market(s), together with wholesale services provided to third party retail service providers;
  - o whether the relevant market is a multi-network market;
  - whether international transit services fall within the same relevant market; and
  - o the geographic scope of the relevant market.

### <u>Do transit interconnection services fall within a distinct relevant product market to carriage over alternative facilities?</u>

- C.136 ComReg has considered whether wholesale transit interconnection services and wholesale leased line trunk circuits fall within the same relevant product market. A leased line is a permanently connected communications link between two premises dedicated to the customers' exclusive use. It provides dedicated capacity between those two points, rather than switched capacity to anywhere. Transit interconnect services provide switching, routing and carriage for switched calls originating on the public telephone network.
- C.137 The pricing of transit services and wholesale leased line trunk circuits, respectively, reflects these functional differences, and is such that it is unlikely that service providers would switch between wholesale transit services and leased lines, or *vice versa*, in response to a 5 to 10% increase in price. Leased lines require a level of financial investment and commitments (and therefore risk), together with substantial time and planning, that ensure that they are not priced in a manner that is within 10% of the competitive price for transit services. Entities considering acquiring leased lines must be certain that they have the minimum volume of traffic on the particular point-to-point route to warrant the risk, investment, time and planning entailed.
- C.138 BT Ireland and MCI WorldCom currently have the largest alternative networks. As yet there is no evidence that the existence of such alternative networks and the provision of alternative services by BT Ireland is exerting competitive pressure on the pricing of eircom's transit services. ComReg does not believe that such competition will develop to more than a limited extent within the timeframe of this review.
- C.139 The Department of Communications, Marine and Natural Resources has invested in carrier-neutral, open-access metropolitan area networks (MANs) for 19 towns throughout the country. The network will consist of metropolitan fibre optic cable and ducts. It is expected that the current MAN projects will be complete by the second half of 2005. However, the MANs aim is to deliver broadband services to high density clusters of users (such as business parks) and to provide basic infrastructure for deploying other technologies such as DSL<sup>9</sup>. The fibre rings will provide the link to the central facility where copper connections are located (wholesale broadband backhaul); the fibre circuit will then be broken down into smaller segments for termination at the customer premises via copper connections for the provision of DSL services. ComReg, thus, considers that such services are more appropriately dealt with in the market review of leased line markets and in particular that of wholesale trunk segments.
- C.140 As part of the Governments National Development Plan (2000–2006) support has been given to the ESB Telecom (a subsidiary of the Electricity Supply Board (ESB)) for the construction of a fibre optic network. ESB is known as a "carriers' carrier", in that they provide dark fibre services to other operators, who then provide retail services to end-users. However, services have only recently become available on the ESB network and take up is believed to be limited at this stage of development. In addition, for the reasons given above, ComReg considers that such services are more appropriately dealt with in the market review of leased line markets and, in particular, that of Wholesale Trunk Segments.
- C.141 ComReg has also considered the provision of direct interconnection as a possible substitute for wholesale fixed transit services. This does not involve investment of the scale required to reproduce the local access network, which would be needed to

<sup>&</sup>lt;sup>9</sup> For further details see DCMNR document "The National Development Plan – Fibre Optic MANs – what they are and how they work" on www.dcmnr.gov.ie

substitute for call origination or termination. Larger fixed network operators such as BT Ireland and MCI WorldCom have implemented a number of direct interconnect routes for their own traffic and one operator is providing third party transit services, albeit on a small scale. Smaller operators face the particular problems associated with small interconnect routes to other smaller operators where the costs of providing circuits are far higher than those of adding incremental capacity to an existing large route to an operator providing transit services. Direct interconnection requires substantial commitment and planning of resources and takes time as well as significant investment. There is no evidence that network operators purchasing transit services could promptly shift to the provision or purchase of direct interconnection in response to price changes.

- C.142 Given these findings, it is unlikely that OAOs could promptly shift to direct interconnection for all routes, or that smaller OAOs could promptly introduce many routes and thus demand their self-provided transit services. Thus, ComReg believes that direct interconnection is not in the same market as fixed wholesale switched transit services.
- C.143 With regards to supply-side substitutability, network operators that replaced the purchase of transit services with direct interconnection have used their productive assets, i.e. the newly-created capacity, to offer transit services to third parties only recently, and then on a very small scale. There is no evidence that such network operators would systematically offer part of their new capacity to other operators demanding transit, but this could change as the market evolves. While ComReg does not anticipate that this will materialise within the life of this review the situation will be actively monitored for the emergence of potential competition.
- C.144 ComReg has also considered whether switched transit services provided over mobile networks are in the same market as switched transit services over fixed networks. ComReg notes that there has been more build out by mobile operators who are now generally using direct interconnection between their mobile networks as opposed to transit or conveyance on fixed networks. However, to compete with eircom in the provision of third-party switched transit services would require further significant investment. These costs would only be justified with sufficient levels of traffic, which may not be present on all routes and at each point of interconnection.
- C.145 On the supply side, it may be possible for a mobile operator to substitute into the fixed market if the hypothetical monopolist increased the price of fixed conveyance and transit. However, this would require the mobile operator to have sufficient spare capacity on its network. In addition, the mobile operator would have to incur significant costs to develop systems for dealing with wholesale customers, including billing and account management. Thus, ComReg does not believe that mobile to mobile fixed transit services are in the same market as fixed wholesale switched transit services.

#### **Conclusion**

C.146 ComReg's conclusion is that transit interconnection services fall within a distinct relevant product market to carriage over alternative facilities.

### <u>Is self-supply of transit services included in the relevant product market?</u>

- C.147 ComReg has considered whether it is appropriate to include self-supplied wholesale transit services in the relevant product market. Call transit services can be 'self-provided' by a network operator or provided by such a network operator to third party service providers. As a result, a new entrant service provider could consider constructing alternative exchanges with secondary and/or tertiary functionality, to avoid having to acquire transit services. It is clear that a number of undertakings self-supply transit functionality. In addition, both eircom and BT Ireland supply wholesale transit services to third parties. The balance of administrative practice of the European Commission has been to exclude self-supply for the purpose of defining markets. However, the Commission derogates from this general principle in circumstances in which it has determined that the characteristics of particular markets are such that self-supply exerts competitive pressure on sales to third parties. It is also important to recall that, in the absence of historical regulatory intervention, there would be few (if any) communications 'access markets'. The sector clearly displays strong differentiating characteristics from other sectors.
- C.148 ComReg proposed that including self-supply of call transit functionality in defining the relevant product market both reflects economic principle and is consistent with emerging Community jurisprudence and Commission practice. ComReg, for reasons set out above, does not consider that self-supply of direct interconnection or mobile to mobile transit falls within this market. As with the other interconnection markets, the competitive constraint on the hypothetical monopoly supplier would come from demand.

#### Conclusion

C.149 ComReg concludes that self-supply should be included in the market for transit.

#### Is the relevant market a multi-network market?

- C.150 A third party provider of retail voice call telephony services to end-users does not require access to every network in Ireland that is capable of providing transit services. Retail services can be provided once it has access to transit services necessary for end-to-end connectivity. Such services allow it to ensure connectivity between the switching functionality that forms the boundary of the wholesale origination service that is necessary to originate the retail calls, and the wholesale termination service that is necessary to supply the termination element necessary for end-to-end connectivity. This is discussed further in Section 7.
- C.151 While eircom is the main provider of third party transit services in Ireland, BT Ireland has also been providing transit services to both fixed and mobile operators since early 2002.

#### Conclusion

C.152 ComReg takes the view that the relevant market for wholesale transit services is a multi network market.

### <u>Are international transit services in the same relevant market as national transit services?</u>

- C.153 ComReg has considered the extent to which international transit services represent a separate and distinct service that falls outside the relevant market for transit services in Ireland.
- C.154 Functionally, international transit services entail the routing of an Irish originating or terminating switched call to or from an international termination or origination point. More particularly, the national component of such transit services entails switching and related transmission to an international gateway.

#### Demand-side substitution

C.155 International transit services are acquired by providers of international retail calls services (whether in Ireland or elsewhere). They might be acquired together with national transit and origination or termination services. However, international transit services are not functional substitutes for any of these other wholesale interconnection products. For example, a retail service provider seeking to provide a retail call between Dublin and New York does not require transit between Dublin and Cork. There is thus no demand side substitution.

#### Supply-side substitution

C.156 The key distinctions between national and international transit for fixed calls are:

- National transit needs widespread interconnect with eircom to be commercially viable. Very few operators are in a position to offer such a service without significant investment.
- International Transit needs an international gateway switch, international transmission capability, and correspondent agreements with operators in terminating countries, but interconnect with eircom can be minimal. A number of operators can provide such services.
- C.157 It is ComReg's view that a supplier of national transit services would not be able to enter the market for the supply of international transit services in response to a small but significant price increase. For a supplier of international transit services to enter the market for national transit, the level of investment to build out to eircom's primary interconnect points would be substantial and the rates are capped by eircom's regulated transit price. For a supplier of national transit services to enter the market for international transit, it would be necessary for the potential entrant to make the investments required in an international gateway and transmission facilities as a precondition to market entry.

#### Conclusion

C.158 ComReg concludes that national and international transit are in separate markets.

#### The relevant geographic market

C.159 A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous and

- which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas 10.
- C.160 According to the EC Guidelines, in the electronic communications sector, the definition of the geographical scope of the relevant market is generally determined with reference to the area covered by a network, and to the existence of legal and other regulatory instruments.
- C.161 Transit services are offered to and by all operators in Ireland on terms that do not differentiate by reference to geographic location. ComReg, thus, takes the view that there is a single national market for supply of wholesale national transit services.

#### **Summary Conclusions: call transit**

- C.162 ComReg concludes that there is a relevant market for wholesale call transit services on the public telephone network provided at a fixed location. The market is defined such that:
  - transit interconnection services are a distinct relevant product market to alternative facilities for transit services:
  - self-supply should be included in the relevant product market(s), together with wholesale services provided to third party retail service providers;
  - the relevant market is a multi-network market; and
  - international transit services do not fall within the same relevant market as national transit services
  - the relevant geographic market is Ireland

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<sup>&</sup>lt;sup>10</sup> See the Commission Notice on Market Definition, SMP Guidelines, [ComReg's Market Data Information Notice] and United Brands v. Commission, [1978] ECR 207, for additional guidance.

- Q. 6. Do you agree that the wholesale transit market should be defined to include self-supply? Please expand in your response.
- Q. 7. Do you agree that there is a single relevant market for fixed wholesale transit services that encompasses all fixed networks in Ireland? Please expand in your response.
- Q. 8. Do you agree with ComReg's preliminary conclusions concerning international transit services? Please expand in your response.
- Q. 9. Do you agree with ComReg's preliminary conclusions concerning the market definition for wholesale call transit services? Please expand in your response.
- Q. 10. Do you agree that the relevant geographic market for wholesale transit services is Ireland? Please expand in your response.
- Q. 11. Do you agree with the preliminary conclusions regarding the market definition exercise? Please provide a reasoned response.

#### Views of respondents (on questions 6, 7, 8, 9, 10 and 11)

- C.163 Three respondents broadly agreed with all of ComReg's conclusions on the wholesale transit market definition. A fourth respondent agreed broadly with ComReg's conclusions on market definition but expressed concerns over the exact definition of the wholesale market for international transit services. This respondent held the view that ComReg must define the market precisely so that no element of wholesale national transit inadvertently fell within the wholesale market definition for international transit, e.g. a retail international call could involve the provision of wholesale national transit services and/or wholesale international transit services. The same respondent expressed concerns over the preliminary finding that international transit services were competitive and over the proposed removal of obligations in this market. This respondent held the view that competition law alone would not be sufficient to prevent the incumbent from pricing at or below costs or leveraging market power from adjacent markets following the removal of obligations.
- C.164 Most respondents who commented on self supply agreed that self supply should be included in the relevant market. However, one respondent suggested that self supply of transit services should not be included, because there was no interconnection involved, and an integrated operator did not have a competitive advantage over another retail operator in setting its retail pricing based on self-supply of transit services.
- C.165 One respondent argued that self supply of transit services should not be included because there was no interconnection involved and that an integrated operator did not

have a competitive advantage over another retail operator in setting its retail pricing based on self-supply of transit services. Another respondent, while agreeing that self-supply should be included in the market, suggested that the argument was not well-justified and referred ComReg to the European Commission's decision on TKK in Austria.

C.166 One respondent held the view that the national transit market should be split between trunk transit (transit originating or terminating on eircom's network) and pure transit (terminating and originating on third party networks). The same respondent argued that pure transit should be split into three further segments: transit to geographic numbers, transit to mobile numbers (including mobile to mobile) and transit to NTC. The justification for this further segmentation of pure transit was based on the varying nature of traffic conveyance and charging regimes associated with each segment.

#### ComReg's position

- C.167 ComReg notes that all respondents agreed that the markets for national and international transit were separate, based on lack of supply side substitution arising from functional differences and different market characteristics.
- C.168 In its original consultation ComReg's preliminary view was that, based on the information which had been made available, the international transit market was effectively competitive. However, in the course of the consultation, further information has been provided by several respondents which casts doubt on this preliminary conclusion. In order to clarify the competitive conditions in the international transit market, ComReg proposes to undertake a separate review and national consultation on this market. In the meantime, existing obligations in the international transit market will apply.
- C.169 On the question of the inclusion of self-supply, ComReg notes that, as the largest user of the incumbent's wholesale capacity is its own retail arm it is not possible to allocate costs or recover charges without taking full account of this consumption of capacity. This has always been done by treating traffic from all sources as equivalent, that is to say treating external interconnect and self-interconnect as identical.
- C.170 ComReg notes further that its market definition does not include every self supply onnet minute for every OAO as transit. OAO self supply of on-net minutes are only included in the transit market if the call is not completed by call origination and subsequent termination, but all indirectly connected OAO calls are indeed captured by this definition.
- C.171 In addressing the respondent's concern that no interconnect is involved, ComReg notes that the exclusion of self-supply would eliminate the principle source of demand for transit on the incumbent's network, discriminate between traffic from internal and external sources, and mask the supply of service from its wholesale to its retail arm.
- C.172 It is ComReg's view that the inclusion of self-provision through direct interconnection in the transit market is a very different matter from the inclusion of self-provision between wholesale and retail arms of switched transit. The EC's conclusion that self-provision through interconnection is outside the transit market is one that ComReg entirely agrees with, having sought to make it clear throughout its market definitions that direct interconnection reduces demand for switched transit services and constitutes a withdrawal from the market and not a substitute for it.

- C.173 In addressing the suggestion that the market definition should be narrower, ComReg takes the view that, although different types of conveyance would require differing levels of utilisation of the incumbent's tandem network, no evidence has been advanced to indicate sufficient functional difference between the tandem conveyance of fixed national calls beyond the primary exchange.
- C.174 It is ComReg's view that mobile to mobile fixed transit falls outside the fixed transit market. It is a disappearing service that has been steadily eroded by direct interconnection of the MNOs.
- C.175 ComReg maintains the view that there is no significant functional difference between the tandem conveyances of fixed domestic calls beyond the primary exchange. The proposal to further split a 'pure transit' market based on the varying technical requirements associated with each segment is undermined by the acknowledged ability of other fixed operators to either self-provide these services or provide these services to third parties. ComReg, thus, takes the view that the competitive characteristics of all such fixed transit services are sufficiently homogenous to justify defining a single national wholesale transit market.

## Summary of preliminary conclusions for the market definition

- C.176 ComReg has carried out the above market definition exercise in accordance with the principles of competition law and has taken the utmost account of the *Relevant Markets Recommendation*, as well as the *SMP Guidelines*.
- C.177 The wholesale fixed narrowband interconnect markets which ComReg proposes to define are as follows:
  - National market for wholesale call origination services on the public telephone network provided 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 network provided at a fixed location.
- C.178 In the original consultation, ComReg proposed that international transit services did not fall within the same relevant market as national transit services. ComReg believes that this preliminary conclusion is correct, and notes that all respondents agreed that the markets were separate. However, additional material which has been provided during the consultation process prompts ComReg to propose to revisit its overall conclusions on the level of competition in the international market. ComReg therefore intends to carry out an additional national consultation. Current obligations on eircom in the international transit market will remain in place pending the outcome of that consultation.

## **Relevant Market Analysis**

#### Introduction

## **Background**

C.179 Having identified the relevant interconnection markets, ComReg is required to conduct an analysis of whether these markets are effectively competitive by reference to whether any given undertaking or undertakings is/are deemed to hold SMP in these markets. Recital 27 of the Framework Directive states that a relevant market will not be effectively competitive "where there are one or more undertakings with significant market power". Regulation 25(1) of the Framework Regulations states that:

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

- C.180 Accordingly, an undertaking may be deemed to have SMP either individually or jointly with other undertakings in a relevant market. In addition, where an undertaking has SMP on a relevant market, it may also be deemed to have SMP on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.<sup>11</sup>
- C.181 ComReg is obliged under the Framework Regulations to assess SMP in accordance with European Community law and to take the "utmost account" of the Guidelines<sup>12</sup>.
- C.182 The SMP guidelines state that the existence of a dominant position cannot be established on the sole basis of large market shares and that NRAs should undertake a thorough and overall analysis of economic characteristics of the relevant market before coming to the conclusion as to the existence of significant market power.<sup>13</sup>
- C.183 However, the SMP guidelines state that according to established case law, very large market shares - in excess of 50% - are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position.<sup>14</sup>
- C.184 Despite its relative importance, market share must be considered alongside a range of other factors, including:
  - the extent to which the market dynamics indicate that any entity (or entities) has power over price;
  - historical conduct suggestive of the existence of market power;
  - countervailing buyer power;
  - the existence of entry barriers and barriers to expansion (beyond more strategic advantages which amount to a 'first mover' advantage), including economies of scale and scope;
  - ability to leverage key aspects of overall size or economic strength in the relevant market; and

<sup>&</sup>lt;sup>11</sup> Framework Regulations, Regulation 25(3).

<sup>&</sup>lt;sup>12</sup> Regulation 25(2).

<sup>&</sup>lt;sup>13</sup> SMP Guidelines, Paragraph 78

<sup>&</sup>lt;sup>14</sup> SMP Guidelines, Para 75

• extent of vertical integration.

#### **Market structure**

- C.185 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 call origination services to third parties in Ireland, through Indirect Access services such as Carrier Pre Select, Carrier-Select, and Carrier Access.
- C.186 BT Ireland is the only OAO currently offering wholesale transit services to thirdparties, although the scale of this service is limited. Otherwise, transit services are either to some extent self-supplied or purchased from eircom in the form of switched minutes.
- C.187 Each fixed network operator provides termination services on its own network for retail calls to end-users, as it is only the entity controlling the network terminating point which can terminate calls to that number. The market for terminating calls to service providers is still growing, and while some OAOs have entered the market, their share is relatively small.

#### eircom

C.188 eircom, as the only undertaking with a ubiquitous fixed switched network in Ireland, conveys the majority of switched calls across its network either for third-parties or as self-provided traffic. All OAOs must interconnect with the eircom network at various levels in order to provide retail call services to end-users. The terms on which eircom offers these wholesale services are set out in its Reference Interconnect Offer (RIO).

#### **BT Ireland**

- C.189 The second major competitor in the provision of retail narrowband service in Ireland is BT Ireland (formerly EsatBT, which was bought by British Telecom in 2000). BT Ireland has a large number of indirect customers as well as a small number of directly connected customers. In addition to the provision of calls to end-users, BT Ireland provides a wide range of calls to service providers.
- C.190 BT Ireland competes to provide residential and business calls and hosts the second largest Internet service provider in the country. BT Ireland has four switched tandem exchanges used to provide these retail services. In addition, BT Ireland provides third party wholesale transit services and termination services for calls to service providers.

#### MCI WorldCom

C.191 MCI, like BT Ireland, operates one of the larger alternative fixed switched networks (with 1 tandem/double tandem exchange), but does not provide third-party wholesale call origination or transit services. MCI does provide termination services to other operators. MCI provides retail calls using indirect access to eircom's network and also acts as a wholesale purchaser by providing these same services to resellers competing at the retail level.

## **Smart Telecom**

C.192 Smart Telecom provides residential calls and also has an extensive payphone business. Earlier this year, it was amongst the first of Eircom's rivals to offer single billing to residential customers. However, the extent of Smart Telecom's narrowband switched infrastructure is limited. There is no third-party provision of interconnection services.

#### **Other Authorised Operators**

C.193 There are a number of other fixed operators involved in the retail provision of calls to end-users, such as Energis, Colt, Budget, Access Telecom. The switched narrowband infrastructure controlled by these undertakings is limited with no third-party provision of services, other than for termination of calls.

#### ntl & Chorus

C.194 Their main business is the provision of Cable TV services, with a small number of directly connected and CPS customers.

#### Resellers

C.195 A number of operators do not have infrastructure themselves, but purchase minutes at the wholesale level to provide call services at the retail level.

#### **ESB**

- C.196 ESB was awarded funding under the National Development Plan 2000-2006, to build a national backbone. Fibre has been deployed around the existing ESB electricity network. ESB manages the network as a 'carriers' carrier' meaning it will lease capacity to other operators rather than engaging in the retail market itself.
- C.197 The ESB network comprises a Southern ring and a Northern ring. The Southern ring runs from Dublin to Shannon, Limerick, Cork, Waterford, Wexford, Arklow and back to Dublin.

## **Government Funded Metropolitan Area Networks**

C.198 As part of a national policy to facilitate broadband access, the Department of Communications, Marine and Natural Resources will invest €65 million in total in Phase I to fund the construction of 50,000 km of carrier-neutral, open-access metropolitan area networks for 19 towns throughout the country. This is equivalent to 90% of total funding. The network will consist of metropolitan fibre optic cable and ducts. The original network will be aimed at business users, schools, local government offices, hospitals and other public institutions. While framework agreements have already been signed with primary suppliers of the network for Phase I, more opportunities will be available for Phases II and III over the next few years. However, the MANs aim is to deliver broadband services to high density clusters of users (such as business parks) and to provide basic infrastructure for deploying other technologies such as DSL. Thus, the MANs are not used to provide retail fixed narrowband services and hence do not support the associated wholesale services (call origination, call termination and transit services).

## **Market Analysis: Call Origination**

## **Market share**

- C.199 ComReg notes that eircom's market share of retail calls is around 87% of domestic calls and 68% of international calls. <sup>15</sup> ComReg's data further indicates that eircom provide 85% of all wholesale call origination services (see Figure 4.1).
- C.200 The European Commission has indicated that a dynamic, rather than a static approach is required when carrying out a prospective, or forward-looking, market analysis. ComReg's data indicates that, including self supply, eircom's market share in the wholesale origination market has remained stable over the last three years, ranging between 81 and 86% (see Figure 4.1).
- C.201 Taking into account eircom's control of 85% of the wholesale call origination market, the stability of its market share and the absolute level of such shares, ComReg believes that eircom's market share will not change significantly within the timeframe of this review.

## **Pricing Behaviour**

- C.202 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 efficient operator. In essence, it allows for a margin above the cost of provision, reflecting the cost of capital.
- C.203 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.
- C.204 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 the calling party (in the case of a call to an end-user) and then either, pays for termination and transit; or in the case of calls to service providers 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 services.
- C.205 ComReg takes the view that, in the absence of regulation, an originating operator with a market share of 85% would have power over price in negotiating with CPS and terminating operators.

## Countervailing bargaining power

C.206 In some circumstances, customers might be in a position to exert countervailing buyer power when purchasing from an entity that would otherwise be expected to be in a

<sup>&</sup>lt;sup>15</sup> ComReg Doc. 05/26, Market Analysis – retail fixed calls markets

<sup>&</sup>lt;sup>16</sup> See Michelin v. Commission [1983] ECR 3461

- position to exercise market power. However, countervailing buyer power can only impose a constraint where customers have the ability (within a reasonable timeframe) to resort to credible alternatives (e.g. not to purchase or to switch supplier) in response to a price increase or threatened price increase.
- C.207 ComReg has seen no evidence that supports the existence of countervailing bargaining power in the market for call origination. On the contrary, it would appear that the purchasers of such wholesale services have no alternative credible suppliers. CPS and terminating operators must, therefore, reach agreement with eircom to be able to provide service.

#### Barriers to entry and potential competition

- C.208 The threat of market entry is one of the main potential competitive constraints on incumbent firms, and may prevent a dominant incumbent from raising prices above competitive levels. The threat of entry will be reduced by the existence of barriers to entry.
- C.209 Sunk costs are costs which are must be incurred to enable entry to a market, but which cannot be recovered on exit. A new entrant must consider whether there is potential to cover sunk costs as well as costs of service provision, whereas an incumbent has already covered sunk costs. Sunk costs inevitably create barriers which can deter market entry. It should be recalled that wholesale fixed origination services can only be provided by the entity that controls the relevant end-user network termination point.
- C.210 In relation to fixed wholesale origination services, the density and ubiquity of eircom's network results in eircom typically incurring lower transmission costs than competing network operators. The effect of such economies of scale on new entrant operators seeking to use owned facilities to offer retail services (and, therefore, self-providing wholesale origination services), is that such an operator is likely to be unable to match the fixed incumbent's prices, unless the new entrant prices at a level that does not allow it to cover its costs.
- C.211 Economies of scale are likely to be achieved not only in the supply of access and wholesale origination, but in the supply of associated support services. This means that the incumbent also achieves lower costs in network support, such as maintenance charges, etc.
- C.212 eircom also has a cost advantage resulting from the economies of scope that it enjoys in relation to the common costs that it incurs in supplying a range of different services using common underlying facilities and wholesale services. Economies of scope become increasingly relevant as the range of services sharing costs increases, so that an operator providing service across the broadest possible range of telecommunications services is both able to reduce the portion of common costs to be recovered from any particular service and to improve its ability to recover all of its common costs without having to significantly increase retail prices.
- C.213 Taking these barriers to entry into account, ComReg does not consider it likely that a new entrant would build a new network replicating all or part of eircom's local access network, or that sufficient investment will be made in existing infrastructure to upgrade it to the extent that it can provide an alternative local access network during the timeframe of this review.

### Ability to leverage and vertical integration

C.214 eircom is the dominant provider of the local access network in Ireland. It is the only entity with the ubiquitous local access facilities that are the necessary precondition, to the provision of wholesale fixed origination services. eircom is thus capable of leveraging its market power for the provision of wholesale fixed origination services into other adjacent markets.

#### Conclusion

- C.215 eircom should be designated as having SMP in the wholesale market for call origination on the fixed public telephone network. It is ComReg's view that no current service provider can or will impose a competitive constraint on eircom, and that no entity will develop the ability to do so within the lifetime of this review.
  - Q. 12. Do you agree with the preliminary conclusions regarding the market analysis of the wholesale call origination market? Please provide a reasoned response.

#### Views of respondents

C.216 Four respondents agreed with ComReg's conclusions regarding the market analysis of the wholesale call origination market. A fifth respondent argued that all providers of directly connected services should be subject to the same regulatory obligations as eircom in the provision of call origination services. It was this respondent's view that the supply of exclusive access to specific locations was creating conditions which were more competitive in some segments of the market.

## ComReg's position

C.217 In defining the market for call origination services, ComReg noted that the pricing behaviour of a single supplier providing access to a specific location is constrained by demand and supply-side factors. It is therefore not appropriate to define each operator as constituting a separate market.

## Market Analysis: Call Termination on Individual Fixed Networks for Retail Calls to End-Users

#### **Market shares**

C.218 ComReg has identified single network markets for the provision of wholesale termination services for retail calls to end-users. Given that it is not possible for any entity other that the entity controlling the network terminating point with which the geographic number is associated to terminate calls to that number, each fixed network operator has a 100% share of wholesale termination on its network.

C.219 The SMP guidelines state that, according to established case law, very large market shares – in excess of 50% - are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position<sup>17</sup>.

## **Pricing and profitability**

C.220 The termination pricing data shows that OAO geographic termination rates are higher than eircom's. These rates have remained relatively unchanged since 2000, with the exception of a reduction in the rates offered to eircom by Energis and NTL in 2002 and 2003 respectively, and BT Ireland in April 2005.

Table 4.1: Termination charge to eircom for 3 minute call<sup>18</sup>

	Peak c	Off-peak c	Weekend	Effective	Effective To
			c	From	
NTL	3.066	1.62	1.371	01/07/00	31/08/03
NTL	1.929	1.067	0.936	01/09/03	Current
Energis	3.12	1.56	1.257	01/07/00	31/03/02
Energis	1.929	1.067	0.936	01/04/02	Current
BT				01/07/00	30/03/05
Ireland	1.613	0.813	0.673		
BT				01/04/05	Current
Ireland	0.880	0.460	0.420		

Source: eircom Switched Transit Routing and Price List – Issue 38

C.221 In essence, the OAO termination charges are higher than eircom's. The current rate charged by all of NTL, Energis and COLT is within 10% of eircom's rates. ComReg notes that the NTL and Energis rates dropped from a level that was approximately 80% above eircom's rate in single reductions in 2002 and 2003, respectively. However, the next cluster of operators' charge geographic termination rates that are approximately 60 to 80% above eircom's rates, and have remained static at that level since the year 2000. Finally, BT Ireland's geographic termination charges were between approximately 130% and 180% above eircom's, and had remained static at that level since the year 2000. However, in April 2005 all BT Ireland geographic termination rates were reduced and are now between 42% and 52% above eircom's. It would, thus appear that the for certain call durations OAOs have termination rates substantially higher than those of an operator of minimum efficient scale (assuming that eircom's rates are cost-oriented at such a rate).

## Absence of Countervailing bargaining power

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- C.222 All providers of termination services negotiate with eircom, as the provider of 85% of origination services, or in a small number of cases, CPSOs (where the CPSOs are effectively "reselling" origination services) or OAOs.
- C.223 If an operator engages in practices that are potentially exploitative, customers might be able to exert countervailing buyer power against such practices. Where buyers are large and powerful, they might be in a position to effectively respond to any attempt to increase prices by sellers.

<sup>&</sup>lt;sup>17</sup> SMP Guidelines, Para 75

<sup>&</sup>lt;sup>18</sup> These new termination rates have a 'rate per call' and 'rate per minute' element.

- C.224 Countervailing buyer power exists where large customers have the ability (within a reasonable timeframe) to resort to credible alternatives (e.g. not to purchase or to switch supplier) in response to a price increase or threatened price increase or other deterioration in the conditions of delivery. ComReg notes that there is precedent that makes it clear that countervailing buyer power can off-set high market shares, in particular circumstances, driven largely by an 'exceptional' market structure. For example, in *Eons/Store*, 19 the Commission found that, despite the 50-70% market share that the combined parties would possess, the relationship between the suppliers and customers was mutually dependent and the buyers exercised market power *vis-à-vis* the merging parties. In particular, the merger under review created a 'rather exceptional' market structure in which one large and two smaller suppliers faced one large and two smaller buyers<sup>20</sup>.
- C.225 The centrality of "market structure" is highlighted by the Commission's conclusions in *Danish Crown/Vestjyske Slagterier*. The Commission found that two buyers accounting for over 50% of purchases did not exert buyer power. While they were able to extract more favourable conditions than smaller purchasers, the sellers were able to export their produce, the sellers were dominant suppliers of another closely related product and the product was a 'must stock' item. Similarly, in *Nestle/Perrier*, the Commission noted the 'must have' status of the brands and the price increases that the sellers had achieved over the preceding four years.
- C.226 In the present circumstances, ComReg has considered the extent to which countervailing bargaining power at the wholesale level is exerted by purchasers of termination services in the relevant markets. Such operators purchase terminating services in order to enable their customers to make calls to an end-user connected to the network termination point controlled by the terminating operator.
- C.227 The key motivation that gives rise to the incentive to raise call termination charges is that the calling party pays entirely for the call and that there is no potential for demand or supply-side substitution in the provision of such services. This market power could, for the most part, only be reduced or removed through the exercise of countervailing buyer power. A purchaser could exercise buyer power either by threatening to raise their own termination rates or by threatening not to purchase. Only eircom (absent regulation) could credibly exercise either type of buyer power, as eircom is the biggest purchaser of termination services and the vast majority of termination services are purchased from eircom (see figure 4.3). However, eircom termination rates are regulated and due to the mandatory requirements for all undertakings to negotiate interconnection in order to ensure end-to-end connectivity (as required by the regulatory framework), no operator, including eircom, could threaten to refuse to purchase.
- C.228 In addition, while eircom rates have been regulated in the past, it can be clearly seen that the smaller operators are capable of exercising some market power, as the OAO termination rates charged to eircom have varied greatly and have been consistently at levels that are higher than the eircom regulated termination rate.
- C.229 ComReg is, therefore, of the view that there is no evidence of the exercise of countervailing buyer power in this market.

<sup>&</sup>lt;sup>19</sup> Case No IV/M.1225.

<sup>&</sup>lt;sup>20</sup> *Ibid*., at para. 97.

<sup>&</sup>lt;sup>21</sup> Case No IV/M.1313.

<sup>&</sup>lt;sup>22</sup> Case No IV/M.190.

#### Barriers to entry and potential competition

- C.230 The threat of market entry, either on a long-term or "hit and run" basis, is one of the main potential competitive constraints on incumbent firms, where such entry can be shown to be highly probable, timely and appreciable. In essence, the threat of market entry may prevent a dominant incumbent from raising prices above competitive levels. The threat of entry will be reduced by the existence of barriers to entry.
- C.231 Alternatives for demand or supply substitution do not provide sufficient discipline on call termination at fixed locations or an argument in favour of a wider market definition, so that the relevant market is call termination on individual networks. It is not possible for another operator to enter such a market and compete with the operator in the provision of termination services to end users. Such a market definition is, in itself, evidence of high and non-transitory absolute barriers to entry.

## **Conclusions**

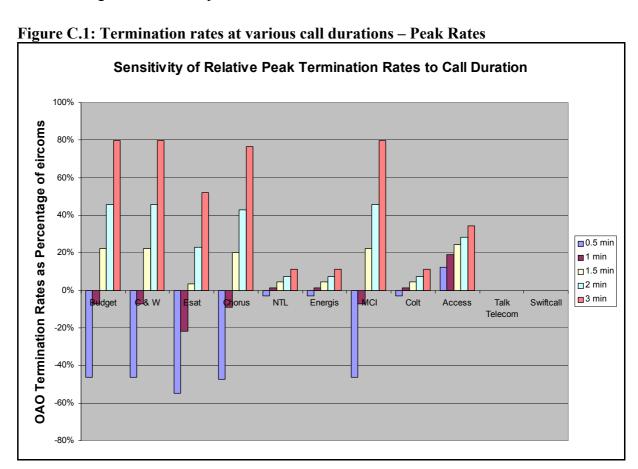
- C.232 Each fixed network operator should be designated as having SMP in the wholesale market for call termination for calls to end-users on its fixed public telephone network.
  - Q. 13. Do you agree with the preliminary conclusions that each fixed network operator has SMP in the wholesale market for call termination for calls to end-users on its fixed public telephone network? Please provide a reasoned response.

## Views of respondents

- C.233 Six respondents disagreed with some aspect of ComReg's conclusions regarding SMP in this market. One of these respondents argued that the level of bargaining power held by OAOs was miniscule compared with that of eircom and not a single OAO had raised its termination rates since the initial liberalisation of the market. The same respondent noted that where eircom had engaged in realistic commercial negotiations, they have had success in lowering OAO termination rates. Another respondent pointed out that interconnect link charges in Ireland were the highest in Europe, affecting the pricing of termination on OAO networks. The same respondent noted that, while an SMP finding might be appropriate for this market, the issue of proportionality was core to any assessment of appropriate remedies. Another respondent, while agreeing with the finding of SMP in this market, argued that identical remedies should be applied across all SMP operators. One respondent also argued that ComReg had taken a lighter approach to remedies in this market compared to the wholesale market for call termination on mobile networks.
- C.234 One respondent agreed with the proposed designation that each OAO was dominant on its own network. However, in the respondent's view, asymmetric regulation led to above-cost termination charges due to various distortions in the market for call termination to end users. The respondent believed that rates charged by OAOs were well in excess of those of eircom and had been for a number of years.

## ComReg's position

- C.235 While ComReg acknowledges that all respondents disagreed with some aspect of its findings on SMP in this market, ComReg also notes that the reasons varied and that there is a clear requirement to strike a balance between views on relative market power and the proportionality of obligations.
- C.236 It would appear that OAOs are relatively unfettered in the setting of termination rates, with few reductions in rates since liberalisation. However any comparison of such rates should be approached with care. Due to the 'fixed charge per call' element (as well as a per minute charge) inherent in a number of operator rates (including eircom's), a more complete picture of relative rates would be illustrated by a comparison of rates across a range of call durations. In the consultation ComReg used a three minute call duration to compare termination rates, which resulted in eircom having a cheaper rate than most OAOs. However, the charts below illustrate that eircom's relative standing is sensitive to the actual call duration chosen, especially around the one minute mark. It is, thus, important to take this into account when making a comparison of this nature.
- C.237 ComReg would note that some OAO rates do appear excessive at higher call durations. For example, one respondent has noted that the next largest operator after eircom offering termination services has set the highest termination rate relative to eircom. Some respondents have indicated that the intransigence of most OAO rates since liberalisation has resulted from eircom entering into unrealistic commercial negotiations. However, the potentially strong negotiating position of OAOs entering into such negotiations is of concern to ComReg. The persistence of some unusually high rates does little to allay such concerns and ComReg maintains its view that OAOs have significant market power in this market.



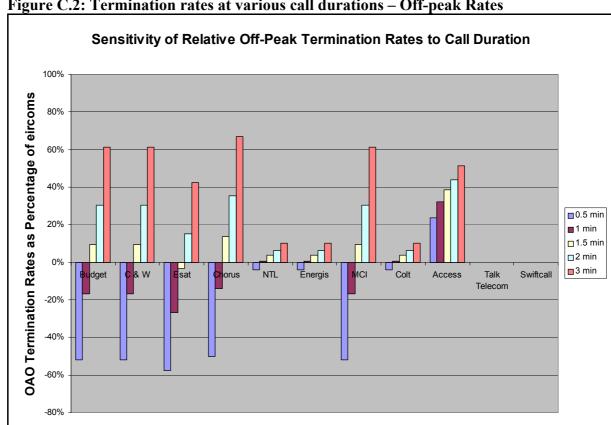
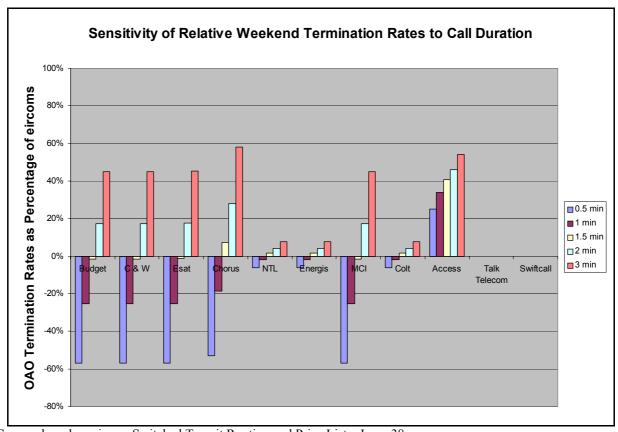


Figure C.2: Termination rates at various call durations – Off-peak Rates





Source: based on eircom Switched Transit Routing and Price List – Issue 38

## **Market Analysis: termination of calls to service providers**

### **Three Criteria**

C.238 In Chapter 3 ComReg identified a market for wholesale call termination to service providers. As this market deviates from the *Recommendation on Relevant Markets*<sup>23</sup>, ComReg has considered the three criteria outlined by the European Commission in the *Recommendation*. The Commission has set out these criteria to be used when identifying markets which are potentially susceptible to *ex-ante* regulation.

## Barriers to entry

C.239 The first criterion relates to whether a market is subject to high and non-transitory entry barriers. In the market for termination of calls to service providers, potential new entrants face barriers to entry flowing from their inability to take advantage of the same economies of scope and scale that can be enjoyed by an operator with a ubiquitous local access network. ComReg's conclusion is that barriers to entry are significant.

## Tendency towards effective competition

- C.240 This second criterion relates to whether or not the market has characteristics such that it will tend towards effective competition without the need for ex ante regulatory intervention.
- C.241 While the market initially experienced entry, this entry has not been effective in reducing the market power enjoyed by eircom. For example, BT Ireland acquired market share relatively rapidly after the introduction of Non-Geographic Number Portability in November 1999. However, this has recently been more than offset by eircom's success with capped flat rate Internet access services. The limited success of such entry would, in itself, act as a deterrent to further entry, in addition to the barriers described above.
- C.242 eircom's market share is currently 80%. Further, it has been over 65% since the 4th quarter of the year 2000, and has not dropped below 70% since the 1st quarter of 2003. It has not only remained remarkably stable, it has actually grown consistently over the last four years. Market shares of this level and this stability can indicate a position of dominance.
- C.243 As ComReg describes in greater detail below, there is some, but very limited, evidence of countervailing bargaining power in the market for termination of calls to service providers.
- C.244 Although this market has been subject to *ex-ante* regulation in the past, there has been limited entry and this entry has, to date, been ineffective. While ComReg is hopeful that this market will tend towards an effectively competitive outcome in the long term, the characteristics and trends in the market do not indicate that this will happen within the timeframe of this review.

Sufficiency of competition law

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<sup>&</sup>lt;sup>23</sup> Commission Recommendation of 11.02.2003, C(2003)497

- C.245 The third criterion relates to the appropriate role of competition law and ex-ante regulation in reducing or removing the barriers to entry described above or in facilitating effective competition. It appears that the application of competition rules is likely to be insufficient (absent ex ante regulation) to address the lack of effective competition in the relevant wholesale market for termination of calls to service providers because competition law requires evidence of abuse of a dominant position whereas the imposition of ex ante regulation requires a lack of effective competition, which is a lower threshold for intervention. The market for termination of calls to service providers has been characterised by a very small degree of new entry and persistently high market shares for the incumbent. Existing ex-ante regulation allows ComReg to observe developments in this market and identify competition problems at an early stage and, where appropriate, impose detailed technical remedies and monitor these remedies effectively, on an ongoing basis.
- C.246 ComReg considers that *ex ante* regulation is best positioned to address the competitive failures arising from provision of wholesale termination services for calls to service providers, and should at the very least be considered to be an appropriate complement to competition law in the short to medium-term.

#### Conclusion

C.247 Thus, ComReg holds the view that the market for termination of calls to service providers is a relevant wholesale market for the purposes of market analysis under the new regulatory framework, and that the continuing barriers to entry and persistent high market share held by eircom indicate that this market is not yet tending towards effective competition.

#### **Market analysis**

- C.248 In the case of wholesale termination charges relating to calls to service providers, the originating operator retains (or is paid) a portion of the retail charge collected and the balance of the retail revenue is paid to the terminating operator. After deducting its own costs, the terminating operator pays the residual balance to the service provider.
- C.249 If the retail revenues are insufficient to cover its costs, as, for example, for freephone calls, the terminating operator recovers these costs and its own from the service provider. In all calls to service providers, the originating operator recovers its costs the retention and the terminating operator makes do with the balance of the retail revenues, with a resulting positive or negative settlement to the service provider. eircom's retention is regulated and eircom requires other operators to reciprocate at the same rate as set out in its RIO, and the accompanying price list which contains statements such as the one reproduced below.
  - \* Service Schedule 205 quotes the eircom regulated retentions for Premium Rate calls. The settlement is derived from these regulated retentions on the principle of retail minus retention. The reciprocal settlement for OAO access to eircom Premium Rate Service can be viewed in Service Schedule 105. The Principle of Reciprocity applies.

Table C.2 Eircom RIO matched services

Eircom se	ervices <sup>24</sup>	Operator services		
Service schedule number	Service title	Service schedule number	Service title	
105	Access to eircom Premium Rate Service	205	Access to Operator Premium Rate Service	
106	Accesss to eircom Freefone Service	206	Access to Operator Freefone Service	
107	Access to eircom LoCall Service	207	Access to Operator Shared Cost Timed Service	
108	Access to eircom Callsave Service	208	Access to Operator Fixed Timed Service	
109	Access to eircom Universal Number Service	209	Access to Operator Universal Number Service	
110	Access to eircom Personal Numbering Service	210	Access to Operator Personal Numbering Service	
121	Access to eircom Internet Service - 1891	221	Operator Internet Access 1891 Internet Service	
122	Access to eircom Internet Service - 1892	222	Operator Internet Access 1892 Internet Service	

C.250 eircom describes the regime as the 'deemed to be' settlement regime where other operator's costs are deemed to be equivalent to those of eircom for the provision of an equivalent service.

### **Market share**

- C.251 ComReg has identified a multi-network market for the provision of wholesale termination services for calls to service providers (including Internet Service Providers). ComReg's data, as illustrated in the graph below, include a reclassification of traffic between categories by the incumbent<sup>25</sup>, but nevertheless indicate that eircom's market share (including self-supply) has climbed from 70% to 80% in recent quarters. BT Ireland acquired market share relatively rapidly after the introduction of Non-Geographic Number Portability in November 1999. However, this has recently been more than offset by eircom's success with capped Internet access services.
- C.252 As Figure 4.4 makes clear, eircom's market share is currently 80%. Further, it has been over 65% since the 4th quarter of the year 2000, and has not dropped below 70% since the 1st quarter of 2003. It has not only remained remarkably stable, it has actually grown consistently over the last four years. Market shares of this level and this stability can indicate a position of dominance.

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<sup>&</sup>lt;sup>24</sup> Eircom Reference Interconnect Offer, issue 1.54 (as amended from time to time)

<sup>&</sup>lt;sup>25</sup> ADSL and bitstream turnover and volumes were reclassified from Data communications to Access in the financial year ended 31 March 2004

## Countervailing buyer power

- C.253 eircom currently originates 85% of all minutes terminating on any network in Ireland. All providers of termination services negotiate with eircom, as the provider of 85% of origination services, or in a small number of cases, CPSOs (where the CPSOs are effectively "reselling" origination services) or OAOs.
- C.254 ComReg has considered the extent to which countervailing buyer power at the wholesale level is exerted by purchasers of termination services in the relevant markets. Such operators purchase terminating services in order to enable their customers to make calls to an end-user or service provider connected to the network termination point controlled by the terminating operator.
- C.255 The competitive dynamics of supply of termination to services providers are shaped, to a large part, by the payment flows. In the market for call termination on multiple networks for calls to service providers, there are varying degrees of countervailing buyer power depending on the payment flows. In the case of calls which are callingparty-pays, such as those for internet access, the relationship between the terminating operator and the service provider is outside the scope of this market review because the Service Provider is providing services beyond the network terminating unit and the commercial relationship between it and its terminating network operator is a retail relationship, not a wholesale relationship between operators. This "buyer" relationship does influence the behaviour of the terminating operator in that it provides incentives to maximise the revenue share that can be offered to the service provider (to "win" the service provider from other terminating operators). However, the terminating operator negotiates the termination charge (and the origination retention) with the originating operator. In the absence of regulation, such as regulatory rules to ensure end-to-end connectivity, the call origination operator would, theoretically, be able to exercise its bargaining power over the terminating operator and set the level of retention at its own discretion. However, as such rules are already required under the regulatory framework, this bargaining power is negated.
- C.256 Termination services acquired to provide called-party-pays calls to service providers are provided in a broader context in which the service provider has clear incentives to minimise the charges that it pays (or to maximise the fees received). Depending on the mobility of the service provider and terminating operators, a service provider may be able to choose between a limited number of potential suppliers or negotiate with the terminating operator. This pressure is exerted outside the inter-operator relationship relating to the termination retention and the originating charge. However, the nascent competition amongst terminating operators to offer the service provider the best terms may have the effect of reducing, to some extent, the total revenue that is the subject of negotiation between the originating and terminating operator.
- C.257 ComReg's view, therefore, is that there is some, but very limited, evidence of countervailing bargaining power in the market for termination of calls to service providers.

#### Barriers to entry and potential competition

C.258 The main barriers to entry faced by potential new entrants are those of economies of scale and of scope. Depending on the type of service, new entrants may be able to "cluster" the called parties on concentrated local access facilities, and so reduce the nature and extent of the investment required to enter the market. However, the advantages enjoyed by an operator with a ubiquitous local access network remain a considerable barrier to entry. In addition, the limited success of the market entry to

date would, in itself, act as a deterrent to any further entry, adding to the barriers described above.

## **Conclusion**

C.259 eircom should be designated as having SMP in the multi-network wholesale fixed market for call termination of calls to service providers.

Q. 14. Do you agree with the preliminary conclusions that eircom should be designated as having SMP in the multi-network wholesale fixed market for call termination for calls to service providers? Please provide a reasoned response.

## Views of respondents

- C.260 Four respondents agreed with ComReg's conclusions in the wholesale market for termination of calls to service providers. One respondent disagreed with ComReg's conclusions on SMP in this market basing its conclusions on eircom's share of retail traffic for various value-added services. The same respondent argued that:
  - Inclusion of internet figures distorted the market in that internet service provision was to a large extent one of self-supply.
  - ComReg was underestimating OAO market share
  - Range of schemes available therefore there is scope for CBP
  - ComReg excluded calling party pays schemes such as those for internet access when they are included in the market definition
- C.261 Retail traffic shares for certain value-added services were put forward by one respondent as a justification for concluding that eircom did not have SMP in the wholesale market for termination of calls to service providers. In addition, this respondent argued, on the one hand, that the market, when segmented this way, was competitive, yet also that each of these services is readily substitutable providing a choice of suppliers and thus scope for countervailing buyer power.

## **ComReg's view**

- C.262 ComReg agrees with the respondent that eircom's market share varied across different types of value added service. However, ComReg has demonstrated strong supply side substitutability amongst different types of service in the market for termination of calls to service providers, and has argued that this indicates a single relevant market. It is ComReg's view that this is not inconsistent with a market where some individual services are more competitive than others, particularly when, as the data provided by the respondent shows, the level of competition (in the form of market share) fluctuates widely over time.
- C.263 ComReg is of the view that inclusion of internet figures does not distort this market. ComReg notes that the particular situation of Ireland is that most internet provision is

self-supply, because of the ownership of the largest ISPs. ComReg proposed that self-supply should be included in the relevant product market, and this view was accepted by respondents. However, ComReg has argued that this is not the main issue here, as the core question is the extent to which voice and data services belong in the same market. It is ComReg's view that supply side characteristics clearly show that narrowband voice and data services should be defined in the same relevant market. Thus, internet figures should be included in the market analysis.

C.264 ComReg notes that both directly connected traffic and traffic for termination of calls from mobiles are included in the market share analysis. Further, while there is a range of charging schemes available to service providers and there is a limited choice of wholesale suppliers to service providers, eircom's share of traffic in this market has, in fact, been increasing and is now 80%. This would suggest that CBP is not a strong enough force to constrain the SMP operator. Finally, despite one respondent's view to the contrary, ComReg has not excluded calling party pays schemes such as those for internet access, as to include some schemes but not all would be flawed.

## **Market Analysis: National Transit**

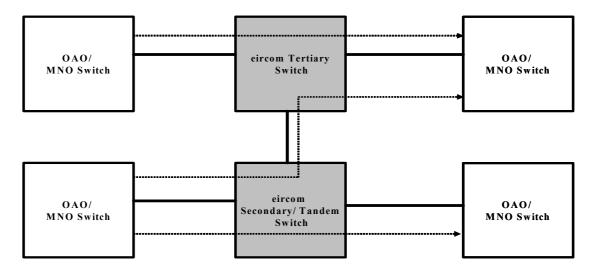
### **Market shares**

C.265 ComReg calculates that, including self supply, eircom provides 69% of all fixed national transit (hereafter transit) services in Ireland. Further, the data indicates that this share has remained relatively stable at between 68 and 70% over the last three years (see Figure 4.5).

## **Pricing behaviour**

- C.266 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.
- C.267 Currently eircom call origination and termination services (which include Primary, Tandem and Double Tandem call routing and, thus, differ from the markets as defined in Section Three) are charged to third parties at cost oriented prices. Rates are derived by means of a top-down LRIC model. 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 C.4: Carriage of calls over the eircom network that fall within the traditional understanding of transit



C.268 eircom's transit services are currently regulated, using a top-down LRIC model, as appropriate for the routing of each call. ComReg notes that some routing factors that have been regulated as components of origination and termination services (i.e. tandem and double services) will now fall within the transit market. Figure 4.6 shows the price of a three minute call at peak period and illustrates the high level of stability in eircom's transit pricing, at least for the last three years.

## Countervailing bargaining power

C.269 ComReg is of the view that countervailing buyer power does not yet exist in relation to the supply of fixed transit services in Ireland. It is possible that, as alternative suppliers enter the market over time, customers will acquire the supply alternatives that allow them to credibly threaten to change suppliers.

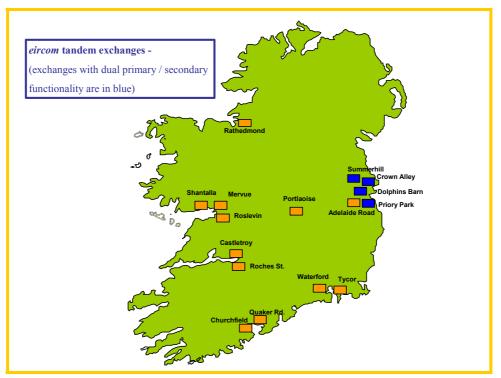
## Barriers to entry and expansion, and potential competition

- C.270 The relevant market for fixed transit in Ireland is characterised by high and non-transitory entry barriers. While these barriers are somewhat lower than those present in relation to the provision of wholesale fixed origination and fixed geographic termination services, they remain significant. In particular, ComReg takes the view that the high costs (a large portion of which are sunk costs) and relatively low volumes of traffic that can be 'contested' by new entrant operators preclude such market entry, at least in the medium term.
- C.271 The relatively small volumes of traffic for which a potential new entrant can compete, inhibit the ability of a potential new entrant to create the economies of scale and scope that are necessary to successfully provide transit services. Building the facilities to provide or acquiring the appropriate underlying capacity requires a significant underlying investment from the potential entrant (particularly in relation to the construction of such facilities). Such investments will only be made where the risk that the costs will be recoverable through retail sales is justifiable.

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- C.272 In addition, the narrower range of retail services that new entrant providers provide (at least initially) add further pressure to cost recovery, increasing the portion of the cost base that would have to be recovered from the provision of each service. See paragraphs in call origination regarding ComReg's view of the impact of economies of scale and scope.
- C.273 To date, there has been limited roll out of OAO infrastructure with primary and/or tandem switching capability that could potentially compete with eircom in the provision of switched calls to third parties. With the exception of small levels of traffic provided by BT Ireland, all traffic conveyed through these switches is self-supplied. The maps below illustrate the locations of primary and secondary switches belonging to eircom. Currently eircom have 33 primary switches and 16 tandem switches, while BT Ireland have 4 tandem switches and MCI have 1. BT Ireland has in the past also engaged in a joint venture with CIE to build additional fibre networks along its railway infrastructure, although this is more appropriately dealt with in the market review of leased line markets.
- C.274 ComReg considers that the limited roll out and third-party provision of OAO infrastructure with primary and/or tandem switching capability will continue to be insufficient to exert a competitive pressure on eircom's transit services within the timeframe of this review.

**Figure C.5:** eircom **secondary/tandem exchanges** (exchanges with dual primary/secondary functionality are in blue)



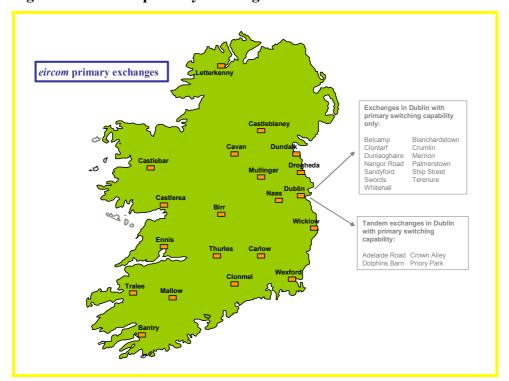


Figure C.6: eircom primary exchanges

- C.275 Metropolitan Area Networks are currently being developed to deliver broadband services to high density clusters of users (such as business parks) and to provide basic infrastructure for deploying other technologies such as DSL. However, these MANs are not used to provide retail fixed narrowband services.
- C.276 The Electricity Supply Board (ESB) was also awarded funding under the National Development Plan 2000-2006, to build a national backbone infrastructure. Fibre has been deployed around the existing ESB electricity network. ESB manages the network as a 'carriers' carrier' meaning it will lease capacity to other operators rather than engaging in the retail market itself. The ESB network comprises a Southern ring and a Northern Ring. The Southern Ring runs from Dublin to Shannon, Limerick, Cork, Waterford, Wexford, Arklow and back to Dublin. However, this project is aimed at enabling high-speed broadband packages to be available to towns on the ESB Telecoms fibre optic network and would not compete with eircom in the provision of narrowband switched calls to third parties. In addition, services have only recently become available on the ESB network and take up is believed to be limited at this stage of development.
- C.277 The mobile network operators have begun to self-provide transit services (at least in relation to high volume routes on which they are confident that there is sufficient traffic to warrant the investment). However, they do so largely using leased capacity. Further, they acquire sufficient capacity to meet their own needs, and only acquire such capacity on particular routes. They clearly lack both the spare capacity and the necessary ubiquity to enter the market in the short-term. Further, they do not have the billing, account management and similar ancillary systems that would be necessary to sell services to wholesale customers in the short-term.
- C.278 ComReg considers that there is little potential competition that could enter the market in the relevant timeframe.

## Ability to leverage and vertical integration

C.279 ComReg's observations of behaviour in the markets for the provision of wholesale transit services suggest that eircom is able to leverage its dominance in the origination market into the self-provision of wholesale transit services. Further, it is able to vertically leverage the coverage of, and the capacity available on, its extensive underlying network facilities.

## **Preliminary conclusions**

- C.280 eircom should be designated as having SMP in the wholesale market for transit services on the fixed public telephone network. ComReg does not believe that it is likely that any current provider or potential entrant will impose a competitive constraint on eircom within the timeframe of this review. ComReg's analysis shows evidence that, in the absence of regulation, market forces would be unable to constraint the pricing of transit.
  - Q. 15. Do you agree with the above preliminary conclusions regarding market analysis in the market for wholesale transit services on the fixed public telephone network? Please provide a reasoned response.

## Views of respondents

- C.281 Four respondents agreed with ComReg's conclusions in the wholesale transit market. One of these respondents noted that, in the absence of a mandated transit product, the wide dispersion of the eircom primary nodes would become a barrier to entry with an OAO being required to seek connectivity between locations as diverse as Bantry and Letterkenny. The same respondent noted that, based on traffic volumes, the cost of transmission and the constraints that existed regarding the provision by OAOs of direct connectivity to eircom's exchanges, a fully meshed connectivity between all Primary Node equivalents in the total multi-network environment in Ireland was not economically or practically possible for a majority of OAOs.
- C.282 A fifth respondent disagreed with ComReg's market analysis of the wholesale transit market. This respondent argued that the transit market should be segmented into four different types of transit. In the 'trunk transit' segment it was argued that eircom volume shares were falling because of the depth of interconnection of OAOs, that some deeply interconnected OAOs (and MNOs) were capable of offering this service but were not entering the market because regulated prices were set too low, that potential competition would constrain eircom pricing absent regulation, and that direct interconnection of OAOs was a substitute for eircom's trunk transit service. It was argued that OAOs could exert countervailing buyer power on eircom because entry barriers were lower than for wholesale origination and termination.
- C.283 The same respondent argued that some of the market segments within the 'pure' transit market were characterised by effective competition. It was argued that OAOs 'shopped around' due to pressures of cost reduction and that BT Ireland was a keen competitor on price. ComReg's methodology for calculations of market shares was also queried. In the 'transit to geographic numbers' segment it was argued that eircom were not allowed to recoup costs on transit services and that the resulting low prices acted as a barrier to entry. In the 'transit to mobile' segment it was argued that direct 57

interconnection of MNOs and OAOs should be included in the market while in the 'transit to NTCs' market it was also argued that pricing was too low and discouraged entry, although OAOs and MNOs were capable of offering this service. Finally, it was argued that ComReg must do a separate market analysis for capacity-based interconnect products before obligations could be imposed on these services.

## ComReg's position

- C.284 Without prejudice to its position that there is a single national wholesale market for call transit, ComReg has considered each of the transit market analysis issues highlighted by the respondents above.
- C.285 The respondent that disagreed with ComReg's analysis of the transit market relied heavily on its own market share calculations in coming to its conclusions. The market share calculations presented were divided among the four market segments identified by this respondent. In addition, these shares excluded incumbent self-supply of transit services whereas ComReg's definition and analysis include self supply and does not recognise a 'pure' transit market.
- C.286 ComReg notes that if regulated prices are so low as to constitute a barrier to entry, then the 'pure' transit market cannot be effectively competitive, as argued by this respondent.
- C.287 In addressing the respondent's points on trunk transit, ComReg disagrees with the approach adopted by this respondent which seemed to be to fragment the market in order to isolate a segment in which the incumbent is not dominant (based on market share). In so far as this subdivision might have merit, ComReg disagrees with the market share conclusions presented by the respondent in the trunk transit segment, in that it largely underestimates the incumbent's share of fixed tandem conveyance. For example, while OAO self-supply of trunk transit services was included, incumbent self-supply was excluded. This gave OAOs a much inflated share of this type of traffic.
- C.288 The respondent presented no market share calculations for 'pure' transit to geographic numbers, an area in which the incumbent would be the primary player. The respondent did, however, acknowledge that the incumbent carried a large volume of transit to geographic numbers for OAOs.
- C.289 The respondent argued that the recent increase in direct interconnection between mobile operators and between OAOs and mobile operators had led to a significant fall in eircom's share in this segment. However, ComReg notes that mere hypothetical supply-side substitution is not sufficient to justify the inclusion of direct interconnection in the national transit market. ComReg notes that this direct interconnection is in almost all cases not, in turn, offered to third parties. Instead, such transit traffic that was once provided by eircom has simply disappeared from the market. Thus eircom's share of such traffic remains relatively unchanged.
- C.290 The respondent argued that MNOs can enter the mobile to mobile fixed transit market in response to an increase in price. ComReg has argued in the consultation that such traffic is not in the national wholesale fixed transit market. ComReg is of the view that for MNOs to enter the fixed transit market, they would require sufficient spare capacity and would incur significant costs to develop systems for dealing with wholesale customers, including billing and account management. ComReg is of the view that MNOs do not as yet have all aspects of the capability required to offer an any-to-any transit service in place of eircom's and have not entered the market to date. Mobile to mobile transit via fixed networks is a disappearing service being replaced

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- by the direct interconnection of MNOs. In addition, there is no evidence of OAOs providing mobile to mobile transit services in place of the incumbent.
- C.291 In arguing for a separate definition of transit to non-geographic numbers, the respondent argued that the routing and functionality required to carry these calls was in excess of that used for transit to mobile and transit to geographic numbers but that a blanket transit rate was set by regulation for all services. The respondent then implied that deregulation would allow the incumbent to price this service at a higher competitive price. The respondent then went on to argue that BT Ireland could provide direct interconnection in response to a price increase and thus the incumbent would have no incentive to engage in such a price change.
- C.292 ComReg maintains the view that all national transit services should be defined in the same market due to supply side characteristics, and this is the case even where there are some differences in the competitive conditions in some segments of the market at some times.
- C.293 One respondent argued that sufficiently strong potential competition can restrain market power just as effectively as actual entry. The respondent based this potential competition on the fact that 2 OAOs and two MNOs were (at varying levels) deeply interconnected with the incumbent network. However, according to the data provided by this respondent each of the four operators appeared to only be interconnected with up to 50% of the incumbent primary nodes. ComReg does not see how such a level of interconnection could act as sufficiently strong potential competition and restrain the market power of an unregulated incumbent.
- C.294 One respondent indicated that the current regulated transit rates acted as a barrier to entry to others. However, ComReg notes that, despite these regulated rates, BT Ireland are already offering limited transit services to third parties in the market place. In addition, the respondent itself noted that OAOs 'shopped around' and that BT Ireland was a keen competitor on price.
- C.295 ComReg sees no evidence to suggest OAOs have the ability to enter this market following a hypothetical increase in price. The current ability of OAOs or MNOs to replicate a national any-to-any transit service is severely limited by the level of network connection with eircom primary nodes throughout Ireland. Thus, the potential competition offered by other operators would not be likely, timely and appreciable in the event that the national transit market were liberalised and all existing regulatory obligations removed.

## **Proposed Market Remedies**

## **Proposed Wholesale Interconnection Market Remedies**

- C.296 In this section ComReg sets out the following; (i) Summary of preliminary SMP findings, (ii) Remedies available in principle. Then for each market we describe: (i) Competition problems; and (ii) Proposed remedies.
  - C.297 Pursuant to the *Framework Regulations*, ComReg is obliged to impose specific obligations as it considers appropriate where a designation of SMP has been made pursuant to Regulation 27 (4). These SMP obligations are set out in Regulations 10-14 of the Access Regulations.
- C.298 ComReg may also propose additional obligations. For SMP operators, ComReg may, in exceptional circumstances, propose to apply additional obligations to those set out

in Regulations 10-14 of the *Access Regulations*. In such circumstances ComReg must obtain permission from the European Commission. Regulation 6 of the *Access Regulations* allows for the application of other access and interconnection obligations, so-called non-SMP obligations, which, for example, may be designed to ensure end-to-end connectivity.

- C.299 In this chapter ComReg discusses the specific obligations that may be imposed and assesses what obligations are appropriate.
- C.300 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*.

## SMP Obligations that can be applied by ComReg

- C.301 The *Access Regulations* provide ComReg with a number of obligations it can apply to SMP designated operators. The specific obligations that can be imposed by ComReg include:
  - Transparency (Regulation 10);
  - Non-Discrimination (Regulation 11);
  - Accounting Separation (Regulation 12);
  - Access to, and use of, specific network facilities (Regulation 13); and
  - Price Control and Cost Accounting (Regulation 14)

Regulation 9(6) of the *Access Regulations* states any obligations imposed by ComReg in accordance with the *Access Regulations* shall:

- be based on the nature of the problem identified;
- be proportionate and justified in the light of the objectives laid down in section 12 of the *Communications Regulation Act 2002*, and
- only be imposed following consultation in accordance with Regulations 19 and 20 of the *Framework Regulations*.
- C.302 In assessing the appropriateness of obligations to apply to undertakings designated as having SMP in any of the markets in this review, ComReg needs first to identify the nature of the problems that may exist or arise in these markets.
- C.303 The problems in these markets of particular concern to ComReg are those which adversely affect competition. Where competition is adversely affected, efficiency tends to be undermined and end-users tend not to enjoy the maximum possible benefits.

## Competition problems in general

C.304 It is helpful before addressing specific problems that may exist or arise in the origination, transit and termination markets, for ComReg to discuss, in general, the kinds of actual and potential competition problems that may feature in wholesale interconnection markets. Such problems are affected by the structural characteristics prevailing in these markets.

- C.305 ComReg believes that there are considerable entry costs associated with the markets in this review, and that these present formidable barriers to entry. However, the architecture of telecoms networks is such that the transit market benefits more from economies of density relative to origination and termination. Accordingly, the transit market has witnessed market entry in the provision of transit services to third parties in a small scale and may well witness the progressive evolution of competition at a faster pace than the origination and termination markets however this is not expected over the lifetime of this review. While ComReg is hopeful that the market for termination to service providers will tend towards an effectively competitive outcome in the long term, the characteristics and trends in the market do not indicate that this will happen within the timeframe of this review.
- C.306 In dealing with competition problems therefore ComReg will seek, where appropriate, to apply remedies that promote infrastructure based competition in the wholesale transit market which is regarded as relatively more contestable, over the lifetime of this review, than the markets for origination and termination.
- C.307 In general competition problems in the markets in this review are likely to fall into three broad categories:<sup>26</sup>
  - Leverage;
  - Single market dominance; and
  - Matters relating to termination.
- C.308 Leverage is the application by an undertaking of market power enjoyed in one market to another closely related potentially competitive market. As leverage problems characterise the transfer of market power, they can arise in both vertical and horizontal settings.
- C.309 Vertical leverage may arise when a firm controls an input that is essential for a potentially competitive downstream industry. The upstream bottleneck owner can then alter downstream competition by denying access or limiting access to its input. Many of the 'upstream' wholesale interconnect products in this review are essential inputs in the potentially competitive downstream retail markets. Hence, an undertaking identified as having SMP in any one of the markets in this review and which also operates in one or more of the potentially downstream competitive markets, has the potential to engage in vertical leverage. The most obvious illustration of vertical leverage is denial of access or refusal to deal.
- C.310 Vertical leverage can also be applied via price and non-price means whereby an SMP operator may attempt to leverage its market power by being prepared to supply a good or a service only on unreasonable terms.
- C.311 In particular where mandated access is required there are increased incentives for SMP operators to engage in non-price leveraging strategies. These include discriminatory use or withholding of information; delaying tactics; undue requirements such as adverse contractual arrangements; quality discrimination; strategic design of product characteristics to suit the SMP operator's downstream arm; and undue use of information about competitors.
- C.312 Examples of leveraging by pricing means include margin squeeze, price discrimination, and predatory pricing. An example of using price to affect vertical

<sup>&</sup>lt;sup>26</sup> These categories are in accordance with the problems outlined in "ERG Common Position on the approach to appropriate remedies in the new regulatory framework", April 2004

- leverage is the application of a price squeeze. A price squeeze involves an SMP operator setting a price for a wholesale input such that the buyer of an 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.
- C.313 Horizontal leverage occurs when market power is transferred by an undertaking from one market in the value chain to another related potentially competitive market at the same level in the value chain. Examples of horizontal leverage of relevance to the markets in this review include product bundling/tying and cross-subsidisation.
- C.314 The significant market power arising out of a position of single dominance can be exercised to the detriment of competitors and end users. Examples of single market dominance would include the erection of entry barriers (entry deterrence) and the setting of prices in excess of costs (exploitative behaviour). Single market dominance may also give rise to productive inefficiencies, where an undertaking identified with SMP could, because of an absence of sustainable or effective competition, produce outputs inefficiently.
- C.315 Termination problems are specific to call termination markets. For example, an undertaking having SMP on a call termination market may apply its market power by setting excessive prices for terminating calls onto its network.
- C.316 All of the above general problems are relevant to the markets considered in this review.

## Principles to be applied when selecting obligations

- C.317 When selecting appropriate obligations from the *Access Regulations* to address the competition problems identified in the wholesale markets in this review, ComReg has an obligation to consider the objectives of Section 12 of the *Communications Regulation Act* 2002 (to promote competition, to contribute to the development of the internal market, and to promote the interests of users) and of Regulation 6 of the *Access Regulations* (to promote efficiency, promote sustainable competition, and give maximum benefit to end-users).
- C.318 Furthermore Regulation 9 of the *Access Regulations* requires that any obligations imposed by ComReg must be based on the nature of the problem identified, and be proportionate and justified in the light of the objectives laid down in Section 12 of the *Communications Regulation Act* 2002.
- C.319 On the basis of its market analysis ComReg feels it is unlikely, within the period of this review, that there will be any significant development leading to sustainable competition in any of the markets in this review. Notwithstanding this, ComReg will choose appropriate remedies to encourage efficient investment and innovation and further promote an environment that promotes sustainable competition.
- C.320 Where problems are identified in specific markets and an undertaking(s) has been designated as having SMP, ComReg will select obligations based on the nature of the problem identified and will ensure that these are proportionate. Where possible, consideration will be given to a range of obligations and the least burdensome effective set of obligations will be selected. An effective obligation is one that remedies the problem identified and promotes sustainable competition.
- C.321 ComReg believes that sustainable competition in the markets in this review is more likely to emerge where the replication of infrastructure occurs. ComReg will therefore

- seek to design obligations in these markets in such a way that takes account of infrastructure investment incentives and the effect such investments have on sustainable competition.
- C.322 Where ComReg's market analysis suggests that replication of an SMP operator's infrastructure is feasible and desirable with regard to the promotion of sustainable competition, obligations will be designed where possible to assist in the transition process to a sustainable competitive market. ComReg may therefore design access obligations to enable non-SMP operators to make incremental steps along the 'investment ladder'.<sup>27</sup>
- C.323 ComReg emphasises that in designing obligations to promote sustainable competition in these markets, and in particular where obligations are designed to enable access to and use of specific network elements and associated facilities, it will take account of the requirements outlined in Regulation 13(4) of the *Access Regulations*. In this regard ComReg will take due account of the implications of access obligations on facility owners.
- C.324 Where ComReg's market analysis suggests that significant infrastructure competition is not likely to be feasible within the period under review, remedies may be chosen to ensure that there is sufficient access to wholesale inputs to enable service based competition to flourish.
- C.325 In general, obligations will be designed by ComReg to exhibit predictability and transparency. By so doing, this should provide greater comfort to businesses when making long-term investment decisions. ComReg will also take account of potential effects on related markets and will also include a Regulatory Impact Analysis of the proposed obligations.
- C.326 Finally, ComReg will seek to design and apply obligations in these markets that are incentive compatible. The means that, wherever possible, each SMP operator will have an incentive to comply with obligations.
  - Q. 16. Do you agree with the principles ComReg proposes to adopt when selecting obligations in this market? Are there other principles that ComReg should consider when selecting appropriate obligations?

#### Views of respondents

C.327 Generally the responses received agreed in principle with ComReg's assessment of the market and the potential problems facing competition in the interconnection market. The only additional comment that was made was in relation to the potential level of investment, and that any remedies imposed should be such that investment is encouraged and rewarded allowing for sustainable competition in the market. One operator expressed concern about the way in which ComReg would propose implementing remedies to encourage investment.

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 $<sup>^{27}</sup>$  See ERG Common Position on the approach to appropriate remedies in the new regulatory framework", April 2004.

## ComReg's position

- C.328 ComReg has in light of the responses received proposed remedies that are seen to be proportionate in terms of current markets conditions and in line with the principles above. Due to the lack of infrastructure investment currently in place ComReg has found eircom with SMP in all four markets and does not see this position changing substantially over the next couple of years. However current interconnection rates in the market, most recent rates finalised being the 2003/04 period<sup>28</sup>, are more beneficial to those OAO's that have built out more infrastructure.
- C.329 ComReg is currently undertaking a review of the eircom network and will consider the opportunity for additional infrastructure and its feasibility in the short term. As part of this review ComReg will assess the usage of the network in light of OAO roll out of their own infrastructure and the effect this may have on interconnection rates to ensure investment is encouraged and rewarded where appropriate.

## **The Call Origination Market**

- C.330 Call origination is the service that transmits switched calls from the first point of concentration through the primary switching stage. In order to self supply this service an operator must have access to end-users via the local loop, i.e. the access network that connects end-users to the first point of concentration. ComReg does not believe that replication of the local loop is feasible in the period of this review. In the absence of an operator having a direct connection to end-users it could lease a direct connection from eircom via local loop unbundling (LLU) and then self supply call origination. Using LLU to connect to end-users requires considerable investment in infrastructure and therefore, in the main, competing operators have availed of indirect access (via carrier pre-selection, carrier selection, or carrier access). With indirect access competing operators purchase the wholesale origination services from the operator with the direct connection to the end customers (overwhelmingly eircom) to a point of interconnection with their own network.
- C.331 In the market analysis of the wholesale call origination market and in the market review of retail narrowband access, ComReg showed that few operators other than eircom have so far built direct connections to end-users. While it is possible to connect to certain large customers, ComReg does not consider it to be feasible within the lifetime of this review for OAOs to replicate the entire, or even significant portions of, the eircom local access network. It is not feasible because the scale of investment exceeds what is possible within the timeframe of this review, and it is not desirable because the duplication of eircom's local access network would not maximise consumer benefits.
- C.332 ComReg believes that while LLU will promote further competition and benefit for end-users, these regulations alone will not be sufficient to maximise consumer benefits within the timeframe of this review as the scale of investment required to replicate the eircom originating network, i.e. from each point of concentration to the primary switching level, is too great a barrier to overcome. Consequently ComReg needs to consider whether the application of additional remedies in the origination market in this review would be required to promote competition and deliver significant consumer benefits.
- C.333 Thus for an OAO in Ireland to be able to supply a retail telephone service to endusers, it needs to interconnect with eircom. This is likely to remain the primary means

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<sup>&</sup>lt;sup>28</sup> See <u>www.eircomwholesale.ie</u> for details of interconnect rates applicable

- by which an OAO can offer retail services during the lifetime of this review. This conclusion indicates that remedies should be designed in the first instance to provide OAOs with sufficient access to wholesale inputs.
- C.334 Wholesale call origination products are essential inputs necessary, along with transit and call termination, to enable the production or supply of retail telephone services. In this review such retail telephone services include voice telephony, dial-up narrowband internet access (metered or un-metered), and calls to other service providers. In the absence of a call origination input, an operator would not be able to offer end-users a retail telephone service.

## Competition problems in the call origination market

- C.335 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 a competing OAO. Since interconnection was required by European and Irish legislation in 1997, ComReg has made numerous interventions mandating and shaping the interconnect services available to OAOs, and has been called upon to scrutinise the terms and conditions of interconnection, and processes around these services. In particular when implementing requests for new interconnection products ComReg has chaired and actively participated in industry fora. Intervention has continued even in recent times; see for example ComReg Document 01/03. ComReg has also been involved in setting charges for interconnection capacity and calls throughout each of the years from 1997 to date.
- C.336 Even with the application mandated interconnection at cost oriented prices, ComReg has had occasion to intervene in the wholesale origination market on numerous occasions to deal with competition problems. These have involved complaints lodged by OAOs alleging competition problems of a non-price nature, including discriminatory use or withholding of information; delaying tactics; undue requirements; quality discrimination; strategic design of products; and undue use of information about competitors.
- C.337 When developing new interconnection products, OAOs complained that products were designed so as to provide advantage to eircom's downstream arms, for example ComReg received complaints in relation to the handover for the new 1892 internet service in 2002 (Dispute Resolution: Final Determination 01/02). ComReg also received complaints that eircom forced OAOs to interconnect at points which were inefficient for their networks.
- C.338 Information on points of interconnect essential for OAOs to plan their business cases was only provided following intervention by ComReg and represents an example of withholding of information. Similar complaints were made by OAOs in the implementation of FRIACO.
- C.339 ComReg was also required to intervene on amending terms and conditions required by eircom when amending wholesale products and considered these to represent undue contractual requirements.
- C.340 OAOs had also raised complaints about alleged misuse of information about their customers and ComReg required the establishment of wholesale product areas and processes to ensure OAOs' interests were protected. Again the need for Decision D10/02 illustrates the problems encountered by OAOs in this regard.

- C.341 Although mandating access to wholesale origination at cost ought to remedy competition problems relating to price, the complexities of allocating costs in this market can still give rise to allegations of the application of a margin squeeze. Currently, the charges which eircom can apply are regulated at both a wholesale and a retail level and ComReg believes that this regulation has to date ensured that such problems have been minimised. However ComReg has had to intervene to direct revised interconnection charges on numerous occasions.
  - Q. 17. 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? Are there other competition problems, not mentioned in this section, which have occurred or may occur in this market that ComReg should also take into account when formulating appropriate remedies in this market? Please provide details of such problems.

## Views of respondents

C.342 Respondents agreed that in the absence of ex ante regulation there would be little incentive for eircom to offer reasonable access to these services.

## ComReg's position

C.343 ComReg has proposed remedies to continue the application of ex ante regulation in the call origination market to ensure eircom provides these services in the most appropriate form.

## Appropriate obligations: call origination

- C.344 eircom is the only network operator currently in a position to offer ubiquitous wholesale call origination products in the Irish market. ComReg therefore believes that appropriate *ex ante* regulation of eircom's wholesale call origination products is essential to lay the foundations for establishing sustainable competition in fixed retail telecoms markets.
- C.345 In establishing an *ex ante* regulatory framework designed to facilitate sustainable competition, ComReg needs to ensure that obligations imposed 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.
- C.346 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.

- C.347 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. However, the appropriate form of access needs to be considered by ComReg.
- C.348 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.
- C.349 If the wholesale call origination market were 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.

## **Transparency**

- C.350 It could be argued that the least intrusive and least onerous obligation under the Access Regulations (Regulation 10) is transparency. For example, transparency would require eircom to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices. This could be done, as at present, by requiring eircom to make public a 'Reference Interconnection Offer' (RIO) that specifies information about wholesale call origination products.
- C.351 Transparency would allow ComReg and OAOs to observe price and non-price terms and conditions for eircom's wholesale call origination products. However, on its own, transparency could not guard against the setting of excessive prices, the imposition of undue requirements, and the application of discriminatory practices by eircom. Furthermore, transparency alone would not be able to tackle problems of delay, especially in relation to new products and to products demanded by OAOs which are not demanded or used by eircom. However, transparency would make clearer whether discriminatory practices are applied by the SMP operator.
- C.352 ComReg therefore believes that transparency, while having the desirable property of being 'light-handed', is insufficient on its own for dealing with the competition problems identified in this market. As such, ComReg believes that transparency is a necessary obligation to make effective other obligations in this market. This view is considered further in the discussion of the other obligations that may be imposed on eircom by ComReg in the wholesale call origination market.
- C.353 ComReg believes it will also be necessary to impose obligations of transparency in support of any accounting separation obligations, as this would allow the calculation of costs and prices (i.e. internal price transfers) to be rendered visible. Further, 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.

Q. 18. Do you agree that, on its own, the application of a transparency obligation would not remedy the problems identified in this market? Do you agree that transparency, and in particular the requirement to make public interconnection terms and conditions, is a necessary remedy to problems actual and prospective in this market?

## Views of respondents

- C.354 All operators except one agreed with the above. One operator who agreed also made the comment that this obligation was necessary to ensure the application of the other remedies such as non discrimination.
- C.355 The operator who did not agree maintained that the current level of transparency was sufficient to fulfil the obligation and that any additional requirements would be disproportionate.

## ComReg's position

- C.356 ComReg is of the opinion that the imposition of this remedy is essential and will complement other remedies that may be imposed. Any change from the current level of transparency will be consulted on should a change or enhancement be deemed necessary to the market.
- C.357 ComReg believes that requiring eircom to publish a Reference Interconnect Offer will promote speedier negotiations with OAOs and could reduce potential inter-operator disputes. In addition, it will provide OAOs with knowledge that the call origination services they purchase are provided by eircom on a non discriminatory basis.
- C.358 Therefore ComReg proposes to require eircom to publish a reference offer that is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. 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. (In line with the access obligation on eircom not to withdraw access to facilities already granted) ComReg believes that eircom should continue to publish a Reference Offer containing details of access to facilities already granted. ComReg considers that this obligation would be met by the continued publication of call origination service schedules, prices, product descriptions and inter-operator process manuals contained in Core RIO document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time to time).
  - Q. 19. Do you agree that eircom should publish a Reference Interconnect Offer containing details of access to facilities already granted? Please detail your response.

#### Views of respondents

C.359 All operators agreed that this was a necessary requirement to ensure the availability of interconnect products. One OAO also made reference to problems that have been encountered by them in ensuring the timely update of the current RIO, and that

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monitoring by the regulator was necessary to mitigate any potential problems in the future.

## ComReg's position

- C.360 ComReg will continue to review the publication of the RIO and the format it takes to ensure it is sufficiently updated and maintained to the satisfaction of the end users.
- C.361 In addition, ComReg considers that eircom should be required to publish (in relation to the access obligation it is proposed to in accordance with Regulation 13 (2) (c) of the *Access Regulations*) pursuant to Regulation 10 of the *Access Regulations*, specified information, such as technical specifications, network characteristics, terms and conditions for supply and use, and price which is necessary for the provision of new and existing call origination services. ComReg believes that this information should be published as part of the Reference Interconnect Offer.
- C.362 ComReg considers that this obligation would be met by the continued publication 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, located in the eircom Core RIO Document Version 3.13 (as amended from time to time), 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 Version 1.54 (as amended from time to time).
  - Q. 20. Do you agree that eircom should publish specified information which supports call origination services? Please detail your response.

#### Views of respondents

C.363 All operators agreed that eircom should publish specified information to support the relevant services. However one operator made the point that this should not mean that the SMP operator should be mandated to provide information to the level that would equate to technical advice or support as this would be outside the obligations of the framework.

## ComReg's position

ComReg will continue to impose the obligation on eircom to provide such information but only to the level necessary to ensure the availability of call origination services.

- C.364 ComReg is of the opinion that eircom should be required to provide and publish appropriate manuals, order forms and processes for new and existing services, the details to be determined on a case by case basis.
  - Q. 21. Do you agree that eircom should be required to publish appropriate manuals and documentation for new and existing Call Origination services? Please detail your response.

#### Views of respondents

C.365 All operators agreed that this was a basic requirement to ensure the efficient provision of call origination services.

## ComReg's position

- C.366 ComReg will continue to ensure these manuals and documentation are published by eircom.
- C.367 ComReg proposes pursuant to Regulation 10(3) of the *Access Regulations* that eircom should be required to publish the Reference Offer on its wholesale website.

# Q. 22. Do you agree that eircom should publish a Reference Offer for Call Origination services on its wholesale website? Please detail your response.

#### Views of respondents

C.368 All operators agreed that this should be required. One operator made an additional point that it would be very useful if eircom provided OAO's with an e-mail notification of changes as they occur to the RIO.

## ComReg's position

- C.369 ComReg will continue to ensure that eircom publish this on their website. ComReg does not consider that eircom should be subject to additional requirements to notify OAOs individually of changes to the RIO.
- C.370 A number of processes currently apply to the publication of eircom's RIO- these include the republication of the RIO when any price changes have been approved by ComReg, a text process that was mandated in D10/02, a process for the introduction of new interconnection and associated retail products, and the application of version control to RIO documents. ComReg believes that these obligations should be maintained as they are necessary to provide OAOs with sufficient notice of any changes to the eircom RIO and should apply to all the documents which apply to the call origination market.

## Q. 23. Do you agree that the current processes that apply to the publication of eircom's RIO should be maintained for call origination services?

## Views of respondents

C.371 All operators agreed that the current processes should be maintained. One operator also commented that the publication obligation should only be to the extent the effort and the overhead involved was balanced against the number of interconnect partners, the overall complexity of the eircom interconnect offering and the rate at which changes are made to the document set.

## ComReg's position

- C.372 ComReg will continue to ensure that the current processes are maintained and note comments regarding the application of this obligation. This will be reviewed on an on going basis to ensure it is proportionate to the benefits it affords.
- C.373 If eircom is designated with SMP in a relevant market, ComReg may impose obligations on eircom, in accordance with Regulation 10(1) of the *Access Regulations*, to ensure transparency in relation to interconnection, access or both interconnection and access, which would have the effect of requiring eircom to make public specified information.
  - Q. 24. 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 support your answer with details.

#### Views of respondents

C.374 There was no particular response to this, however one operator commented that any changes to the RIO were discussed at a committee level and that this should be maintained.

## ComReg's position

- C.375 ComReg notes the comment received from one operator and will ensure that there is active participation from OAOs when changes are proposed and ensure there is industry agreement before these changes are made.
  - Q. 25. Do you agree that eircom should be required to provide itemised billing for call origination services? If you agree please indicate in what format this should be provided in order to provide the level of detail required to reconcile bills to a satisfactory level i.e. soft copy versus hard copy, whether it should be monthly/quarterly. If possible please also provide an approximation of the typical cost of providing this service and how this should be recovered.

## Views of respondents

C.376 Most respondents agreed that this was a necessary requirement in order to reconcile monthly bills and to have a greater level of transparency on the interconnect payments to the incumbent. Two operators disagreed that this had been justified and that it was not proportionate to provide this as it would require a substantial additional cost.

## ComReg's position

C.377 The provision of itemised billing at the wholesale level has not up to now been a requirement, however as a further enhancement to the level of transparency in the wholesale call origination market ComReg believes that eircom should provide itemised billing to other authorised operators and that a formal process should be arrived at. The introduction of this would allow for a level of granularity that would enable operators to be in a position to perform reconciliations internally which are

necessary to ensure there are no errors between respective operator systems and recording. Due to problems encountered by OAO's to date a certain level of itemisation is being provided by eircom and this is being improved on an ad hoc basis and mainly on the request of other operators who encounter difficulty in reconciling bills from eircom to their in house systems. 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.

C.378 ComReg has noted the comments of all operators and now feels that it will be necessary to go to a public consultation in relation to the need for itemised billing and its potential application.

#### **Non-discrimination**

- C.379 While a transparency obligation may address some competition problems it cannot by itself remedy all competition problems such as those caused by vertical foreclosure. ComReg believes therefore that in addition to transparency, a non-discrimination obligation should be imposed on eircom. The application of a non-discrimination obligation requires eircom to offer equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and would require eircom to provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.
- C.380 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 associates<sup>29</sup>.
- C.381 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. Further, non-discrimination is an essential complement to other obligations, particularly transparency and access (on the latter see below). For instance, where an access obligation has been imposed pursuant to Regulation 13 of the Access Regulations, an SMP operator may have increased incentives to discriminate on non-price parameters.
- C.382 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. For example in the specific case where an OAO approaches eircom seeking to develop a new call origination product (pursuant to a reasonable request being made for access), it is important that this OAO is afforded equivalent access to the relevant eircom departments, as eircom retail are afforded. In other words ComReg believes that eircom's downstream arms should not have privileged access to the relevant eircom departments.
- C.383 Furthermore, ComReg proposes that eircom should be required to apply a standard process for the development and introduction of new call origination services and elements, including standard documentation and timescales. This should ensure that cost allocations etc to these new services 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.

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<sup>&</sup>lt;sup>29</sup> 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. 72

- C.384 ComReg considers the non-discrimination obligation is made more effective by the transparency obligation. However, ComReg also believes that it may be necessary to apply an obligation of accounting separation to strengthen further the non-discrimination obligation. This is discussed below in the discussion on accounting separation.
- Q. 26. 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 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 detail your response.

#### Views of respondents

- C.385 All operators agreed that this was a necessary obligation to ensure the proper provision of interconnect services on a level playing field to the incumbent. One operator commented that this obligation should not however, be imposed to the extent that it provided a disincentive to eircom to innovate through the introduction of new services. Another operator also made a further point on the issue of "equivalence" and how this was defined. They said that the incumbent must not be allowed to have advance notice of changes to wholesale terms and prices to the detriment of other operators.
- C.386 One operator disagreed with the imposition of this obligation as they maintained there was no evidence of discrimination in the market and that the incumbent was subject to the rigours of competition law which was sufficient to ensure there was no advantage gained over competitors through discrimination.

#### ComReg's position

- C.387 ComReg agrees that the non discrimination remedy is necessary to ensure the protection of other operators from anti competitive behaviour by the incumbent. Comments made by operators on the application of this remedy have been noted and will be addressed when applying the remedy.
- C.388 With regard to the issue of "equivalence", ComReg will through the imposition of this remedy endeavour to ensure the SMP operator cannot gain advantage over other operators by the use of information prior to others to gain an advantage in the market.

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

C.389 Given the considerable barriers to entry arising from sunk costs, ComReg is of the view that infrastructure competition in the call origination market is unlikely to

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become sustainable during the lifetime of this review. This conclusion indicates that access obligations will play a crucial role in the emergence of sustainable competition. ComReg intends to promote an access regime that balances the interests of all operators in the market, which promotes service level competition that leads to the foundation of a market structure that makes infrastructure based competition in the future more likely. By adopting this approach, ComReg hopes that it will be able to roll back the obligations applicable to this market in future reviews.

- C.390 The transparency and non-discrimination obligations discussed above are necessary but insufficient on their own for dealing with the competition problems in this market because the key competition concern in the wholesale call origination market relates to the denial of access to facilities or the application of unreasonable terms and conditions by eircom. In addition, non-discrimination and transparency would not be able to deal with products and services not currently used or supplied by eircom. For example, the obligation of non-discrimination on its own may not have been sufficient to oversee the development of the Flat Rate Internet Access Call Origination (FRIACO) product. ComReg is of the view that such problems would be very real in this market unless a remedy is effected that specifically tackles access issues. As set out previously in the Section on Competition Problems for Call Origination, ComReg can cite numerous examples of access problems, and is therefore minded to apply an appropriate access obligation for dealing with problems in this market.
- C.391 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. On its own it is highly unlikely that eircom would offer sufficient wholesale products on reasonable terms through commercial negotiations with OAOs. ComReg is of the view that 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. Such behaviour would be construed as denial of access and would lead to the foreclosure of sustainable competition.
- C.392 At present eircom is obliged to offer access at the wholesale interconnect level for all the services listed in the 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. ComReg considers that OAOs may require new or amended products such as non traditional interface wholesale products or revised FRIACO products to be developed.
- C.393 ComReg could adopt two approaches when mandating an access obligation. 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.
- C.394 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.
- C.395 ComReg considers this 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.

- C.396 At this stage ComReg believes it to be 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. Any such request will be reviewed in the context of Regulation 13 (4) of the *Access Regulations*.
- C.397 When considering whether or not to impose any access obligation under Regulation 13 (1) or 13 (2) of the *Access Regulations*, ComReg must take account of Regulation 13 (4) of the *Access Regulations*. These factors include, inter alia, the technical and economic viability of using or installing competing facilities, in the light of market development; the feasibility of providing the access proposed, in relation to the capacity available; the initial investment by the facility owner bearing in mind the risks involved in making the investment; and the need to safeguard competition in the long term. According to Regulation 13(3) of the *Access Regulations*, ComReg may attach further conditions to cover fairness, reasonableness and timeliness in respect of any obligations it imposes in accordance with Regulations 13(1) and 13(2) of the *Access Regulations*.

# Q. 27. Do you agree that an access obligation for call origination should be imposed on eircom? Please provide details in support of your answer.

#### Views of respondents

C.398 All operators agreed that this was a necessary obligation to ensure the proper opportunity to compete in the call origination market. The main point made in the response was that any request made must be reasonable before the incumbent must be obliged to comply.

#### ComReg's position

- C.399 ComReg agree that this is a necessary obligation and that it must be only on the basis of a reasonable request. ComReg will decide on what is a reasonable request in the event of a dispute.
- C.400 Turning to the detail, there are varying types of access obligations which can be imposed as set out in Regulation 13 of the *Access Regulations*. ComReg believes the following obligations should be imposed
- C.401 Pursuant to Regulation 13 (2) (i) of the *Access Regulations* ComReg propose that eircom should be required to interconnect networks or network facilities. This is necessary to maintain eircom's obligation to interconnect with existing and new OAOs and ensure that the market functions.

## Q. 28. Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please detail your response.

#### Views of respondents

C.402 All operators agreed that this request was reasonable and that it was necessary in order to provide wholesale interconnection. One operator did refute claims made in the

consultation that there had been problems with the provision of these facilities over the years.

#### ComReg's position

- C.403 ComReg notes all comments made by operators and will continue the regulation of this obligation.
- C.404 Pursuant to Regulation 13 (2) (c) of the *Access Regulations* ComReg proposes that eircom should have an obligation not to withdraw access to facilities already granted. This is necessary to ensure that OAOs have the certainty to provide retail services to the marketplace and so compete with eircom. ComReg considers that this obligation would be met by the continued offering of call origination service schedules and prices contained in eircom's Core RIO document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time to time) and product descriptions and inter-operator process manuals as currently published as stand alone documents on eircom's wholesale website.
- C.405 There are circumstances where it may be desirable to withdraw access to facilities, for example when a facility is no longer needed and it is an undue burden on eircom to maintain it. ComReg therefore proposes to qualify the obligation on eircom allowing it to withdraw access to facilities already granted without prior ComReg approval and following a public consultation.
  - Q. 29. Do you agree that eircom should be required not to withdraw access to facilities already granted, save without prior ComReg approval which would only be granted following public consultation? Please detail your response.

#### Views of respondents

C.406 There was a mixed response to this question from operators. Some disagreed on the basis that it was not necessary and impractical since the current regime was working without any problems. In the opinion of one respondent, under the current regime there was a process for the withdrawal of products and all operators were given sufficient time to raise a dispute. If the dispute was valid then the product was not withdrawn. One operator believed that this constituted a new obligation and that ComReg did not have the power to impose it. One operator commented that ComReg may wish to consider the potential burden of committing to an automatic public consultation on every withdrawal of facilities.

- C.407 ComReg does not agree that the current regime is sufficient, and is supported in this view by OAOs. ComReg considers that there is merit in the suggestion that an automatic public consultation may be overburdensome. Therefore, Comreg will oblige eircom not to withdraw access to facilities already granted, unless this is approved by ComReg. ComReg's approval may involve public consultation.
- C.408 Furthermore, pursuant to Regulation 13(2) (c) and 13 (3) of the *Access Regulations*, ComReg considers that eircom should be required to continue to provide specified information, such 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. ComReg considers 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, located in the eircom Core RIO Document Version 3.13 (as amended from time to time), 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 the prices contained in the eircom RIO Price List Version 1.54 (as amended from time to time).

Q. 30. Do you agree with ComReg's proposal to require eircom to provide specified information which supports existing call origination services and to continue to provide such services in accordance with existing terms and conditions and specifications? Please detail your response.

#### Views of respondents

C.409 All operators agreed that this was necessary to support the provision of interconnection services on a proportionate basis. One operator commented that the current process was sufficient and had proven successful to date and any further regulation was seen as micro management on the part of ComReg.

- C.410 ComReg will continue to impose this obligation on the incumbent and will decide at what level it should be provided. Proportionality will always be considered when assessing the requirements of OAOs and any unnecessary burdens this may place on eircom.
- C.411 In the future and within the timescale of this review, 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*. At this stage ComReg believes it to be overly interventionist and premature to mandate such products, but does propose 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 requests will be reviewed in the context of Regulation 13 (4) of the *Access Regulations*. However at this stage ComReg proposes that imposition of any access remedy through Regulation 13 of the *Access Regulations* would be granted only when that remedy represents the only way to promote effective competition.

- Q. 31. Do you agree that eircom should have an obligation to meet reasonable requests for access? Please detail your response.
- Q. 32. If you believe that eircom should be required to answer reasonable requests for access for call origination, are there specific wholesale products or features or additional associated facilities not currently offered in the eircom RIO that should be provided by eircom? Please provide details of such products and why their inclusion in the RIO would remedy competition problems in this market.

#### Views of respondents

- C.412 All operators accepted the obligation to meet reasonable requests for access and that it was based on a reasonable regime. However one operator refuted the claim that ComReg has had to make numerous interventions in this area. Their view was that no evidence had been provided. Another operator commented that any access remedy should only be applied where negotiations pursuant to a reasonable access request were unsuccessful.
- C.413 One operator also made note that the distinction that ComReg made regarding the demarcation between Transit and the other services fundamentally affected the costing of these services. Their view was that by definition the transit element had no relationship with network Access Layer. They proposed that eircom's ARO pricing should be reviewed to ensure that common costs such as exchange buildings, power plant, duct used to connect RSU's and other Nodes and ancillary facilities such as welfare areas, security insurance etc. were properly apportioned.
- C.414 Another operator made the comment "that eircom should respond in a professional and timely manner to any reasonable request for access." The respondent questioned whether all retail services had an updated wholesale equivalent of all eircom retail services. An example given by them was where eircom did not provide a wholesale equivalent for its FWA provided retail service

- C.415 ComReg notes agreement from respondents that eircom should be obliged to meet reasonable requests for access. No operator responded with any additional requirements.
- C.416 ComReg will continue to impose the obligation of meeting reasonable access requests and will address any disputes accordingly.
- C.417 Additionally, pursuant to Regulation 13 (2) (b) of the *Access Regulations* ComReg also believes that eircom should have the obligation to negotiate in good faith with undertakings requesting access. This is necessary to ensure that OAOs can approach eircom and ensure that their requests for new or amended products are treated promptly and appropriately.
- C.418 Pursuant to Regulation 13 (3) of the *Access Regulations* ComReg considers that eircom's call origination services should must be provided on terms and conditions which are fair, reasonable and timely.

Q. 33. 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 and compensation payments? Please detail your response.

#### Views of respondents

- C.419 All operators agreed that call origination services must be provided on terms and conditions that are fair and reasonable. However there were mixed opinions on the level of SLA's and compensation payments. Some operators felt that the current level of SLA's were sufficient and as such further regulatory obligations in this regard should "encompass only those transactions that are key to the functioning of the wholesale offering in a non discriminatory manner."
- C.420 In relation to the imposition of compensation payments all operators agreed in principle that compensation payments are necessary to ensure the efficient use of resources. However some suggested that that this consultation was not the correct forum to address this and that ComReg did not have the powers to impose obligations in this regards without further consultation on the mechanism under which they would be imposed.
- C.421 One operator specifically said that "Service Level Agreements are necessary, but on their own are of little value as failure to meet SLA requirements have no penalty. .... compensation payments should be tied to SLAs, and ...compensation payments must be sufficient to provide a real incentive to Eircom to meet the SLA."

- C.422 ComReg agrees that call origination services should be offered on terms and conditions that are fair and reasonable and will regulate the market to ensure this is the case
- C.423 On the issue of SLAs, ComReg notes that this applies to interconnection paths, and is dealt with in Section 7 of the main body text.
- C.424 ComReg proposes that eircom should be required to provide access to call origination services to competitors at an equivalent standard and at an equivalent time as the retail arm.
- C.425 Furthermore ComReg proposes that eircom should be required to provide competitors with information necessary for access to its call origination services at an equivalent standard and an equivalent time as the 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.

Q. 34. Do you agree that eircom should provide access to and information necessary for access to call origination services to competitors at least equivalent times and standards as it provides to its retail arm? Please detail your response.

#### Views of respondents

- C.426 The incumbent stated that that "they have in the past made available all necessary information to fulfil any requests made and that this is unnecessary intervention by ComReg." An important point was made regarding the difference between direct and indirect access. In such cases, the respondent suggested that the level of information made available may be different in different circumstances.
- C.427 One operator made the point that there was currently a review of the originating operator identification in process and that it was not appropriate to consult on the level of detail in relation to the remedies for the wholesale fixed access market.
- C.428 Another operator agreed. In the respondent's view, the question of "equivalence" needed to be further addressed. Their experience was that eircom repeatedly argued that "internal SLA's do not exist" for example. However, retail services with SLA's could be built by eircom and it was impossible to imagine a situation where either formal or informal understandings or arrangements did not exist. At the very least, Eircom's retail services seemed to have access to statistical information not available to OAOs.

#### ComReg's position

- C.429 On the whole operators appear to agree with the principle, however it is the application of the principle that seems to lead to ambiguity in the responses.
- C.430 ComReg agrees that, in the interest of the non discrimination obligation, access to and information necessary for the provision of services which are offered to the retail arm of the incumbent should be offered to OAOs at equivalent times and standards. ComReg is of the opinion that eircom should be required to provide call origination services on an unbundled basis. The level of unbundling should be not less than offered at the time to its retail division or subsidiaries.

## Q. 35. Do you agree that eircom should provide call origination services on an unbundled basis as part of its Access obligation? Please detail your response.

#### Views of respondents

- C.431 One operator assumed that the question referred to an obligation to provide call origination at all Primary switches. In the respondent's view, this was already in place and regulation was unnecessary.
- C.432 Another operator agreed that the level of unbundling that applied to wholesale call origination services should be not less than offered to eircom's retail division or subsidiaries.
- C.433 One respondent noted that "this obligation is required, otherwise OAOs might be required to buy products that they do not need for their service, thereby reducing their efficiency and ability to compete."

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#### ComReg's position

- C.434 ComReg agrees that this is a necessary obligation given current market conditions and will continue to ensure this obligation is adhered to.
- C.435 If the provision, by eircom, of certain products is mandated ComReg believes 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 Operational Support Systems (OSS) such as is necessary for them to take up the mandated product and allow them to compete with eircom at the retail level in winning customers. Therefore, pursuant to Regulation 13 (2) (e) ComReg also considers it would be appropriate that, insofar as it is required by OAOs to avail of access, eircom be required, pursuant to Regulation 13 (2) (e) of the *Access Regulations*, to grant open access to technical interfaces, protocols, or other key technologies and systems.
  - Q. 36. 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 detail your response.

#### Views of respondents

- C.436 All operators except for one agreed that this was necessary in order to provide services to a sufficient level. However one operator who agreed on the provision also commented that they considered that currently the provision of all necessary information and technical interfaces to operators to support their products was satisfied where requested. They also considered the current approach to be a proven solution which had been accepted by OAO's so they considered it unnecessary regulation and micro-management on behalf of ComReg to try and change this.
- C.437 The respondent commented further that information that must be provided by the SMP operator should be defined at the point of interconnection. In its view, this includes information about those technical interfaces and protocols that are essential to support access to wholesale call origination services. However information about technologies, systems and software that may be specific to eircom's retail activities and replicated by OAOs should not be subject to open access requirements. The respondent suggested that access to such information may be subject to Intellectual Property rights.

- C.438 ComReg does not agree that current provision meets all existing and likely future needs, and notes that regulatory intervention has been necessary to ensure open access. ComReg notes comments on the level of information which is required, and suggests that this could be subject to further industry discussion.
- C.439 Access obligations, together with the transparency and non-discrimination obligations, would remedy many of the problems in this market, but their effectiveness would be

greatly enhanced by accompanying obligations covering price control and cost accounting (see below).

#### Price control and Cost Accounting

- C.440 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 eircom, or deal with problems related to possible inefficient investments undertaken by eircom. 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.
- C.441 In many markets where prices and/or costs are excessive, entry would occur and subsequent competition would re-align prices with costs. However, infrastructure competition in the wholesale origination market is expected to be limited over the life time of this review, and consequently entry that might otherwise constrain the prices set by the SMP operator in this market is highly unlikely. ComReg therefore believes that, in addition to the above obligations, a price control obligation is necessary to promote competition in the retail market and safeguard end-users against excessive prices.
- C.442 ComReg has found in practice since the introduction of regulation many areas where eircom was found to present costing submissions which were excessive when compared to an equivalent efficient operator and which would lead to unfair charging at the wholesale level. In such cases ComReg and its predecessor the ODTR, was forced to make directions to have appropriate amendments made to ensure proposed wholesale charges were cost oriented.
- C.443 A price control may take many forms. It would be possible to adopt a less interventionist approach, where ComReg could apply a price control based upon the concept of retail minus, whereby eircom would be permitted to set prices for wholesale services equal to their retail equivalents less avoidable costs, or adopt a more intrusive form requiring prices to be cost oriented. In relation to retail minus, putting to one side the issue of whether an equivalent retail product exists, a suitably designed retail minus price control would deal with the application of a margin squeeze, but it would not address the problems associated with the application of excessive prices. ComReg believes the possibility of excessive prices in this vital bottleneck service is sufficiently serious that a price control requiring cost oriented tariffs is preferred. Indeed, the current price control regulations applying in this market mandate cost oriented tariffs based on a Forward Looking-Long Run Incremental Costing (FL-LRIC) methodology and ComReg does not believe conditions have altered appreciably to justify their modification or removal.
- C.444 Historically, OAOs in Ireland have purchased eircom's wholesale interconnect origination services to enable the offering of retail services to end-users in areas where they lacked local access networks. Because of the problems of vertical foreclosure, access to eircom's wholesale interconnect services was mandated using cost oriented price reviews based on FL-LRIC costing methods. The access obligation and the price control obligation have enabled service based competition, and as a consequence efficient OAOs have been able to grow larger customer bases. As the customer bases of OAOs achieve a critical mass, it is envisaged that this will lead to a more stable environment for further infrastructure investments in the core networks by the OAOs.

- Such investments over the course of time should reach further to the customer locations.
- C.445 Through current regulatory requirements imposed on eircom, ComReg has ensured the availability of the various services by eircom in the interconnection market and this has enabled OAOs to climb further up the 'ladder of investment'<sup>30</sup>. ComReg therefore seeks to encourage, where possible, efficient infrastructure investment, as this will facilitate effective and sustainable competition. Infrastructure based competition is also more likely to lead to the eventual withdrawal or relaxation of many of the current and proposed regulatory obligations in the interconnection market.

#### **Principles of Price Control**

- C.446 As stated above, a price control can be used to remedy the leverage of upstream market power into potentially competitive downstream retail markets. To prevent such behaviour, ComReg proposes to continue the obligation that interconnection services are offered at cost oriented prices. By ensuring that interconnect prices are cost oriented ComReg ensures that the provision of interconnection is on fair and efficient terms and that costs are soundly derived from appropriate costs and give proper economic signals to operators to guide their investment decisions.
- C.447 In applying a price control based upon cost orientation, ComReg will need to pay careful attention to the treatment of common costs. Common costs are those costs which are shared across a number of products. Where common costs are shared between products in an SMP market and with products in a non-SMP market, the SMP designated operator may seek to allocate disproportionately the common costs into the SMP market. By so doing the SMP operator would effectively raise rivals costs, and as a result would be able to cross-subsidise the products in the non-SMP market. ComReg will therefore review closely common costs in any application of a cost oriented price control in this market.
- C.448 The principle that only efficiently incurred costs can be recovered through interconnection charges is one that ComReg believes is of vital importance. eircom at an operational level is free to manage its network, and to route call 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.
- C.449 An example of the application of the principle of efficient operation is Near End Handover of interconnection traffic. Where an OAO has built out points of interconnect to the primary switching level it should be able to take off traffic at this level. In practice a proportion of eircom's primary switches lack the necessary functionality to allow calls to Number Translation Codes to follow such routings and as a result some traffic is unnecessarily routed higher up eircom's network incurring additional costs. These additional costs are inefficient and eircom may only charge the OAOs for the costs that would have been incurred had all traffic that should have been taken off at the primary level had actually been taken off.
- C.450 Where it is efficient to do so, eircom will incur network overheads associated with the management of the network, for instance the intelligent network or spare capacity for

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<sup>&</sup>lt;sup>30</sup> See for example ERG Common Position on Remedies, April 2004 available on www.erg.eu.int

- overflow routing. As these costs are overheads associated with managing the entire network they should be recovered across all calls both self supplied and interconnect..
- C.451 Prior to the implementation of the above price control and in conjunction with the market analysis data considered, ComReg has also taken into account the cost recovery principles commonly applied in order to decide on the level of price control necessary at this stage. The main principles are as follows;
  - Cost causation
  - Cost minimisation
  - Distribution of benefits
  - Development of competition
  - Practicality

#### **Cost Causation**

- C.452 Costs should be recovered from those whose actions cause the costs to be incurred at the margin. In the case of the origination rates in Ireland, the FL-LRIC approach is seen as the most appropriate to ensuring that economic efficiency is enhanced by requiring parties to pay for the costs which they actually cause. The type of costing model adopted is a very important aspect in order to achieve this, is either top down or bottom up.
- C.453 The principle of cost causation must be applied in a non-discriminatory manner. For example, eircom's own retail arm requires the provision of wholesale services every bit as much as OAOs so that it is appropriate to recover carrier services and interconnect billing costs across all calls utilising the eircom network, including entirely eircom retail calls and not merely those involving interconnected operators..

#### Cost minimisation

C.454 The mechanism for cost recovery should ensure that there are strong incentives to minimise costs. By applying forward looking costs models [rather than historical costs, which may not be a true reflection of the incremental costs caused by OAOs], eircom and other operators have an incentive to ensure that costs are efficient and kept to a minimum.

#### Distribution of benefits

C.455 Costs should be recovered from the beneficiaries and in such a way as to provide a level playing field for downstream operators.

#### **Development of competition**

C.456 The mechanism for cost recovery should not undermine or weaken the pressures for effective competition.

#### **Practicality**

C.457 The mechanism for cost recovery needs to be practicable and relatively easy to implement. eircom has, in recent times amended its systems and tailored the pricing models to reflect the FL-LRIC methodology. Where any changes to such systems may be expensive in terms of resources and capital expenditure, ComReg will, before it

- makes any changes to this mechanism in the future, take account of this expenditure of resources by eircom.
- C.458 In light of the apparent lack of competition in the interconnection markets, ComReg, or previously, the ODTR, has, since 1998, published a number of documents on what it considered to be the most appropriate way to achieve cost orientation. One of the most important and pertinent documents published by ComReg in relation to the issue of cost-orientation is Document 99/38<sup>31</sup>. In this document, issues relating to the estimation of FL-LRIC costs were discussed and it was concluded that the adoption of a FL-LRIC model for interconnection was the best way to:
  - encourage efficient competition;
  - send appropriate signals that promote forward looking investment decisions;
  - enable cost recovery by eircom;
  - facilitate effective means of interconnection;
  - be sufficiently transparent; and
  - be non discriminatory and non-preferential.
- C.459 ComReg also had to provide guidance on costs allowed in this model by directing eircom that additional costs caused by the provision of interconnection may only be recovered to the extent that they have been both fully justified and identified as being incremental to interconnection and not incurred from internal activities of the organisation. Where this was not justified to the satisfaction of ComReg the costs were not allowed for inclusion in the interconnect rates. Further to this direction, a number of directions have been issued by ComReg, following review of eircom's conveyance rates for origination, termination and transit rates, where the application of costing methodologies, or the inclusion of certain costs, were not seen by ComReg to be appropriate. Up to the time of this review ComReg has reviewed the origination, termination and transit rates together.
- C.460 ComReg has, in the past, consulted industry and directed on methodologies to be applied in the RIO model prepared by eircom in areas such as the type of gradients and routing factors to be applied, set up costs to be allowed and over what calls these costs can be recovered, whether there should be two part charging (for call set up and duration), and other areas where consensus was not reached between eircom and ComReg.

#### **Products subject to Price Control**

- C.461 As already stated, eircom is currently required to offer a number of interconnection services and these are published on the eircom website (<a href="www.eircomwholesale.ie">www.eircomwholesale.ie</a>). ComReg is proposing to continue to mandate the provision by eircom of access to these interconnect origination services. See Annex G for a list of these products.
- C.462 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

<sup>&</sup>lt;sup>31</sup> Document 99/38 - The Development of Long Run Incremental Costing for Interconnection.

- costs of the network elements used and the costs associated with collecting the retail revenue such as billing costs and bad debt.
- C.463 In June 2002, following an industry consultation, ComReg mandated the introduction of 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 are handed over at the tertiary level in the eircom network. ComReg's reasoning for introducing NEHO was that it represented the best use of infrastructure rollout as OLOs would no longer have to pay for network elements they do not require and it encouraged more efficient network based routing as this will enable OLOs to benefit from points of interconnect at primary level.
- C.464 Currently only one operator avails of NEHO. ComReg set rates for this operator on a quarterly basis based on information supplied by eircom. The rates for this service comprise of the conveyance costs related to the specific points of interconnection and average call holding times of that operator. The existing industry average rates will continue to apply to other operators which have not requested NEHO and continue to collect calls at the tertiary switches. These rates apply only to calls originated by eircom and do not apply to transit traffic to this Operator.

# Q. 37. Do you agree that eircom should continue to provide Near End Handover? How often should these rates be reviewed? Please provide detailed comments.

#### Views of respondents

- C.465 All respondents to this question agreed that this should be provided. However one operator commented that this product was already supported in a manner that had been agreed with industry. This respondent believed that it was not necessary to address it here again.
- C.466 Another operator noted that "this gives OAOs an appropriate incentive to build infrastructure, extend networks, and allows them to increase efficiency. The current frequency is acceptable for review."

- C.467 ComReg has addressed this question in this consultation to allow operators to comment on the current process and to ensure that there are no changes which are desirable which have not been addressed. From the responses received it is clear that no change is desirable and as such the current system will remain in place.
- C.468 In addition to standard per call and per minute origination charges eircom is obliged to offer a flat rate internet access call origination product (FRIACO). The costs associated with originating FRIACO calls are not recovered on a per call and per minute basis, but are charged on a capacity basis and the costs are recovered on an annualised basis per switch port.

Q. 38. Do you agree with the continued provision by eircom of call origination services charged on a capacity basis, i.e. FRIACO? If not please provide supporting explanation for your conclusion.

#### Views of respondents

- C.469 All respondents agreed that this is a necessary provision. However one operator also suggested that this product was already supported in a manner that had been agreed with industry, and that it was not necessary to address it here again.
- C.470 Another respondent suggested that ComReg should examine the margin provided in the current FRIACO product. The respondent claimed that Eircom's retail price per customer is €20 euro, while the wholesale price is €55 per port. The respondent did not believe contention accounted for this discrepancy.

- C.471 ComReg has addressed this question in this consultation to allow operators to comment on the current process and to ensure that there are no changes which are desirable which have not been addressed. From the responses received it is clear that no change is desirable and as such the current system will remain in place.
- C.472 It would not be considered appropriate to separate certain wholesale products when reviewing call origination costs, rather it is considered necessary to apply a price control on all interconnection wholesale services in order to prevent price squeezes or excessive pricing. ComReg believes 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.
- C.473 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.
- C.474 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 and other costs involved in maintaining them in addition to normal interconnect charges.
- C.475 Currently there is a special pricing mechanism used to arrive at the PAC which is based in ComReg Decision D15/02.
  - Q. 39. Do you think that the current charging mechanism for PAC is still appropriate? If not please provide details with your answer.

#### Views of respondents

C.476 All respondents agreed that the current charging mechanism for PAC was appropriate. One operator expressed their view that it was not necessary to raise this in this consultation.

#### ComReg's position

C.477 ComReg has noted the responses and as such will continue to regulate the PAC charging mechanism as it is today.

#### **Form of Price Control**

- C.478 ComReg commenced the regulation of eircom in the interconnect market in 1998. Since this time there has been a number of consultations and directions made in relation to the costing principles applied in the calculation of the interconnect rates. The need for these interventions arose as there has been insufficient competition in the market to prevent excessive pricing. Heretofore, costs have been calculated using methods that were deemed by ComReg to be appropriate to the circumstances and which in ComReg's view would promote efficiency and sustainable competition and maximise consumer benefits.
- C.479 In order to achieve a high level of assurance that interconnect rates are cost oriented it is necessary to apply the most appropriate methodology that will achieve this. The methods that could be applied include using fully distributed historical costs, marginal costs or forward looking long run incremental costs using either a top down or bottom up approach.
- C.480 The application of the forward looking long run incremental cost (FL-LRIC) method is preferred to other cost methods, such as fully distributed historical costs, 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.
- C.481 As set out in Document 00/31<sup>32</sup> ComReg will review the generality of all wholesale services provided by the eircom in the RIO on an annual basis, this includes those listed in Annex E. In this list there are a range of services which include additional costs to Core Network call origination charges. Where appropriate it may be possible to use historic costs as a reasonable proxy for forward looking costs.
- C.482 While ComReg believes that the obligation to provide wholesale call origination services priced at LRIC cost remains justified and appropriate given the impracticality of replicating the assets underpinning the service, ComReg has concerns that the current method of enforcing compliance with this obligation is less than optimal. Under current arrangements eircom make pricing submissions to ComReg on an annual basis derived from their top-down LRIC costs. Top-down LRIC models rely on underlying accounting information which by its nature is backward looking. As a result when ComReg approves a pricing submission for the current period it can only do so on interim basis as the submission is relying on forecasts, and rates do not become finalised until actual volume and cost data is available. While this approach ensures that prices are rigorously cost oriented it also creates uncertainty in the market and imposes a heavy compliance burden on eircom.

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 $<sup>^{\</sup>rm 32}$  Document 00/31 - eircom's Reference Interconnect Offer- Decision Notice D7/00 & Report on the Consultation.

- C.483 ComReg has previously consulted on the possibility of moving from an annual review regime to a multi-year wholesale price cap regime. This would both increase certainty for the industry and avoid overly intrusive and bureaucratic regulation. In addition a price cap regime provides very clear incentives to eircom to minimise costs, if it can reduce its unit costs below the level expected when the cap is set then it retains increased profits, at least for the period until the cap is reviewed. The responses received in prior consultations in relation to interconnection indicated that this approach had broad support within the industry, although many details relating to how the price cap will be implemented in detail will need to be resolved.
- C.484 ComReg believes that moving to a wholesale price cap regime within the timeframe of this review would be desirable, but acknowledges that the annual review regime may have to continue in the short term.
  - Q. 40. ComReg proposes to continue with the application of a FL-LRIC price control for call origination conveyance rates until such time as an alternative method is arrived at. Do you agree with this position? Do you believe there are alternative price control methods that have not been considered by ComReg which are less onerous but equally effective as FL-LRIC? Please support your response with economic analysis.
  - Q. 41. Do you agree that eircom should be required to provide any new interconnect origination services subject to the same price control obligations as existing services? Please detail your response.
  - Q. 42. Do you agree that ComReg should consider moving towards the application of an alternative price control such as setting rates in line with RPI movements which may include an adjustment up or down over a set period for call origination conveyance rates? Please provide definitive explanations with your answer.

Views of respondents

C.485 The views received from operators in relation to the above questions were mixed. Some operators agreed on the continuation of the current charging mechanism until such time as a Wholesale Price Cap was arrived at, whereas one operator came to the conclusion that the continuation of costing on a FL-LRIC basis was no longer appropriate. They believed it was no longer appropriate for reasons such as the uncertainty in the modelling adopted, and the potential bias from the use of benchmarking. The respondent proposed that the potential for sustained economy wide benefits from ICT (Information and Communications Technology) will increasingly depend on the use, not the production, of ICT. The former has been identified as a key driver of economic growth in a number of economies, while the latter may eventually decline in value due to the relentless decline in the price of the

- ICT due to technological progress. The effective use of ICT was seen as being dependent on high quality communications infrastructure.
- C.486 In relation to the introduction of a wholesale price cap the same operator commented that while they would welcome the introduction of a wholesale price cap, they noted that "its effectiveness is wholly dependent on its ability to promote future investment and encourage sustainable competition."
- C.487 Another respondent commented that the key question was the level of the X in the CPI-X wholesale price cap formula. In the respondent's view, it should be sufficient to induce eircom to be efficient and to continue to improve its efficiency. The respondent proposed that stack testing and full margin squeeze analysis must be conducted by ComReg before any Eircom retail price reduction.

#### ComReg's position

- C.488 ComReg has noted the responses and will continue the application of the FL-LRIC costing methodology until such time as a wholesale Price Cap is arrived at and agreed by industry to be appropriate and fulfils all the objectives of increasing competition and encouraging investment.
- C.489 In relation to the comments made that the FL-LRIC approach is no longer appropriate, ComReg is not in a position to change this without further consultation outside this review process and given that the current process has been agreed with industry and continues to be supported by OAOs ComReg will not make any changes in the immediate future.

#### **Accounting Separation**

- C.490 Accounting Separation 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 at an excessive level and provide greater certainty about the cost base.
- C.491 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.
- C.492 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.
- C.493 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.

- C.494 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 believes the imposition of an obligation of accounting separation upon eircom would be justifiable and based upon the nature of the problem identified.
- C.495 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.
- C.496 As it is proposed to designate eircom with SMP in the call origination market there are also the possibilities of further competition problems which could lead to the exploitation of consumers. This exploitation could arise in the current market if eircom were to engage in entry deterrence, exploitive behaviour through excessive pricing and productive inefficiencies. These issues are further explained below in the context of the market for call origination in the fixed telecoms market.
- C.497 ComReg proposes to consult further on the detailed implementation of accounting separation under the new framework. In the interim, ComReg is proposing that eircom be required to maintain the existing level of accounting separation, until such time as any further consultations are completed.
  - Q. 43. Do you believe eircom should have an obligation of accounting separation in the call origination market? Please elaborate on your answer.

Q. 44. Do you agree that where an obligation for Accounting Separation or Cost Orientation has been proposed in the call origination market on an SMP operator that they should have an obligation to maintain the appropriate Cost Accounting Systems that will fulfil these obligations? (See the Cost Accounting Systems section later in this paper for further discussion in relation to these systems.) Please detail your response.

#### Views of respondents

- C.498 All respondents except one agreed that the obligation to provide separated accounts should be maintained by ComReg. In relation to the operator who disagreed their response stated that they believed that the current regime imposed an undue burden on them in relation to accounting separation obligations and should be relaxed. They believed that it was unjustified based on problems identified in the interconnect market. In the respondent's view, "the current level of reporting i.e. Historical Cost Accounts and Current Cost Accounts can present some anomalies where prices are amended to reflect more up to date values.....the level of transfers may not be the same and as such take from the usefulness to the reader and may lead to confusion rather than greater transparency."
- C.499 In relation to the obligation to maintain appropriate Cost Accounting Systems to fulfil any Accounting Separation obligations, there was a mixed response from operators. Most agreed that it is necessary; however one operator commented that it was a matter which was only relevant to the obligation of cost orientation.

#### ComReg's position

C.500 ComReg has noted all responses and will maintain the current obligations on eircom regarding accounting separation. Industry will be given a further opportunity to respond on the Accounting Separation and Cost Accounting Systems in the consultation which is now underway<sup>33</sup>.

#### The Market for termination of calls to end-users

- C.501 In many cases competing operators will need to purchase call termination services from other operators to enable call completion. In Ireland, termination in the fixed market occurs largely on the eircom network and this is expected to remain the case over the lifetime of this review. The asymmetry in call termination traffic patterns is due to the history of eircom having been an exclusive monopoly. Hence, eircom is by far the largest network and handles most of the traffic.
- C.502 It has been argued in this paper that every operator offering fixed termination to enduser numbers is regarded as having SMP. This is because of the widespread use of the calling party pays principle, which results in the called party being much less concerned about the costs of termination as these are passed onto the calling party. For this reason, any operator offering termination services to subscribers on end-user numbers directly connected to its network is regarded as a monopolist in the

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<sup>&</sup>lt;sup>33</sup> ComReg docs 05/18, 05/18A, 05/18B, 05/18C

termination market. This suggests that competition problems will be closely associated with the possible abuse of such monopoly power.

#### Competition problems in the call termination markets

- C.503 Where the majority of traffic flows terminate on eircom's network, eircom could have a strong incentive to foreclose downstream retail markets by denying access to vital termination services needed by other competing operators to enable a directly connected subscriber on another network to make calls to anyone connected on eircom's network. On the other hand, smaller operators have little incentive to deny access to the larger network. If a small network were to deny access to a larger network, the incentive for end-users to join the smaller network would be considerably reduced as the proportion of subscribers that could reach the party would be relatively low. This problem would appear to be somewhat offset by a general obligation to interconnect.
- C.504 However, eircom is currently significantly larger than its rivals. OAOs purchase the vast majority of their fixed end user termination services from eircom, while the vast majority of end-user traffic terminating on OAO networks originates on the eircom network. Without regulation, eircom could, for example, set rates at a level that would considerably weaken competition in related markets. Thus, some level of regulation on eircom is required in this market.
- C.505 However, OAOs have maintained the termination rates they charge to eircom higher than the eircom regulated rate, which would suggest that the smaller operators are capable of exercising some market power in the current situation where remedies are imposed on eircom only. In order to address this, it is necessary to impose some level of regulation on OAO termination rates also. In determining the level of remedies to impose on each of the operators in this market, ComReg has taken into account issues of proportionality.
- C.506 ComReg has discussed the potential problem of denial of access; however, the terms and conditions governing access are also important aspects that influence the effectiveness of competition in termination markets and adjacent downstream retail markets. Where each operator providing call termination services to end-user numbers has SMP, there is a real prospect that excessive prices may arise. Furthermore, the relative size of undertakings may also lead to unfair discrimination in the form of dissimilar terms applied by larger operators on smaller operators.
- C.507 To date ComReg has only regulated eircom's call termination services, via a price control obligation in accordance with a FL-LRIC methodology which also necessitates accounting separation. In the consultation, ComReg considered whether it would be appropriate and proportionate to apply a similar suite of obligations on every operator that has SMP for the termination of calls to end users on their own network. ComReg is considering this issue, as the implications of extending all regulations to all operators in the termination market are considerable. For example, to comply with accounting separation requirements would impose a considerable burden on many OAOs.
- C.508 ComReg recognises that the setting of excessive termination rates by an operator designated with SMP in the market for call termination for calls to end-user numbers is possible. However, ComReg is required to take into account the requirement for proportionality in its application of remedies and the respective bargaining positions of the operators in this market.

Q. 45. When seeking to apply a remedy on SMP operators (other than eircom) in the termination of calls to end users, please give your views as to the most appropriate and proportionate remedy to apply, for example cost orientation, reciprocity, price control, commercial negotiations, etc? Please elaborate and justify your answer.

#### Views of respondents

- C.509 One respondent was in favour of imposition of cost orientated termination charges on other operators designated as having SMP on their own network. They provided evidence of perceived abuse in the market at present and identified potential abuse that could occur in the future if ComReg did not impose the more onerous obligation of cost orientation similar to that imposed on the incumbent. They believed that it was discrimination by ComReg to differentiate between terminating operators in this case. They strongly felt that excessive pricing would occur and the incumbent and the consumer would suffer as a result. This was seen as having a negative effect on efficiency. This operator did acknowledge that it may be impractical to have accounting separation and cost accounting on all fixed operators and to alleviate this operators should be obliged to use eircom's costs as an appropriate surrogate and this would give the right signal for efficient entry. They also proposed that "reciprocity could be applied at the network level with small changes being made if necessary to operators routing factors to adequately reflect any differences in the network topology." As an interim solution they proposed that rate to end users for other fixed operators should be set at the current eircom single tandem call termination rate for an interim period. They also suggested that any operator that did not think this adequately compensated them for terminating on their network could then submit routing factor information to ComReg for review.
- C.510 Another operator believed that asymmetric obligations for the call termination market were unjustified and may lead to distortions in the market. They cited evidence from the original consultation market analysis which showed how high the OAO termination rates were, and suggested that this showed the necessity of cost orientation at a minimum. They believed that all obligations imposed on eircom should also be imposed on OAOs.
- C.511 Other operators who agreed with the obligations suggested by ComReg made comments that ComReg should ensure that any obligations that are imposed must be seen to be proportionate. Also one operator added that it would not be appropriate to impose the same obligations as those on the incumbent, i.e. price control cost orientation and accounting separation. They also stated that ComReg had no evidence of anti competitive behaviour on the part of OAOs and that where eircom had entered into realistic commercial negotiations with OAOs in relation to termination rates they have had success in lowering termination rates. The introduction of systems and their maintenance to meet these obligations would represent a huge cost to OAOs and may have the effect in some cases of pushing OAOs out of the market.

#### ComReg's position

C.512 ComReg has found that all operators of call termination services to end-users have SMP on their own networks. ComReg is therefore obliged to propose remedies based 94 ComReg 05/37b

- on the competition problems which have been identified. ComReg's proposal to apply asymmetric remedies in this market recognises that, while all operators are deemed to have SMP on their own networks, the impact of this in the market differs substantially according to the size of the network in question. In order to be appropriate and proportionate, remedies must take this imbalance in market power into account.
- C.513 It is ComReg's view that imposing cost orientation and separated accounting obligations on all fixed network operators would be disproportionate given the scale and ubiquity of eircom's network. One respondent dismissed the strength of the incumbent's negotiating position by stating that as its prices were regulated the incumbent could not bargain on them. ComReg agrees that there does not appear to be evidence of the existence of countervailing buyer power in this market.
- C.514 A key point raised by one respondent was that the lack of a cost orientation regulation on OAOs provides no incentive for them to reduce their termination rates. The respondent reviewed the recent history of termination rate levels and concluded that "...despite significant reductions in eircom's termination rate over recent years, there has been very limited reduction in termination rates of other fixed operators." In ComReg's view, the significant reduction referred to was driven by the introduction of LRIC as the costing methodology for establishing the cost orientation of eircom's interconnect charges, since when, as the submission clearly shows, there has been no significant movement in eircom's rates. In a detailed annex to its submission this respondent analysed OAO termination rates in contrast to eircom's since the adoption of LRIC and established that neither eircom nor the majority of OAOs had made any significant changes to their termination rates in this period. There were two exceptional OAOs who had made a one-off reduction of approximately 30% during this time which was the only significant movement.
- C.515 The assumption made by one respondent that an OAO's costs would be similar to those of eircom is not valid. Eircom's LRIC costs are not causally related to those of an entrant operating an efficient network topology. This might be the case if eircom's LRIC costs had been established using a bottom-up methodology, but in fact eircom computes its LRIC costs top-down, derived directly from its own statutory accounts. strictly in accordance with the scorched-node principle, that is to say staying true to the actual network topology operated by eircom. In an industry characterised by economies of scale the difference in scale of eircom's network and those of all OAOs must be taken into account, as must the economic purpose of eircom's network hierarchy. The respondent argued that the more levels of switching a network had the more expensive it must be, and it is certainly the case that eircom's network element costing methodology adds cost to a call in this way, incrementally, with network elements transversed. To claim that a hierarchical network was necessarily more expensive than a flat one does not recognise that one of aims of designing a hierarchical network was to take advantage of economies of scale. It is therefore clear that the use of eircom's network element costs would be most unlikely to achieve the objective of cost orientation of OAO termination charges because of the differences in scale, structure and operation alluded to above.
- C.516 ComReg recognises the concern expressed by some respondents about the high termination rates charged by some OAOs. While it may be impractical to have accounting separation and cost accounting for all fixed operators, ComReg intends to impose appropriate remedies designed to address the continuing high rates, and will monitor the situation closely.

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- C.517 ComReg recognises that the imposition of obligations which seek to address or deal with problems related to the denial of access and the price of access, is not, on its own, likely to deal effectively with other problems, such as competition problems of a non-price nature. Given the imbalance in termination traffic flows, non-price abuses would be more likely to be undertaken by eircom. These include discriminatory use of, or withholding of information; delaying tactics, and the application of undue requirements in interconnect. ComReg is able to point to a number of difficulties in this area over recent years, including:
  - the withholding by eircom from OAOs of information on points of interconnect essential for OAOs to plan their business case. (this information was only provided following intervention by ComReg); and
  - the intervention by ComReg to amend terms and conditions set by eircom in interconnection contracts because ComReg considered certain of the terms and conditions to represent undue contractual requirements.
- C.518 Another potential competition problem which ComReg is required to safeguard against is the application of a price squeeze (or margin squeeze) by an SMP operator.

## Appropriate Obligations: call termination markets for calls to end users

#### **OAOs** and eircom

- C.519 ComReg proposes to designate all operators in the call termination market for calls to end-users, as having SMP (the list of terminating operators it is proposed to designate as having with SMP is set out in Annex F).
- C.520 The European Commission Guidelines on Market Analysis and SMP state that where an NRA finds an operator with SMP, it is obliged to impose one or more regulatory obligations outlined in the Access Directive, taking into account the principle of proportionality and other factors outlined in the Access Directive. Thus, ComReg is under an obligation to impose appropriate SMP access obligations on all operators which are designated as having SMP in this market.
- C.521 Furthermore, when imposing obligations ComReg must ensure, inter alia, that the obligations are proportionate and based on the nature of the problems identified. Where possible, the least burdensome and most effective set of remedies should be selected.

#### Proposals for Remedies for OAOs in the call termination market

#### **Transparency**

C.522 ComReg proposes that the OAOs listed in Annex F be required, in accordance with Regulation 10 of the *Access Regulations*, to make public, in detail, the termination rates they apply to all other operators in this market. This would take the form of requiring the publication of rates on a publicly accessible website. ComReg does not regard this to be an onerous burden and by making transparent prices that apply in the market, it will make it easier for customers to make informed choices. Furthermore, the disclosure of termination rates will also enable ComReg to monitor more easily the state of competition in the call termination market.

- C.523 For most of the OAOs listed in Annex F, the imposition of this obligation would only result in them being required to publish the termination charges that they levy on eircom, as traffic is only received by them from the eircom network. However, where an OAO with SMP in this market is directly interconnected with operators other than eircom, the OAO will be required to also publish the termination charges that they levy for such termination.
- C.524 The benefit of a transparency obligation requiring the publication of prices and proposed changes to those prices in advance of those changes taking place, is that it would assist in ensuring transparency for purchasers of wholesale termination services and provide advance warning of changes in charges to such purchasers, who may need to restructure their retail prices in response to tariff changes at the wholesale level.
- C.525 Furthermore, ComReg believes that the imposition of a transparency obligation would enable negotiations between operators to be undertaken more speedily and reduce potential complaints.
- C.526 With regard to the costs that may be incurred as a result of the imposition of a transparency remedy, ComReg believes that these are few and that the benefits of a transparency remedy far outweigh any such costs. Indeed, by only requiring the OAOs to publish their prices on their websites the cost is minimised. Thus, ComReg believes that a transparency obligation on SMP operators is appropriate for this market.

#### **Non Discrimination**

C.527 It is proposed that every OAO in this market be required, in accordance with Regulation 11 of the Access Regulations, to apply similar terms and conditions on interconnecting operators where they avail of call termination services having equivalent characteristics.

#### Access to and use of specific network facilities

- C.528 In order to terminate a voice call from another operator's network, the operators must have interconnection agreements. Currently, all operators are required to enter into negotiations on interconnection, and eircom, as the SMP operator, is subject to a more detailed set of requirements concerning how the access obligation should be implemented.
- C.529 Under the new regulatory framework, there is provision under Regulation 5 of the *Access Regulations* to ensure that all operators have an obligation to negotiate interconnection for the purpose of providing publicly available electronic communications services when requested to do so by another operator. There is also provision under Regulation 13 of the Access Regulations to impose on an SMP operator the obligation to meet reasonable requests for access.
- C.530 ComReg believes that an access obligation that requires all operators to meet reasonable requests for access to and use of their network facilities for the purposes of call termination is a necessary condition for the interoperability of services, and is therefore appropriate for this market. In considering how OAOs should be obliged to implement an access obligation, ComReg believes that every operator should be obliged to provide network access for the provision of call termination services to every public electronic communications network provider who reasonably requests such access. Network access should be provided together with any services, facilities

or arrangements which are necessary for the provision of electronic communication services over that interconnection. ComReg believes that that the provision of network access should occur as soon as reasonably practical, and should be provided on fair and reasonable terms and conditions.

#### Price control and accounting separation

- C.531 In the consultation, ComReg asked for comment on price control and accounting separation.
  - Q. 46. Do you agree with ComReg that transparency is desirable and proportionate and therefore an appropriate obligation to impose on OAOs in this market? If no, please elaborate.
  - Q. 47. Do you agree that in addition to transparency, it is necessary to apply a non-discrimination obligation in this market? If no, please elaborate.
  - Q. 48. Do you agree with ComReg's proposal not to impose an obligation of accounting separation on OAOs operational in this market?

#### Views of respondents

- C.532 There was a mixed response to these questions, one operator agreed with the imposition of both transparency and non discrimination on all operators, however other respondents strongly disagreed with the proposals put forward by ComReg.
- C.533 One operator strongly believed that asymmetric regulation of termination rates may hinder economic efficiency for three reasons;
  - 1. It may encourage inefficient entry, violating the principle of allocative efficiency
  - 2. It may contradict the principle of productive efficiency in that OAO's may provide termination services at greater than the minimum cost and a culture of high cost provision of termination services may pervade OAOs, hampering competitive outcomes more generally in fixed interconnection markets;
  - 3. Asymmetric regulation may inhibit dynamic efficiency because entrants/OAOs may have little incentive to reduce their costs over time in part because the can reap monopoly profits from the provision of wholesale call termination services to each other and to eircom.
- C.534 They were of the opinion that cost orientation should be imposed on other OAOs designated with SMP on their own network for call termination. They gave reasons for this such as promoting efficiency, practical to implement, would reduce cross subsidisation and enhance predictability on retail prices set by OAOs. They also say that it would also mitigate the potential for excessive pricing.

- C.535 In relation to the actual obligations proposed by ComReg the same operator was of the opinion that the requirement to increase transparency without the direct regulation of the price level itself could only reduce downward pressure on the termination rates further by providing sufficient information for OAOs to tacitly collude, with termination prices converging towards the operator currently charging the highest termination price.
- C.536 They maintained that if ComReg maintained this position that it would not encourage efficiency and would increase the cost of interconnection which would ultimately affect the consumer.
- C.537 They then referred to the interim solution referred to previously in relation to reciprocity.
- C.538 In relation to the actual obligation of transparency the same operators believed that the current level of transparency was sufficient and that all other OAOs designated with SMP should have similar obligations to those currently imposed on the incumbent placed on them.
- C.539 One operator disagreed that the obligation for transparency was necessary as the termination rates were already published in the eircom transit price list and imposing additional requirements on other OAOs would be dis-proportionate.
- C.540 In relation to the imposition of the non discrimination obligation one operator commented that they considered the obligation of non discrimination micro management and over regulation and that similarly other operators were subject to competition law and non discrimination would be over regulation. Another operator considered the obligation of non discrimination to be dis-proportionate.
- C.541 In relation to the obligation to impose accounting separation one operator disagreed with the imposition of asymmetric obligation on OAO's. As such they thought that accounting separation should also be imposed on all operators designated with SMP.
- C.542 Another operator again considered the imposition of accounting separation on all operators with SMP in the call termination market as dis-proportionate.
- C.543 One respondent who was agreeable to the imposition of transparency and non discrimination on all SMP operators in principle said that this was dependent on the application of these obligations in practice. They re-iterated ComReg's statement from the consultation that "in determining the level of remedies to impose, ComReg believes that it would be appropriate to take into account the requirement for proportionality and the respective bargaining power of the operators in this market."

#### ComReg's position

C.544 ComReg has reached the conclusion that, given the finding of SMP for each OAO in the relevant market, a price control obligation should be imposed on each SMP operator. The objective of a price control obligation is to ensure dominant operators do not set prices at excessively high level or apply a price squeeze to the detriment of end users. ComReg believes that a form of price control which ensures that charges for call termination which prevents excessive pricing may depending on how the control is designed, be proportionate and justified. ComReg is of the view that it is likely that comprehensive cost accounting or cost modelling exercises, which are necessary justified in the context of large operators, are likely burdensome in the case of smaller operators.

- if possible. C.545 The form price control should. be relatively light. and should ensure that rates are fair and reasonable. This is likely to be achieved by reference to benchmarking against other operators of a comparable size both in Ireland and in other countries and also by taking account of the costs of operators which have implemented more detailed cost accounting or cost modelling measures. ComReg is of the view that if this approach proved unworkable or ineffective, that it may then proceed to implement more onerous measures such as accounting separation or cost modelling. This could be done on an operator by operator basis if it transpired that there was a problem of excessive pricing associated with particular operators. It could also be the case that such additional measures might have to be applied on all operators or all operators of a particular category (for example larger OAOs). However ComReg proposes for the time being to proceed with a lighter form of a price control obligation as described above and will monitor developments in the market.
- C.546 Two respondents disagreed, on the basis that all obligations imposed on eircom should also be imposed on OAOs. Two respondents agreed would not be proportionate accounting that it to impose separation obligations on OAOs.

#### Proposals for remedies for eircom

- C.547 As already discussed, ComReg recognises the concern of respondents over the interpretation of proportionality in relation to obligations in this market. ComReg's aim in this market is to balance the requirement to address a market failure, arising as a result of all operators being found to have SMP on their own networks, against the need to ensure that any remedy proposed does not impose a burden in excess of the potential benefits.
- C.548 For this reasons it is ComReg's view that that there is a need to impose stronger remedies on eircom than on OAOs.

#### **Transparency**

- C.549 Transparency would allow ComReg and OAOs to observe price and non-price terms and conditions for eircom wholesale end-user call termination products. However, on its own transparency could not guard against the setting of excessive prices, the imposition of undue requirements, and the application of discriminatory practices by eircom. Furthermore, transparency alone would not be able to tackle problems of delay, especially in relation to new products and to products demanded by OAOs which are not demanded or used by eircom. However, transparency would make clearer whether discriminatory practices are applied by the SMP operator.
- C.550 ComReg therefore believes that transparency, while having the desirable property of being 'light-handed', is insufficient on its own for dealing with the competition problems identified in this market. As such, ComReg believes that transparency is a necessary obligation to make effective other obligations in this market. This view is considered further in the discussion of the other obligations that may be applied on eircom by ComReg in the wholesale end-user call termination market.

Q. 49. Do you agree that on its own the application of a transparency obligation alone would not remedy the problems identified in this market? Do you agree that transparency, and in particular the requirement to make public interconnection terms and conditions, is a necessary remedy to problems actual and prospective in this market? Please detail your response.

#### Views of respondents

- C.551 All operators except one agreed that this obligation was necessary as an initial remedy to current market problems and potential problems that could arise were it not imposed.
- C.552 The operator in disagreement expressed their opinion that they believed that the level of publication by the incumbent satisfied the obligation of transparency and any further obligations were unnecessary.
- C.553 Another operator agreed that a transparency obligation was required but also made the comment that "this gives OAOs information required to establish interconnection, and gives OAOs and ComReg both a means to verify compliance by Eircom with other obligations. A specific obligation is required for Eircom to make public its interconnection terms and conditions. In practice it eliminates barriers and delays that OAOs could encounter in attempting to establish interconnect."

- C.554 ComReg will continue to impose the current level of transparency on eircom and consult in the future on any additional requirements necessary to enhance the level of information currently available.
- C.555 Regulation 10 of the Access Regulations provides for the imposition of the type of transparency obligations that can be imposed. In that regard, ComReg considers it would be appropriate to require eircom to publish a reference offer for call termination 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 would 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.
- C.556 ComReg considers it would be further justified to require eircom to publish a reference offer for termination services given that all OAOs, either directly or indirectly, have to purchase call termination services from eircom.
- C.557 In line with the proposal to impose an access obligation on eircom not to withdraw access to facilities already granted, ComReg believes that eircom should be required to continue to publish a Reference Offer containing details of access to facilities already granted. ComReg considers that this obligation would be met by the continued publication of the eircom end-user call termination service schedule and prices contained in the eircom Core RIO Document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time).

Q. 50. Do you agree that eircom should be required to publish a Reference Offer containing details of access to facilities already granted? Please detail your response.

#### Views of respondents

- C.558 All respondents except one agreed with ComReg that this is necessary.
- C.559 The respondent who disagreed believed that the level of publication by eircom satisfies the obligation of transparency and any further obligations are unnecessary.
- C.560 Another respondent added that they think the incumbent "should publish a RIO containing details of access to facilities already granted. The RIO must be full, detailed, and complete. ComReg will be fully aware of the extraordinary difficulties in getting Eircom to publish and accurately maintain a comprehensive RIO."

#### ComReg's position

- C.561 ComReg will impose this obligation on eircom which is in accordance with the opinion of other respondents to this question.
- C.562 In addition, ComReg considers that eircom should be required to publish (in relation to the access obligation it is proposed to impose in accordance with Regulation 13 (2) (c) of the *Access Regulations*) specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and price which is necessary for the provision of new and existing end user call termination services. ComReg believes that this information should be published as part of the Reference Offer.
- C.563 ComReg considers that this obligation would be met by the continued publication 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, located in the eircom Core RIO Document Version 3.13 (as amended from time to time), 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 Version 1.54 (as amended from time to time).

## Q. 51. Do you agree that eircom should publish specified information which supports call termination services? Please detail your response.

#### Views of respondents

- C.564 All operators except one agreed that this should be provided. The respondent who disagreed believed that the current level of publication satisfied the obligation of transparency and any further obligations were unnecessary.
- C.565 One respondent made a further point as with call origination in that the level of interconnection between the OAO and eircom should be clearly delineated and that the SMP operator should not be mandated to provide information to the level that would equate to technical advice or support.

#### ComReg's position

- C.566 ComReg will continue to impose this obligation on eircom.
- C.567 ComReg is currently of the opinion that eircom should be required to provide and publish appropriate manuals, order forms and processes for new and existing services, the details of which would be determined on a case by case basis.
  - Q. 52. Do you agree that eircom should be required to publish appropriate manuals and documentation for new and existing Call Termination services? Please detail your response.

#### Views of respondents

C.568 All operators agree that this is a requirement. One respondent commented that in its view the current level of publication satisfies the obligation of transparency and any further obligations are unnecessary.

#### ComReg's position

- C.569 ComReg will continue to impose this obligation on eircom.
- C.570 ComReg proposes that eircom should be required to publish the Reference Offer for end-user call termination on its wholesale website so as to allow for easy and predictable access to this by interested parties.
  - Q. 53. Do you agree that eircom should publish a Reference Offer for call termination services on its wholesale website? Please detail your response.

#### Views of respondents

C.571 All operators agree that this is a requirement. One respondent's view is that the current level of publication satisfies the obligation of transparency and any further obligations are unnecessary.

- C.572 ComReg will continue to impose this obligation on eircom.
- C.573 A number of processes currently apply to the publication of eircom's RIO- these include the republication of the RIO when any price changes have been approved by ComReg, a text process that was mandated in D10/02, a process for the introduction of new interconnection and associated retail products, and the application of version control to RIO documents. ComReg believes that these obligations should be maintained and should apply to all the documents which apply to eircom call termination services.

Q. 54. Do you agree that the current processes that apply to the publication of eircom's RIO should be maintained for call termination services? Please detail your response.

#### Views of respondents

C.574 All operators agree that this is a requirement. One respondent believed that the current level of publication satisfied the obligation of transparency and any further obligations were unnecessary.

#### ComReg's position

- C.575 ComReg will continue to impose this obligation on eircom.
- C.576 Pursuant to Regulation 10 (1) of the *Access Regulations*, ComReg may, if eircom is designated as having SMP, impose on eircom obligations to ensure transparency in relation to interconnection, access or both interconnection and access, requiring eircom to make public specified information.
  - Q. 55. Is there any additional information eircom should provide to ComReg or industry or both in relation to products and services provided in the RIO? Please support your answer with details.

#### Views of respondents

- C.577 All operators agreed that this was a necessary obligation. One respondent believed that the current level of publication satisfied the obligation of transparency and any further obligations were unnecessary.
- C.578 Another respondent commented that they "do not believe that eircom provides sufficient technical and operational and OSS information in relation to how its systems work and the equivalent and equal interfaces wholesale provides to its retail arm. There is a general lack of transparency."

- C.579 ComReg has considered the views of respondents. ComReg notes that all respondents believe this obligation to be necessary. It is ComReg's view that the suite of remedies proposed in this market will address all operator concerns about transparency.
- C.580 ComReg believes it will also be necessary to impose obligations of transparency in support of any accounting separation obligation, 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 that may be imposed and help address competition problems relating to cross subsidisation, price discrimination and the application of price squeezes.
- C.581 As a further enhancement to the level of transparency in the wholesale call termination market ComReg believes that eircom should provide itemised billing to other authorised operators. The introduction of this would allow for a level of granularity that would enable operators to be in a position to reconcile amounts billed on a wholesale level to that billed on a retail level and ensure there are no discrepancies. Currently, this process is being improved on an ad hoc basis and mainly on the request of other operators who encounter difficulty in reconciling bills from eircom to their in

house systems. It is general practice in industry that prior to payment of any bill a full breakdown of what the bill relates to is required by the paying party.

Q. 56. Do you agree that eircom should be required to provide itemised billing? If you agree please indicate in what format this should be provided in order to provide the level of detail required to reconcile bills to a satisfactory level i.e. soft copy versus hard copy, whether it should be monthly/quarterly.

Views of respondents

C.582 Respondent's views here were consistent with the call origination questions addressed earlier in the paper. Some operators think it is unnecessary and others feel it is vital in order to reconcile internal and external billing information.

ComReg's position

C.583 ComReg will consult on this further on completion of the market review process.

#### **Non- discrimination**

- C.584 ComReg believes the following non-discrimination obligations should be imposed on eircom to prevent additional competition problems such as quality discrimination and undue use of information about competitors which the transparency obligation would not prevent. Without non-discrimination, it would be difficult to safeguard against foreclosure practices. Furthermore, non-discrimination is an essential complement to the transparency and access obligations (on the latter see below).
- C.585 The application of a non-discrimination obligation would require eircom to offer equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and require eircom to provide services and information to others under the same conditions and of the same quality as it provides for its own services or those of its subsidiaries or partners.
- C.586 In particular 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.
  - Q. 57. Do you agree that eircom should also be required to provide call termination information and services on a non-discriminatory basis to its retail arm and alternative operators? Please detail your response.

Views of respondents

C.587 All operators agreed that non discrimination was necessary, except for one operator who stated that there was no evidence of past discrimination, and so no justification for further action. The respondent believed that competition law was sufficient.

- C.588 ComReg does not feel that the market is mature enough to leave disputes to the competition authority and feels that the imposition of non discrimination is necessary at this point<sup>34</sup>.
- C.589 It is important that information gained by eircom as a result of their provision of call termination services to another operator is not used by eircom's downstream arms in any manner. In other words ComReg believes that eircom's downstream arms should not have privileged access to eircom wholesale.

#### O. 58. Do you agree that eircom's downstream arms should have the same access to eircom wholesale as alternative operators? Please detail your response.

#### Views of respondents

- C.590 All but two operators were in agreement that the same level of information should be made available.
- C.591 One respondent said that ComReg had provided no evidence of such discrimination and that they had at all times met the obligations to allow access on similar conditions to their retail arm. However they did differentiate between the markets in that in the termination market a different product to end to end retail calling is on offer and therefore it may be entirely appropriate to make differing levels of information available in differing circumstances.
- C.592 Another operator expressed the opinion that this would be covered under non discrimination.
- C.593 One respondent expressed their concern about the current level of separation between these arms and said they "would like to see further separation between Eircom's retail and wholesale activities. Eircom's retail divisions should be required to obtain the wholesale elements of products from Eircom Wholesale in the same manner as an OAO does. This extends to ordering processes and systems SLAs etc. If this separation were effective, then Eircom Retail would have the same access to Wholesale as OAOs."

- C.594 ComReg agrees that the relationship between eircom's wholesale and retail arms should be such that it is not susceptible to abuse through knowledge or other methods. As such this obligation will be imposed and monitored until such time as regulation is relaxed in this market
- C.595 Furthermore ComReg proposes that eircom should be required to apply a standard process for the development and introduction of new call termination services and elements, including standard documentation and timescales.

<sup>&</sup>lt;sup>34</sup> For further discussion on ComReg's strategy relating to non-discrimination see ComReg Doc 05/30 - Forward Looking Strategic Review of the Irish Telecommunications Sector 106 ComReg 05/37b

Q. 59. Do you agree that eircom should be required to apply a standard process for the development and introduction of new call termination services and elements? Please detail your response.

#### Views of respondents

- C.596 All operators except one agree that there should be a standard process for any new developments in the market. One operator said that they "do not foresee any future product developments relating to call termination services and therefore see no basis for this question. If an OAO does request a new development it will be dealt with under the current industry agreed process as set out in the RIO."
- C.597 Another operator commented that there should be a process for the development of new services. In the respondent's view the process should be high level to allow for the various types of services ranging from the routine to those that may involve a large amount of development in order to become established.

#### ComReg's position

- C.598 Based on the level of support in the responses received, ComReg will ensure that a standard process exists for any new developments. In ComReg's view it is desirable to have a process in place regardless of whether or not there is an immediate need for such process. ComReg takes a proactive view that future requirements cannot always be foreseen in detail, but can be prepared for.
- C.599 In addition to the obligation of non-discrimination, ComReg considers that it will also be necessary to impose obligations of transparency and accounting separation in order to monitor the non discrimination obligation and address the price competition problems identified earlier. The afore mentioned obligations will enable ComReg to demonstrate the provision of services to other operators under the same conditions (i.e. price) as eircom provides to its retail arm and thus address the possible price problems of cross subsidisation, price discrimination and margin squeezes. ComReg considers that part of the effectiveness of the transparency and non-discrimination obligations is reliant on the introduction of obligation of accounting separation to facilitate the verification of compliance. ComReg proposes to consult further on the detailed implementation of accounting separation and pricing non discrimination issues under the new framework

#### Access to and use of specific network facilities

- C.600 The transparency and non-discrimination obligations discussed above are necessary but insufficient on their own for dealing with the entire range of competition problems in this market. A key competition concern in the eircom wholesale end-user call termination market relates to the denial of access for facilities or the application of excessive prices by eircom. ComReg is of the view that such problems would be very real in this market unless a remedy is effected that tackles specifically access issues.
- C.601 ComReg's analysis of the competition problems suggests strongly that wholesale access obligations are necessary so as to promote more effective competition in retail markets. On its own it is highly unlikely that eircom would offer sufficient wholesale

- products on reasonable terms through commercial negotiations with OAOs. ComReg is of the view that without appropriate access obligations eircom would have an incentive to apply unreasonable contractual terms on other operators, and exercise non-price forms of discrimination that would likely delay the offering of access to other operators. Such behaviour would be construed as denial of access and would lead to the foreclosure of sustainable competition
- C.602 It is proposed to designate eircom with SMP in the provision of its own network call termination services for calls to end-users, and in the absence of regulation, ComReg is concerned that there may be a risk that it could leverage its market power from the wholesale market into the potentially competitive retail market. In addition, it is not technically possible to terminate a call on another operator's network.
- C.603 ComReg has further considered whether competition problems in the downstream voice telephony market could be overcome by imposing the less burdensome obligation of non-discrimination on eircom in the call termination market on its own network. A non-discrimination obligation can ensure that a vertically integrated SMP operator is prevented from acting in such a way as to have a material adverse effect on competition. In the absence of a non-discrimination obligation SMP operators may offer different terms and conditions to different purchasers of their voice call termination services which may have potential anti competitive effects.
- C.604 ComReg considers that a non discrimination obligation may be sufficient in all cases as eircom retail will always avail of the same services that another operator may require.
- C.605 Therefore, ComReg believes that there is a strong argument for stating that a non-discrimination obligation is the appropriate remedy for this market. ComReg has formed this opinion because it believes that it would be unlikely given the characteristics of this market for new call termination services or variants of the current service to be requested and developed on eircom's network.
- C.606 However, ComReg has considered the effect of it opting to impose an obligation of non-discrimination, but deciding not to impose an access obligation on eircom and it is currently of the view that this could mean that ComReg would not be in a position to require eircom to negotiate in good faith with requesting undertakings, or to require eircom to continue to provide existing services on existing terms and conditions in accordance with Regulation 13 of the Access Regulations. Furthermore, it would mean that ComReg would not be able to impose a requirement on eircom, in accordance with Regulations 13 of the Access Regulations, to provide call termination services on terms and conditions which are fair, reasonable and timely.
- C.607 For these reasons and given the nature of the competition problems which might arise in this market, ComReg has had to come to the conclusion that an access obligation is necessary.
  - Q. 60. Do you agree that an access obligation for Call Termination services should be imposed on eircom pursuant to Regulation 13? Please provide details in support of your answer

C.608 All operators agreed that this was a reasonable obligation on eircom.

#### ComReg's position

- C.609 ComReg will ensure that this is imposed pursuant to Regulation 13.
- C.610 ComReg proposes that eircom should be required, Pursuant to Regulation 13 (2) (i) of the *Access Regulations*, to interconnect networks or network facilities. ComReg is of the view that the imposition of this obligation is necessary to maintain eircom's obligation to interconnect with existing and new OAOs.
  - Q. 61. Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please detail your response.

## Views of respondents

C.611 All respondents agreed that this was reasonable. One operator however made the comment that they think this should be an obligation on all operators with SMP in this market

## ComReg's position

- C.612 ComReg will ensure that eircom interconnect networks or network facilities where necessary.
- C.613 Pursuant to Regulation 13 (2) (c) of the *Access Regulations*, ComReg proposes that eircom should have an obligation not to withdraw access to facilities already granted. This is necessary to ensure that OAOs have the certainty to provide retail services to the marketplace and so compete with eircom. ComReg considers that this obligation would be met by the continued offering of the eircom call termination service schedule and prices contained in the eircom Core RIO Document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time to time).
- C.614 There are circumstances where it may be desirable to withdraw access to facilities, for example when a facility is no longer needed and it is an undue burden on eircom to maintain it. ComReg, therefore, proposed to qualify the obligation on eircom not to withdraw access to facilities already granted, so that eircom could withdraw such access provided it obtained prior ComReg approval which would only be granted following public consultation.
  - Q. 62. Do you agree that eircom should be required not to withdraw access to facilities already granted, unless it obtains the prior approval of ComReg to withdraw such access and with such approval to be granted by ComReg following public consultation? Please detail your response.

#### Views of respondents

C.615 There was a mixed response to these questions from operators. Some disagreed on the basis that it was not necessary and impractical since the current regime was working without any problems. One respondent believed that under the current regime there was a process for the withdrawal of products and all operators were given sufficient time to raise a dispute. If the dispute was valid then the product was not withdrawn. One operator believed that this constituted a new obligation and that ComReg did not have the power to impose it.

#### ComReg's position

- C.616 ComReg believes that its analysis of the market justifies the need for an obligation not to withdraw access to facilities already granted. ComReg sees merit in the suggestion put forward by one respondent that a public consultation should only be launched where appropriate. ComReg therefore proposes to impose an obligation not to withdraw facilities already granted, save with ComReg approval, and that this may, but not necessarily, involve public consultation.
- C.617 Pursuant to Regulation 13(2) (c) and 13 (3) of the *Access Regulations*, ComReg considers that eircom should be required to continue to provide specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices which is necessary for the provision of existing end-user call termination services. ComReg considers 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, located in the eircom Core RIO Document Version 3.13 (as amended from time to time), 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 Version 1.54 (as amended from time to time).
  - Q. 63. Do you agree with ComReg's proposal to require eircom to provide specified information which supports existing call termination services? Please detail your response.

#### Views of respondents

C.618 All operators agreed that this was necessary to support the provision of interconnection services on a proportionate basis. One operator commented that the current process was sufficient and had proven successful to date and any further regulation was micro management on the part of ComReg.

#### ComReg's position

ComReg will continue to impose this obligation on the incumbent and will decide at what level it should be provided. Proportionality will always be considered when assessing the requirements of OAOs and any unnecessary burdens this may place on eircom.

C.619 ComReg has difficulty in foreseeing future end-user call termination products being developed, given the current characteristics of this market. Rather than foreclose such a possible development ComReg considers that eircom should have an obligation to meet reasonable requests for access from OAOs pursuant to Regulation 13 (1) of the *Access Regulations*, for such products. Any such request will be reviewed in the context of Regulation 13 (4) of the *Access Regulations*. However at this stage ComReg wishes to note that imposition of any access remedy through Regulation 13 will be granted only when that remedy represents the only way to compete effectively.

## Q. 64. Do you agree that eircom should have an obligation to meet reasonable requests for access? Please detail your response.

#### Views of respondents

C.620 All respondents agreed with this obligation and one respondent proposed that this should be applied to all operators who have been designated with SMP in this market.

## ComReg's position

- C.621 ComReg intends to impose this obligation and will ensure it is complied with. In relation to other OAOs ComReg does not feel that this is an appropriate obligation to impose on all OAOs as they are not in a position to refuse reasonable access without materially impacting negatively on their business.
- C.622 Additionally, pursuant to Regulation 13 (2) (b) of the *Access Regulations*, ComReg also believes that eircom should have the obligation to negotiate in good faith with undertakings requesting access. This is necessary to ensure that OAOs can approach eircom and ensure that their requests for new or amended products are treated promptly and appropriately.
- C.623 Pursuant to Regulation 13 (3) of the *Access Regulations*, ComReg considers that eircom's call termination services must be provided on terms and conditions which are fair, reasonable and timely. In addition, ComReg believes that the terms and conditions should be supported by Service Level Agreements and compensation payments to aid incentive compatibility.
  - Q. 65. Do you agree that eircom should be required to provide call termination 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 and compensation payments? Please detail any your response.

#### Views of respondents

- C.624 Similar to the call origination market there was a mixed response to this question. Some operators agreed and two disagreed. One respondent said that the current level of provision was sufficient and that ComReg did not have the power to impose penalties.
- C.625 Another respondent said that this was an unreasonable obligation as call termination had never been subject to an SLA. As such any new obligation to do so should be supported by evidence of requests from OAOs to do so.

## ComReg's position

C.626 ComReg believes that this is a basic requirement to ensure the provision of termination services to all operators. In relation to the SLA comment, ComReg notes that SLAs apply to interconnection paths, and are discussed in Section 7 of the main body text.

- C.627 ComReg proposes that eircom should be required to provide an unbundled call termination service to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. The level of unbundling should be the same as that offered at the time to its retail division or subsidiaries.
  - Q. 66. Do you agree that eircom should be required to provide an unbundled call termination services as part of its access obligation? Please detail your response.

- C.628 All respondents except for one agreed with this obligation and that it was necessary and reasonable. The respondent that disagreed commented that they "were unsure as to the nature of the question but if they assume that it means provision of termination at the primary level then they say that this is being provided and that further regulatory intervention is unnecessary."
- C.629 Another operator said that they would consider this obligation applicable to OAOs as well as eircom where they have SMP. They made reference to the higher termination rates being charged by OAOs and that the benchmark for the unbundling of any OAOs call termination services should be based on the level of unbundling that was offered to their downstream retail divisions.

#### ComReg's position

- C.630 ComReg believes that the unbundling of services at a wholesale level is necessary to ensure there is no discrimination and it also increases the level of transparency around the provision of different services, be it prices or conditions etc. The imposition of this obligation on OAO's is not seen as a practical option in the current regulatory environment and would not be proportionate in light of market conditions.
- C.631 ComReg proposes that eircom should be required to provide access to call termination services to competitors at an equivalent standard and at an equivalent time as the retail arm.
- C.632 Furthermore, ComReg proposes that eircom should be required to provide competitors with information necessary for access to its call termination services an equivalent standard and an equivalent time as it does for its retail arm.
  - Q. 67. Do you agree that eircom should provide access to and information necessary for access to call termination services to competitors at equivalent times and standards as it provides to its retail arm? Please detail your response.

## Views of respondents

C.633 All respondents agree that this was necessary; however one operator commented that this was already being provided and that further regulatory intervention was not necessary.

- C.634 ComReg will endeavour to ensure that the above obligation is complied with by eircom and that all operators are allowed the opportunity to operate on a level playing field.
- C.635 When products are mandated ComReg believes 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 the mandated product and allow them to compete with eircom at the retail level in winning customers. Therefore, pursuant to Regulation 13 (2) (e) ComReg also considers it appropriate that, insofar as it is required to avail of access, eircom should also grant open access to technical interfaces, protocols, or other key technologies.
  - Q. 68. 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 access to such OSS or similar software necessary to ensure fair competition in the provision of services? Please detail your response.

- C.636 All operators except for one agreed that this was necessary in order to provide services to a sufficient level. However one operator who agreed on the provision also commented that they considered that currently the provision of all necessary information and technical interfaces to operators to support their products was satisfied where requested. They also considered the current approach to be a proven solution which had been accepted by OAO's so they considered it unnecessary regulation and micro-management on behalf of ComReg to try and change this.
- C.637 The operator that was not agreeable to the above provision requirements suggested that the information that must be provided by the SMP operator should be defined at the point of interconnection. In the respondent's view, information about those technical interfaces and protocols that are essential to support access to wholesale call origination services should be provided, however information about technologies, systems ad software that may be specific to eircom's retail activities and replicated by OAOs should not be subject to open access requirements. The respondent suggested that access to such information may be subject to Intellectual Property rights.

## ComReg's position

C.638 ComReg have noted the comments made and will impose the obligation on eircom to ensure these services are provided. Without these services we believe operators will not have the capability to provide competitive services to consumers. Any issues regarding intellectual property rights will be addressed once they arise. However to date no such claims have been brought to the attention of ComReg.

#### **Price control and Cost Accounting**

C.639 ComReg does not believe that it can rely on ex-post measure of regulation of the enduser termination market. In the absence of regulation ComReg believes that eircom could leverage its dominance to distort competition in other markets. As well as this, it is not technically feasible to terminate a call over another network provider's network.

- In the interests of enhancing competition and the welfare of retail customers, price control is considered a necessary obligation to prevent the potential competition problems as described above.
- C.640 A price control could be required particularly if there are obvious fluctuations between termination rates charges by other operators which are a lot lower than the termination rates of the eircom. If this were to happen it would be quite possible that the rates being charged by the eircom are excessive.
- C.641 Where a price control is deemed necessary as part of an overall remedy, ComReg will commence its analysis of the appropriateness of the price control by examining whether a wholesale price control alone would be sufficient to promote effective competition and be in the best interest of end-users.
- C.642 In the absence of a price control on eircom and if excessive prices were then charged, this would severely impede competition in downstream markets as other operators would then have to raise their retail rates in order to cover the cost of termination. In the current termination market competition does not provide sufficient pricing constraints to ensure that prices charged reflect costs and are not excessive.
- C.643 Similar to the call origination market, where ComReg considers a price control remedy necessary, this may take the form of either requiring prices to be reasonable or requiring prices to be cost oriented.
- C.644 The burden of proof to demonstrate that charges are derived from costs including a reasonable rate of return on investment lies with eircom at this stage as it has been found to have dominance in the market for call termination for calls to end-users. It is then up to the regulator to assess the reasonableness of costs demonstrated and accept or require adjustment where necessary.
- C.645 One of the most important factors to take into account when deciding on assessing the cost orientation of costs is to ensure that the rate of return allowed to the dominant operator and the final rates set for the market allow for future investment in the network, be it the existing one or the roll out of new networks by other operators to further enhance competition.
- C.646 By imposing a price control obligation ComReg would hope that this would introduce benefits by ensuring that eircom has incentives to increase efficiency and thus increasing the chances of allowing for effective competition.

## **Principles of Price Control**

C.647 Refer to discussion of price control and products subject to price control in section on call origination.

#### Form of Price control

- C.648 ComReg is of the preliminary view that all operators have significant market power in the provision of their own network fixed end user call termination services. This includes all termination to primary level interconnection.
- C.649 ComReg has sought views in Q 45 above with regard to the appropriate treatment of termination rates for OAOs.
- C.650 ComReg does not believe that competition in this area is likely to increase as only the terminating operator can provide termination on their own network. Currently

- ComReg is not aware of the possibilities of wholesale or retail substitutability which might change this situation over the coming years, but it will review this situation on an on-going basis.
- C.651 ComReg proposes that in eircom's case prices for termination services be controlled by setting prices on a cost oriented basis by reference to eircom's costs on a forward looking Long Run Incremental Cost basis.
- C.652 ComReg is of the view that this obligation would be complemented by the imposition of an obligation of transparency, through price publication, an obligation of non-discrimination, in the provision of this service and through an obligation of separated accounting and appropriate cost accounting systems.
- C.653 In ComReg's view, the absence of a requirement on eircom to provide fixed call termination on a cost-oriented basis would severely impede competition in the downstream markets as it could result in the levying of excessive prices. This would in turn increase competitors' retail costs. Imposing an obligation of non-discrimination, on its own, would not in ComReg's view, be sufficient in that while the imposition of such an obligation might exert downward pressure on charges, there would still be incentives for dominant operators to set excessive prices to improve profitability.
- C.654 A price control obligation would allow ComReg to protect consumer welfare and enhance competition by ensuring that all operators would be able to reduce their retail costs as termination rates reduce (provided that such costs are based on efficiently incurred costs), as technology and efficiency improves.
- C.655 ComReg will monitor the fixed end user termination market on an on-going basis with the view to relaxing the price control obligation in light of increased competition.
- C.656 The application of the price control remedy will be the same as that proposed in the Call Origination section and any alternative price controls going forward will also be considered in conjunction with the other interconnect markets.
  - Q. 69. Do you agree that the obligation on eircom to set termination rates for call termination should be cost oriented? Are there any other conditions which should be attached to the proposed obligations? Please detail any your response.
  - Q. 70. If you agree that price control should be imposed on eircom for call termination should ComReg continue with the application of a FL-LRIC price control until such time as an alternative method is arrived at? Do you agree with this position? Do you believe there are alternative price control methods that have not been considered by ComReg which are less onerous but equally effective as FL-LRIC? Please support your response with economic analysis.

- Q. 71. Do you agree that any new interconnect termination services provided by eircom to OAOs should be subject to the same price control obligations as existing services? Please detail your response.
- Q. 72. Do you agree that ComReg should consider moving towards the application of a wholesale price cap for call termination conveyance rates? Please provide definitive explanations with your answer.

- C.657 The views received from operators in relation to the above questions were mixed. Some operators agreed on the continuation of the current charging mechanism until such time as a wholesale Price Cap was arrived at, whereas one operator came to the conclusion that the continuation of costing on a FL-LRIC basis was no longer appropriate. They believed it was no longer appropriate for reasons such as the uncertainty in the modelling adopted, the potential bias from the use of benchmarking, and the perceived potential for sustained economy wide benefits from ICT (Information and Communications Technology).
- C.658 In relation to the introduction of a wholesale price cap the same operator commented that while they would welcome the introduction of a wholesale price cap, they noted that "its effectiveness is wholly dependent on its ability to promote future investment and encourage sustainable competition."
- C.659 Other comments that operators had towards the introduction of a wholesale price Cap included one comment as follows; "the key question is the level of the X in the CPI-X wholesale price cap formula. It must be sufficient to induce Eircom to be efficient and to continue to improve its efficiency. In addition stack testing and full margin squeeze analysis must be conducted by ComReg before any Eircom retail price reduction. We believe that some Eircom prices would not pass such a test and must therefore be adjusted."

#### ComReg's position

- C.660 ComReg has noted the responses and will continue the application of the FL-LRIC costing methodology until such time as a wholesale Price Cap is arrived at and agreed by industry to be appropriate and fulfils all the objectives of increasing competition and encouraging investment.
- C.661 In relation to the comments made that the FL-LRIC approach is no longer appropriate, ComReg is not in a position to change this without further consultation outside this review process and given that the current process has been agreed with industry and continues to be supported by OAOs ComReg will not make any changes in the immediate future.

### **Accounting Separation**

C.662 Accounting Separation will help disclose possible market failures and provide evidence in relevant markets of the presence or absence of discrimination and margin

- 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 at an excessive level and provide greater certainty about the cost base.
- C.663 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 eircom's designation as SMP in this market and the identification of the obligation of non-discrimination as a means to remedy the competition problems discussed earlier, ComReg believes it appropriate to impose an obligation of accounting separation upon eircom in this market.
- C.664 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.
- C.665 ComReg proposes to implement accounting separation on a by 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.
- C.666 As discussed earlier, in deciding upon the imposition of obligations to address competition problems, ComReg must ensure that the obligation is based on the nature of the problem identified, justifiable and proportionate in 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 believes the imposition of accounting separation upon eircom would be justifiable and based upon the nature of the problem identified.
- C.667 If ComReg were to withdraw this obligation, it would not have any means of monitoring non discrimination 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 it, as given the size; such organisations must already have management accounting systems in place to support internal business decision-making.
- C.668 ComReg proposes to consult further on the detailed implementation of accounting separation under the new framework. In the interim, ComReg is proposing that it

maintains the existing level of accounting separation on eircom until such time as any further consultations are completed.

Q. 73. Do you believe eircom should have an obligation of accounting separation in the call termination market? Please elaborate on your answer.

## Views of respondents

C.669 All operators agreed that this was necessary. One operator however considered the current level of Accounting Separation to be adequate and another operator was of the opinion that all SMP operators in this market should be obliged to produce separated accounts.

#### ComReg's position

C.670 ComReg will continue to impose this obligation on eircom. ComReg is currently consulting industry on the most appropriate way to fulfil this obligation in a way that satisfies all stakeholders<sup>35</sup>.

## Appropriate Obligations: call termination market for calls to Service Providers

- C.671 ComReg has noted that the market for termination of calls to service providers is characterised by high barriers to entry with limited countervailing buyer power. While the market initially experienced entry, this entry has not been effective in reducing the market power enjoyed by eircom. ComReg has found eircom to be dominant in this market.
- C.672 The requirement for ex-ante regulation is to ensure that eircom's treatment of its own retail arm is equivalent to its treatment of other operators offering wholesale call termination for calls to service providers. To achieve this it must demonstrate that its internal charges are cost oriented and transparently set out in separated accounts. Therefore, ComReg is proposing to impose obligations of transparency, non-discrimination and accounting separation on eircom. In placing these obligations upon eircom ComReg would intend to apply the principles of cost orientation and accounting separation that have been listed above.
  - Q. 74. Do you agree that the obligations listed above are appropriate obligations to impose on eircom in the market for wholesale call termination for calls to service providers? Please elaborate on your answer.

## Views of respondents

C.673 Most respondents agreed that these obligations should be imposed. The only objection to ComReg's proposals was on the basis that termination of calls to service providers was not a wholesale market.

#### ComReg's position

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<sup>&</sup>lt;sup>35</sup> ComReg docs 05/18, 05/18A, 05/18B, 05/18C

- C.674 ComReg has explained its reasoning for the definition of this market, and has clarified the nature and characteristics of the wholesale market.
  - Q. 75. Do you agree that where an obligation for Accounting Separation or Cost Orientation in the call termination market has been proposed on an SMP operator that they should have an obligation to maintain the appropriate Cost Accounting Systems that will fulfil these obligations? (See the Cost Accounting Systems section later in this paper for further discussion in relation to these systems.) Please detail your response.

- C.675 All respondents except one agreed that the obligation to provide separated accounts should be maintained by ComReg. In relation to the operator who disagreed, their response stated that they believed that the current regime imposed an undue burden in relation to accounting separation obligations and should be relaxed. The respondent's view was that it was unjustified, based on problems identified in the interconnect market. The respondent suggested that the current level of reporting i.e. Historical Cost Accounts and Current Cost Accounts could present some anomalies where prices were amended to reflect more up to date values. The level of transfers may not be the same and may lead to confusion rather than greater transparency.
- C.676 In relation to the obligation to maintain appropriate Cost Accounting Systems to fulfil any Accounting Separation obligations, there was a mixed response from operators. Most agreed that it was necessary; however one operator commented that "it is a matter relevant to the obligation of cost orientation only."

## ComReg's position

C.677 ComReg have noted all responses and will maintain the current obligations on the incumbent regarding accounting separation pending the outcome of the current consultation (see footnote 34).

#### The Transit Market

- C.678 The transit market is defined as the transmission of switched calls between tandem exchanges. ComReg recognises that the transit market is characterised by the concentration of traffic at a relatively small number of geographic locations, and therefore the economies of scale available to competing operators is such that one would expect to see the development of competing infrastructure to occur in this market before it occurs in the other interconnection markets.
- C.679 ComReg is aware that a certain amount of alternative transmission network investment has been made, including the government backed investments in the MANs and ESB's network. However, the market for transit services is currently overwhelmingly characterised by self supply with very little scope for alternative operators to win market share in the wholesale transit market except by gaining market share in the retail market. As such ComReg does not believe that the alternative networks will provide effective competition in this market in the timeframe of the review.

C.680 ComReg would, over the longer term, hope to see the gradual emergence of infrastructure based competition in this market. When applying obligations on eircom in this market ComReg is aware of the need to avoid discouraging efficient investment by other operators in the longer term while promoting competition in the retail market and delivering maximum benefits to end-users in the short to medium term.

## **Competition problems in the Transit market**

- C.681 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 a competing OAO. In late 2000, a multi- operator dispute which, arose due the introduction of a price change for a transit service by eircom, caused an overall revision by ComReg and industry to the transit process. However the industry working group which was established in 2001 failed to resolve the process for transit services and it still remains an outstanding issue. It is ComReg's view that the potential for future disputes and competition problems remains very real in the absence of an agreed process. These could include discriminatory use or withholding of information; delaying tactics; undue requirements; quality discrimination; strategic design of products; and undue use of information about competitors. ComReg has also been involved in setting charges on the basis of FL-LRIC for transit calls from the inception of the service.
- C.682 With mandated access it is also possible that problems of a price nature such as margin squeeze (price discrimination) could also occur. Currently the charges which eircom can charge are regulated at a wholesale level and ComReg believes that this regulation has to date ensured that such problems have been minimised.

## **Appropriate Obligations: transit**

- C.683 eircom is the only network operator to be in a position to provide wholesale transit to higher points in the network. ComReg therefore believes that appropriate *ex ante* regulation of eircom's wholesale transit products is essential to lay the foundations for establishing sustainable competition in fixed retail telecoms markets.
- C.684 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.
- C.685 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.
- C.686 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. However, the appropriate form of access needs to be considered by ComReg.
- C.687 In discussing the appropriate application of obligations in this market, ComReg also need 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.
- C.688 If the wholesale transit market were to become more competitive, ComReg would 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.

#### **Transparency**

- C.689 Transparency would allow ComReg and OAOs to observe price and non-price terms and conditions for eircom's transit products. However, on its own transparency could not guard against the setting of excessive prices, the imposition of undue requirements, and the application of discriminatory practices by eircom. Furthermore, transparency alone would not be able to tackle problems of delay, especially in relation to new products and to products demanded by OAOs which are not demanded or used by eircom. However, transparency would make clearer whether discriminatory practices are applied by the SMP operator.
- C.690 ComReg therefore believes that transparency, while having the desirable property of being 'light-handed', is insufficient on its own for dealing with the competition problems identified in this market. As such, ComReg believes that transparency is a necessary obligation to make effective other obligations in this market. This view is considered further in the discussion of the other obligations that may be applied on eircom by ComReg in the wholesale transit market.
  - Q. 76. Do you agree that on its own the application of a transparency obligation would not remedy the problems identified in this market? Do you agree that transparency, and in particular the requirement to make public interconnection terms and conditions, is a necessary remedy to problems actual and prospective in this market? Please detail your response.

#### Views of respondents

- C.691 All operators agreed that this was a necessary obligation for the transit market. However one operator also commented that in its opinion this market was competitive and as such no remedies should apply here and any current obligations should be lifted.
- C.692 The respondent stated that in the event ComReg's market definition was upheld they believed that the current obligation for transparency had been fulfilled and that the current level of documentation was sufficient.
- C.693 Another operator commented that "A specific obligation is required under transparency for Eircom to make public its interconnection terms and conditions. This facilitates verification of compliance with the other obligations, including non-discrimination. In practice it also eliminates barriers and delays that OAOs could encounter in attempting to establish interconnect."

#### ComReg's position

C.694 ComReg have not found this market to be competitive at this stage and therefore will impose this obligation on the SMP operator, eircom.

## Q. 77. Do you agree that an obligation of transparency should be imposed on eircom? Please detail your response.

#### Views of respondents

C.695 All operators agreed that this was necessary with the additional comment from one operator that they considered the current level of documentation to be sufficient.

- C.696 ComReg will continue to impose the obligation of transparency and will ensure that it is improved where it is seen to fall short of meeting the needs and requirements of stakeholders.
- C.697 Regulation 10 of the *Access Regulations* provides for the imposition of transparency obligations that can be imposed. Of these 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.
- C.698 In line with the proposed access obligation on eircom not to withdraw access to facilities already granted, ComReg believes that eircom should continue to publish a Reference Offer containing details of access to facilities already granted. ComReg considers that this obligation would be met by the continued publication of the transit service schedule and prices, call origination service schedules, prices, product descriptions and inter-operator process manuals and call termination service schedule and prices contained in Core RIO document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time to time).
- C.699 ComReg has imposed a similar unbundling obligation on eircom in both the call origination market and the end-user call termination market. ComReg proposes 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 current RIO (Version 3.13) (as amended from time to time). ComReg further proposes that the reference offer for the three markets- call origination market, eircom end-user call termination and transit should be published as one offer.

- Q. 78. Do you agree that eircom should be required to publish a Reference Offer containing details of access to facilities already granted?
- Q. 79. 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 a detailed response.
- Q. 80. 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?

C.700 All respondents agreed with all three questions above and that ComReg should impose these obligations on eircom. One respondent did make the point that in the event this market was not found competitive that the current level of documentation was sufficient.

- C.701 ComReg will ensure that eircom publish the necessary details of access facilities already granted in the Reference Offer in the same format as is currently published.
- C.702 In addition, ComReg considers that eircom should publish (in relation to the access obligation imposed under Regulation 13 (2) (c)) specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and price which is necessary for the provision of new and existing transit services. ComReg believes that this information should be published as part of the Reference Offer.
- C.703 ComReg considers that this obligation would be met by the continued publication 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, located in the eircom Core RIO Document Version 3.13 (as amended from time to time), 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 Version 1.54 (as amended from time to time) and eircom Switched Routing Transit Price List Issue 38 (as amended from time to time).
- C.704 ComReg has imposed a similar obligation on eircom in both the call origination market and the end-user call termination market. Although ComReg recognises that while there are some differences between the markets in meeting this obligation, the majority of information applies to the three markets in a standard way. ComReg therefore proposes that the optimal way for this obligation to be met is to require eircom to publish all information as part of a standard suite of documents comprising its Reference Interconnect Offer.

- Q. 81. Do you agree that eircom should publish specified information which supports transit services? Please detail your response.
- Q. 82. Do you agree with ComReg's proposal to require eircom to publish specified information relating to the call origination, the eircom call termination and transit markets in a standard suite of documents comprising its Reference Interconnect Offer?

- C.705 All respondents agreed that this should be a requirement with one operator again stating that in the event the market was found to be uncompetitive that there was a sufficient level of transparency in the market.
- C.706 One respondent also made the comment that that "all necessary information should be published, and ComReg should be able to specify additional information required for publication from time to time."

## ComReg's position

- C.707 ComReg will continue to impose the level of transparency which is considered to be appropriate to the market and will specify additional information which may be required to be published where necessary.
- C.708 ComReg is of the opinion that eircom should be required to provide and publish appropriate manuals, order forms and processes for new and existing services, the details to be determined on a case by case basis.
  - Q. 83. Do you agree that eircom should be required to publish appropriate manuals and documentation for new and existing Transit services? Please detail your response.

#### Views of respondents

C.709 All respondents agreed that this was necessary; however two operators maintained that the current level of documentation etc was sufficient and one also proposed that any additional information should only be considered on a case by case basis.

- C.710 ComReg will continue to ensure that the appropriate manuals and documentation for new and existing transit services are maintained.
- C.711 ComReg proposes that eircom should be required to publish the Reference Offer for transit services on its wholesale website so as to afford easy and predictable access for users.

## Q. 84. Do you agree that eircom should publish a Reference Offer for Transit services on its wholesale website?

## Views of respondents

C.712 All respondents agree that where the transit market is deemed to be uncompetitive that this was a necessary obligation.

## ComReg's position

- C.713 ComReg will continue to ensure that a RIO is published on the eircom website.
- C.714 A number of processes currently apply to the publication of eircom's RIO- these include the republication of the RIO when any price changes have been approved by ComReg, a text process that was mandated in D10/02, a process for the introduction of new interconnection and associated retail products, and the application of version control to RIO documents. ComReg believes that these obligations should be maintained and should apply to all the documents which apply to eircom's transit services.

# Q. 85. Do you agree that the current processes that apply to the publication of eircom's RIO should be maintained for transit services?

#### Views of respondents

C.715 All respondents agreed that where the transit market is deemed to be uncompetitive that this was a necessary obligation.

## ComReg's position

ComReg will continue to ensure that the current processes that apply to the publication of eircom's RIO is maintained for transit services.

C.716 If eircom is designated as having SMP in this market, ComReg would be in a position to impose on eircom, in accordance with Regulation 10 (1) of the Access Regulations, obligations to ensure transparency in relation to interconnection, access or both interconnection and access which would require eircom to make public specified information.

## Q. 86. Is there information eircom should provide to ComReg or industry or both? Please support your answer with details.

#### Views of respondents

C.717 All respondents agreed that where the transit market was deemed to be uncompetitive that this was a necessary obligation. One operator also commented that they believed that eircom should be required to provide at least two months notice of any change.

- C.718 ComReg will continue to ensure that eircom are obliged to provide advance notice with adequate information regarding any proposed changes to the RIO with sufficient time allowed for response.
- C.719 ComReg believes it will also be necessary to impose obligations of transparency in support of any accounting separation obligations, as this would allow the calculation

- of costs and prices (i.e. internal price transfers) to be rendered visible. Further, 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.
- C.720 As a further enhancement to the level of transparency in the wholesale call transit market ComReg believes that eircom should provide itemised billing to other authorised operators. The introduction of this would allow for a level of granularity that would enable operators to be in a position to reconcile amounts billed on a wholesale level to that billed on a retail level and ensure there are no discrepancies. Currently this process is being improved on an ad hoc basis and mainly on the request of other operators who encounter difficulty in reconciling bills from eircom to their in house systems. It is general practice in industry that prior to payment of any bill a full breakdown of what the bill relates to is required by the paying party.
  - Q. 87. Do you agree that eircom should be required to provide itemised billing? If you agree please indicate in what format this should be provided in order to provide the level of detail required to reconcile bills to a satisfactory level i.e. soft copy versus hard copy, whether it should be monthly/quarterly.
  - Q. 88. If itemised billing is introduced how should any additional costs incurred in providing this service be recovered?

C.721 Some respondents agreed that this was necessary and two operators disagreed saying that it was disproportionate and that there were no requirements from OAOs at the time of the response which necessitated itemised billing.

#### ComReg's position

C.722 ComReg will consult further on the provision of itemised billing and the format it should take if introduced following the completion of this market review, so that it does not impose any disproportionate burden on operators.

#### Non- discrimination

- C.723 As discussed in the Call Origination section, ComReg considers that competition problems such as the strategic design of products would persist in this market even where a transparency obligation had been imposed. Therefore, in addition to the transparency obligation, ComReg believes that a non-discrimination obligation should be imposed on eircom. Furthermore ComReg considers that a non-discrimination obligation will complement the other obligations of transparency and access (on the latter see below).
- C.724 The application of a non-discrimination obligation would require eircom to offer equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and require eircom to provide services and information to others

- under the same conditions and of the same quality as it provides for its own services or those of its subsidiaries or partners.
- C.725 In particular 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.
  - Q. 89. Do you agree that eircom should also be required to provide transit information and services on a non discriminatory basis to its retail arm and alternative operators? Please detail your response.

- C.726 All operators except one agreed that this was a necessary obligation to support transparency. The operator who disagreed said "that there is no evidence that eircom has acted in a discriminatory manner and that it is therefore unnecessary to impose this remedy. In the future if they are ever found to have been discriminating then they are subject to competition law and this is the forum under which it should be dealt with"
- C.727 Another operator commented that they considered this to follow from the non discrimination obligation.
- C.728 One respondent made the comment that "having found Eircom to hold SMP, it is essential that a non-discrimination obligation is imposed. OAOs could not, and would not enter the market in the absence of this remedy. A failure to impose the non-discrimination obligation in this market would have consequential impact on all other interconnect markets as Eircom would be able to leverage its market power to gain advantage in those other markets. The obligation extends to all aspects of service provision, including access to information."

## ComReg's position

- C.729 ComReg agree that this obligation is a necessary support to the obligation of transparency and will impose this going forward in the transit market until such time as it is found competitive.
- C.730 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. In other words ComReg believes that eircom's downstream arms should not have privileged access to eircom wholesale.
  - Q. 90. Do you agree that eircom's downstream arms should have the same access to eircom wholesale as alternative operators? Please detail your response.

#### Views of respondents

C.731 There was general consensus that this principle should apply, however one operator did say that there was no evidence of this provided by ComReg and on the basis of the lack of evidence of any problems in this areas that regulation was not required.

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Another operator made the comment that they would like to see further separation between Eircom's retail and wholesale activities. In the respondent's view, this meant that Eircom's retail divisions should be required to obtain the wholesale elements of products from Eircom Wholesale in the same manner as an OAO does. This extended to ordering processes and systems SLAs etc. If this separation were effective, then the respondent believed that Eircom Retail would have the same access to Wholesale as OAOs.

## ComReg's position

- C.732 ComReg notes agreement in principle that eircom's downstream arms should have the same access to eircom wholesale as OAOs have. It is ComReg's view that, given the state of competition in the market, regulation is still required to ensure that this principle is upheld.
- C.733 Furthermore ComReg proposes that eircom should be required to apply a standard process for the development and introduction of new transit services and elements, including standard documentation and timescales.
  - Q. 91. Do you agree that eircom should be required to apply a standard process for the development and introduction of new transit services and elements? Please detail your response.

## Views of respondents

- C.734 All respondents agreed that there should be a process for existing services and one operator said that the current system in place was working sufficiently well and that further regulation was not required. Another operator said that ComReg should only ensure that a new process for new services was dealt with on a case by case basis to ensure it was proportionate to the operator writing the process.
- C.735 Other respondents agreed that a new process should be put in place for the introduction of new transit services and elements.

## ComReg's position

- C.736 ComReg will consult further on the process that is most appropriate to the introduction of these new services and feel this is necessary to add clarity to the market.
- C.737 In addition to the obligation of non discrimination, ComReg considers that it will also be necessary to impose obligations of transparency and accounting separation in order to monitor the non discrimination obligation and address the price competition problems identified earlier. The afore mentioned obligations will enable ComReg to demonstrate the provision of services to other operators under the same conditions (i.e. price) as eircom provides for its own retail arm and thus address the possible price problems of cross subsidisation, price discrimination and margin squeezes.

#### Access to and use of specific network facilities

C.738 The transparency and non-discrimination obligations proposed above are necessary but insufficient on their own for dealing with the competition problems in this market.

- C.739 In the absence of regulation, it is very likely that if eircom was left on its own to commercially negotiate with alternative operators it would deny access to its transit services to or at the least offer such access on uncompetitive terms. As with providing access to call origination and termination services, eircom's refusal to provide access to transit would create serious difficulties for its competitors to compete on the retail voice market.
- C.740 ComReg has considered and concluded that the competition problems in this market can not be addressed by the remedy of non discrimination on its own as there may be situations where an operator may require a service which eircom retail 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. However, eircom has direct interconnection arrangements with almost all electronic communications network providers in Ireland and therefore would generally not need to avail of single (third party transit). Therefore in the absence of imposing an access obligation on eircom, eircom would be free to refuse to supply to requesting operators.
- C.741 Therefore a requirement on the SMP provider to provide wholesale access to its networks is required to facilitate competition in downstream markets by enabling competitors to compete without the need to invest in a ubiquitous network.
- C.742 ComReg has concluded that an access remedy pursuant to Regulation 13 of the *Access Regulations* is required to address the competition problems present in the transit market. It considers that mandating access to transit services is based on the nature of the problem identified, is proportionate and is justified.
- C.743 It is unlikely within the timeframe of this review for OAOs to 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 ubiquitous coverage as eircom is very costly to entry in this market.
- C.744 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 endusers and compete with eircom in the downstream market.
  - Q. 92. Do you agree that an access obligation for transit services should be imposed on eircom pursuant to Regulation 13? Please detail your response.

C.745 All respondents agreed that this was a reasonable obligation.

- C.746 ComReg will ensure that this obligation is complied with.
- C.747 Turning to the detail, ComReg believes the following access obligations should be imposed on eircom.

- C.748 Pursuant to Regulation 13 (2) (i) of the *Access Regulations* ComReg propose that eircom should be required to interconnect networks or network facilities. This is necessary to maintain eircom's obligation to interconnect with existing and new OAOs.
  - Q. 93. Do you agree with ComReg's proposal to require eircom to interconnect networks or network facilities? Please detail your response.

C.749 All respondents agreed that this was a necessary obligation

#### ComReg's position

- C.750 ComReg will continue to ensure that this obligation is complied with to ensure eircom interconnect networks or network facilities where appropriate.
- C.751 Pursuant to Regulation 13 (2) (c) ComReg proposes that eircom should have an obligation not to withdraw access to facilities already granted. This is necessary to ensure that OAOs have the certainty to provide retail services to the marketplace and so compete with eircom. ComReg considers that this obligation would be met by the continued offering of: the transit service schedule and prices; call origination service schedules (excluding FRIACO), prices, product descriptions and inter-operator process manuals; and call termination service schedule and prices contained in Core RIO document Version 3.13 (as amended from time to time) and eircom RIO Price List Version 1.54 (as amended from time to time), and eircom Switched Transit Routing Price List Issue 38 (as amended from time to time).
- C.752 There are circumstances where it may be desirable to withdraw access to facilities, for example when a facility is no longer needed and it is an undue burden on eircom to maintain it. ComReg therefore proposes to qualify the obligation on eircom not to withdraw access to facilities already granted, save without prior ComReg approval which would only be granted following public consultation.
  - Q. 94. Do you agree that eircom should be required not to withdraw access to facilities already granted, save without prior ComReg approval which would only be granted following public consultation? Please detail your response.

#### Views of respondents

- C.753 There were mixed views in relation this question, in line with responses to the other two markets. One operator considered this to be a new obligation and as such outside the powers of ComReg while at the same time saying that the current obligations were working sufficiently. Another operator who felt this was unnecessary said that it was overly burdensome.
- C.754 One operator in favour of it made the comment that "OAOs will have established a dependence on existing facilities, and they could be caused considerable difficulties in the market resulting from any unreasonable withdrawal. Public consultation is

required, as the withdrawal of facilities in this market could have damaging consequences for OAO activities in other markets."

## ComReg's position

- C.755 ComReg will ensure that any facilities proposed to be withdrawn by eircom must receive approval from ComReg within a reasonable timeframe. It is accepted that a consultation process may be disproportionate in most cases however where a product is of great significance to the industry and is to be withdrawn ComReg reserves the right to consult industry.
- C.756 Pursuant to the obligations contained Regulation 13(2) (c) and 13 (3) of the *Access Regulations* of the Access Regulations ComReg considers that eircom should be required to continue to provide specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices which is necessary for the provision of *existing* transit services. ComReg considers 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 Version 3.13 (as amended from time to time), 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 Version 1.54 (as amended from time to time) and eircom Switched Routing Transit Price List Issue 38 (as amended from time to time).
  - Q. 95. Do you agree with ComReg's proposal to require eircom to provide specified information which supports existing and new transit services? Please detail your response.

## Views of respondents

- C.757 All respondents agreed that this obligation was necessary however two respondents considered the current level of availability to be sufficient and as such further regulatory requirements were seen as unnecessary.
- C.758 However another operator made the comment that ComReg should be allowed to specify from time to time any additional information that may be required for publication in the market.

- C.759 ComReg will continue to impose this obligation on the incumbent and will from time to time specify additional information that is essential to the market. The level of burden and whether it is proportionate will be considered in all such cases.
- C.760 In the future and within the timescale of this review, 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. At this stage ComReg believes it to be overly

interventionist and premature to mandate such products, but does propose to impose an obligation on eircom to meet reasonable requests from OAOs, pursuant to Regulation 13 (1) of the *Access Regulations* for such products. Any such request will be reviewed in the context of Regulation 13 (4) of the *Access Regulations*. However at this stage ComReg wishes to note that imposition of any access remedy through Regulation 13 will be granted only when that remedy represents the only way to compete effectively.

Q. 96. Do you agree that eircom should have an obligation to meet reasonable requests for access? Please detail your response. If you believe that eircom should be required to answer reasonable requests for access for transit, are there specific wholesale products or features or additional associated facilities not currently offered in the eircom RIO that should be provided by eircom? Please provide details of such products and why their inclusion in the RIO would remedy competition problems in this market.

## Views of respondents

- C.761 All respondents agreed that this was a necessary obligation to ensure operators could gain access to facilities that allowed for competition. Some specific comments by respondents included one operator saying that they agreed that eircom should be required to meet reasonable requests for access. In relation to additional products they were of the opinion that where an OAO already had a point of presence in an eircom premises by way of LLU and the ARO then eircom should offer an "in Building" in span product which would allow the OAOs co-located transmission equipment to be used for interconnect. In the respondent's view, this would reduce the unit cost of interconnect and facilitate alternative provision of Transit services.
- C.762 Another operator also commented that they believed that eircom should be required to meet all reasonable requests for access. The respondent noted that for OAOs, all new products can only be launched if an Eircom transit facility is available for that product, and that this is consistent with Regulation 13(1)(a) and 13(1)(b).

- C.763 ComReg has noted the comments made and will continue to ensure any reasonable request for access is met by eircom.
- C.764 Additionally, pursuant to Regulation 13 (2) (b) of the *Access Regulations* ComReg also believes that eircom should have the obligation to negotiate in good faith with undertakings requesting access.
- C.765 Pursuant to Regulation 13 (3) of the *Access Regulations* ComReg considers that eircom's transit services must be provided on terms and conditions which are fair, reasonable and timely.

Q. 97. Do you agree that eircom must provide 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 and compensation payments? Please detail your response.

## Views of respondents

- C.766 All respondents agreed that transit services should be provided on terms that are fair and reasonable and supported by Service Level Agreements. However one operator considered the current SLAs in place to be sufficient and not requiring any further amendment. They agreed with the concept of compensation payments but believed that it was up to industry to agree these as they were not within the powers of ComReg to set
- C.767 Another operator agreed that it was necessary for Eircom to have an obligation to provide transit facilities on terms that were fair, reasonable and timely. The respondent suggested that in practice, the best way to ensure this was provided was through appropriate SLAs. In the respondent's view, on their own, without compensation payments, SLAs were of little value, so that compensation payments should be tied to SLAs, and the compensation payments must be sufficient to provide a real incentive to Eircom to meet the SLA.

## ComReg's position

- C.768 ComReg agree that transit services should be applied on terms and conditions that are fair and reasonable. ComReg notes that SLAs apply to interconnection paths. This is discussed in Section 7 of the main body text.
- C.769 ComReg is of the opinion that eircom should be required to provide unbundled transit service to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. The level of unbundling should be the same as that offered at the time to its retail division or subsidiaries.
  - Q. 98. Do you agree that eircom should provide unbundled transit services as part of its Access obligation? Please detail your response.

#### Views of respondents

C.770 All respondents agreed that transit services should be provided unbundled.

## ComReg's position

C.771 ComReg will continue to ensure these services are sufficiently unbundled and address any complaints as they are received. ComReg proposes that eircom should be required to provide access to transit services to competitors at an equivalent standard and at an equivalent time as the retail arm. Furthermore ComReg proposes that eircom should be required to provide competitors with information necessary for access to its transit services at an equivalent standard and an equivalent time as the retail arm.

Q. 99. 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 detail your response.

## Views of respondents

C.772 All respondents agreed in principle that this was a necessary obligation, however one operator made the point that this had been complied with and that no evidence was provided by ComReg to deem this a necessary obligation at this stage. They proposed that call transit was a different product to end to end retail calling and therefore it may be entirely appropriate to make differing levels of information available in differing circumstances.

## ComReg's position

- C.773 ComReg does not accept that there has been no evidence of times when these services have not been provided at equivalent times and standards as to what has been provided to the retail arm of eircom. As such this is still considered a very necessary obligation and will continue to be imposed.
- C.774 When products are mandated ComReg believes 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 the mandated product and allow them to compete with eircom at the retail level in winning customers. Therefore, pursuant to Regulation 13 (2) (e) of the *Access Regulations* ComReg also considers it appropriate that, insofar as it is required to avail of access, eircom should also grant open access to technical interfaces, protocols, or other key technologies.
- Q. 100. 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 detail your response.

#### Views of respondents

- C.775 All respondents agreed that this was necessary in order to ensure fair competition, however one operator made the comment that industry agreed processes had been followed and the current process had been successful in fulfilling the obligation. As such any further regulation was seen as unnecessary and an example of over regulation.
- C.776 Another operator made the same point as with origination and termination in that there may be intellectual property issues.

#### ComReg's position

C.777 ComReg is of the opinion that the availability of these technical interfaces, protocols and other key technologies is vital to the continued ability of operators to compete in the interconnect market

- C.778 In addition, 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*.
  - Q. 101. Do you agree that eircom should be required to provide specified services needed to ensure interoperability of end-to end services to users? Please support your response with details.

- C.779 There was a mixed response to this question with one operator saying there were worried about the lack of clarity about which services were referred to and that if new services were to be specified that this may require a separate consultation.
- C.780 One operator considered this inappropriate as such a request had never been made by an OAO and did not envisage OAO access in the future.
- C.781 Another operator agreed and commented that "alternative networks are relatively undeveloped in Ireland, and each OAO only holds a small share of the call origination and termination markets relative to Eircom. It would not be economically feasible for each OAO to interconnect to each other directly as the cost would be excessive". The respondent did not believe that any OAO could easily enter the market for National transit to take the place of Eircom. It was seen as necessary that ComReg retained the ability to specify services that must be provided by Eircom in the transit market to avoid Eircom using its market power to frustrate new OAO products or to leverage advantage into associated markets.

#### ComReg's position

- C.782 ComReg is of the opinion that this is necessary obligation going forward to ensure that where new services are available in the market that all operators have the facilities to avail of them.
- C.783 Similarly, pursuant to Regulation 13 (2) (h) of the *Access Regulations* ComReg proposes to require eircom to provide such operational support systems (OSS) or similar software necessary to ensure fair competition in the provision of services.
  - Q. 102. 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 detail your response

## Views of respondents

C.784 There was a mixed response to this in that some operators agreed that it should be provided, one operator agreed but commented that the current process was running sufficiently well that further regulation was unnecessary, and one operator disagreed that it was necessary at all.

C.785 The respondent who did not agree based its objection on the need to define information at the point of interconnection.

## ComReg's position

C.786 ComReg believes that the continued provision of these services is essential and that open and fair competition would not be possible without this access.

#### **Price control and Cost Accounting**

- C.787 In the transit market price control may be necessary when dealing with competition problems that stem from the potential of eircom to over recover the cost of running the network which may enable them to leverage market power in vertical settings from the allocation of costs to the core network which are not appropriate in a forward looking environment. A price control could be required particularly if there is expected to be insufficient competition in upstream markets, especially where there are high entry barriers into the upstream segments. As described in the Market Analysis section entry to the transit market requires substantial investment at ground level and not many operators are in a position to do this which leaves the possibility of increasing competition to a level where rates would not require regulation very low.
- C.788 On completion of the market analysis of the transit market and where a price control would appear to be necessary as part of an overall remedy, ComReg will commence its analysis of the appropriateness of the price control by examining whether a price control applied only to wholesale services would be sufficient to promote effective competition and be in the best interest of end-users.
- C.789 Similar to the other interconnect markets a price control may range from requiring prices to be reasonable (in that they afford an operator a reasonable return), to requiring prices to be cost oriented.
- C.790 As eircom is a vertically integrated operator with market power in the wholesale call transit markets, in the absence of appropriate ex ante regulation of wholesale products it would be able to exert its market power in a similar way to those described in the call origination.
- C.791 The provision of a transit service is dependent on the volume of traffic running between operators. If volumes are high then it is most likely to be more efficient for those operators with high volumes to set up a connection (through interconnect links). This would allow the relevant operators to be less dependent on eircom for the provision of a transit service and also provide an alternative for other operators and hence enhance competition. Unlike call origination the infrastructure build out required is a lot less costly and is a lot more likely to occur going forward as the cost would be justified through interconnect cost savings.
- C.792 ComReg expects competition to develop in this market by other OAOs and MOs building out to more exchanges and being able to substitute eircom transit services with their own or a third party purchase. However ComReg does not expect these expectations to affect the finding of SMP within the next two years at least.
- C.793 Once again economies of scale will play an important role as the transit market matures. The establishment of connections between operators will only be justified where there is sufficient traffic flowing between two operators. With the current market share enjoyed by eircom in the call origination market it is unlikely that the other OAOs will be able to achieve the same volumes and average costs as those achieved by eircom.

## **Principles of Price Control**

C.794 For discussion of principles, and of products subject to price control, refer to call origination.

#### Form of Price control

- C.795 eircom's dominance in the wholesale call transit market would enable it to exploit its market position (primarily excessive pricing) which would be detrimental for OAOs and their end-users. Consequently, ComReg is proposing to impose the obligation of a price control on eircom.
- C.796 As stated above, a price control can be used to remedy the leverage of upstream market power into potentially competitive downstream retail markets. To prevent such behaviour, ComReg proposes to continue the obligation that interconnection services are offered at cost oriented prices. By ensuring that interconnect prices are cost oriented ComReg ensures that the provision of interconnection is on fair and efficient terms and that costs are soundly derived from appropriate costs and give proper economic signals to operators to guide their investment decisions.
- C.797 In order to achieve a high level of assurance that interconnect rates are cost oriented in the call transit market it is necessary to apply the most appropriate methodology that will achieve this. These methodologies have been discussed in detail when looking at the imposition of the price control remedy in the call origination market. The same approach will be adopted in the call transit market.
- C.798 Alternative price controls, such as wholesale price cap will also be considered for the transit market on completion of the market analysis process. Other obligations, such as non-discrimination, are insufficient on their own to remedy the problem of exploitative behaviour.
- Q. 103. ComReg proposes to continue with the application of a FL-LRIC price control for call transit conveyance rates until such time as an alternative model is agreed upon. Do you agree with this position? Do you believe there are alternative price control methods that have not been considered by ComReg which are less onerous but equally effective as FL-LRIC? Please support your response with economic analysis.

#### Views of respondents

- C.799 There was a mixed response to this. Most operators agreed that the current pricing regime should be maintained until such time as a wholesale price cap was arrived at. One operator however strongly refuted the legitimacy of the FL-LRIC regime as a basis for going forward and provided an independent report within their response to back this up. They also claimed that they considered the transit market to be competitive and that regulation was no longer required or necessary.
- C.800 Operators that agreed considered this method the most appropriate to give incentive to infrastructure build and to enhance competition. One operator commented that "it is necessary to continue price control on Eircom in the transit market. This is a vital market for the development of competition on all markets, and transit makes up an

- essential input to an end to end service that can not feasibly be replicated by OAOs. Eircom is vertically integrated, and could easily inhibit OAOs ability to compete by increasing their input costs through inappropriate transit charges. FL-LRIC is the best method to use to ensure only the appropriate costs are passed to OAOs. ComReg should develop a wholesale price-cap, using FL-LRIC to derive the cap".
- C.801 All operators agreed that a move to a wholesale price was the desired route but that this obviously depended on the value of "X" in an RPI X price cap and therefore the accuracy of ComReg's projection of achievable cost reductions and the length of periods between price cap reviews.

## ComReg's position

- C.802 ComReg will continue to regulate the transit market as eircom have been found as SMP in this market and will continue to apply FL-LRIC as the pricing mechanism until such time as a wholesale price cap is arrived at that is agreeable to industry.
  - Q. 104. 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 detail your response.

#### Views of respondents

- C.803 The response from operators was mixed. One operator believed that this market was competitive, and that price control was not appropriate. Other operators did not consider the market entirely competitive, but suggested that it was more open to competition than origination and termination, and that regulation could be less onerous going forward as the market evolved.
- C.804 However one operator strongly refuted the suggestion that this market was competitive and said they did "not believe the transit market will become sufficiently competitive within the next three years for the price control obligation on Eircom to be relaxed. Eircom's market share has remained stable and considerably above the threshold leading to a presumption of dominance for the past three years. There is no evidence to show a change in this position in the near future."

- C.805 ComReg has found eircom to have SMP in this market. Given the current level of competition in this market, ComReg proposes to maintain regulation. ComReg recognises the potential for the transit market to evolve faster than the call origination and termination markets, but does not believe that this evolution will be sufficient within the lifetime of this review to warrant the removal of regulation. ComReg notes the comments by respondents and will keep the situation under review.
- C.806 The application of a price control and cost accounting is necessary in order to ensure that potential competition problems do not occur, and that excessive pricing does not feature. Given eircom's high market share (69%) in the wholesale transit market and hence its provision of wholesale transit services to third parties, ComReg believes that it is necessary that some form of price control should be imposed on eircom. ComReg, or the ODTR as it was known at the time, commenced the regulation of eircom in the interconnect market in 1998 which included the call transit market. Since this time

- there have been a number of consultations and directions made in relation to the costing principles applied in the calculation of the call transit rates. This again arose as there has been insufficient competition in the market to prevent excessive pricing. Through existing regulatory powers since this time, costs have been calculated using methods that were deemed to be appropriate to the circumstances and which would promote efficiency and sustainable competition and maximise consumer benefits.
- C.807 The application of FL-LRIC costing methodology on a top down basis was seen as the most appropriate method of arriving at call transit rates at a wholesale level. It ensures the principles addressed in the call origination section of price control were achieved.
- C.808 ComReg has also provided substantial guidance on the costs allowed in their model when arriving at interconnect transit rates. The ODTR/ComReg have in the past always consulted with industry before directing on any changes to costs, and only where there was common agreement to the most appropriate approach to ensuring costs are cost oriented are directions made.
- C.809 ComReg will review on an on-going basis the generality of all the wholesale transit services in the RIO on a periodic basis; this includes those listed in Annex E.
- C.810 In order for ComReg to ensure that rates are set at those of an efficient forward looking operator and as such that there are no historic costs which are recovered by eircom which are not relevant to interconnection at the wholesale level, a comprehensive review of the rates has been carried out since the introduction of the wholesale interconnection rates and a number of amendments to cost models submitted by eircom have been directed on. Such decisions were made in an effort to send appropriate signals to eircom and entrants alike on the basis of a reasoned approach to the underlying cots of a forward looking efficient operator.
- C.811 Currently the charges which eircom can apply are regulated both at a wholesale and a retail level and ComReg believes that this regulation has to date ensured that the competition problems set out above are not evident in the Irish market. However any removal of such obligations would provide incentives for eircom to engage in the behaviour described above. Even with regulated pricing, ComReg was forced on several occasions to intervene and direct amendments to the costing models prepared by eircom and to their processes through review of the RIO top down model and published RIO documents.
- C.812 As part of the remedies going forward ComReg will consider, on the completion of this market review process, the introduction of RPI-X price control instead of the rate of return as is currently applied. It is the expectation that this will have advantages over the current regime in that it provides very clear incentives to eircom to minimise costs. If the firm can reduce its costs below the level expected when the cap was set then the firm retains increased profits, at least for the period until the cap is reviewed. In addition it avoids overly intrusive and bureaucratic regulation.
  - Q. 105. Do you agree that ComReg should consider moving towards the application of an industry agreed wholesale price cap control for call transit conveyance rates? Please detail your response.

C.813 All respondents agreed that this was the desired approach except for one operator who considered this market to be competitive and therefore not requiring regulation.

#### ComReg's position

C.814 ComReg are in the process of reviewing the eircom Core network with the view to arriving at a position to consult on the most appropriate price cap. Once this review process is complete ComReg will consult the market and get opinions on the "X" in a RPI -/+ "X" scenario.

#### **Accounting Separation**

- C.815 Accounting Separation will help disclose possible market failures and provide evidence in relevant markets of the presence or absence of discrimination and margin squeeze. It will make visible the wholesale prices and internal transfer prices of a dominant operators 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 at an excessive level and provide greater certainty about the cost base.
- C.816 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 eircom's designation as SMP in this market and the identification of the obligation of non-discrimination as a means to remedy the competition problems discussed earlier, ComReg believes it appropriate to impose an obligation of accounting separation upon eircom in this market.
- C.817 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.
- C.818 ComReg intends to implement accounting separation on a by 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.
- C.819 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 support of competition promotion, must encourage access to the network in order to ensure efficient and sustainable competition and must contribute towards maximising consumer benefits. 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 accounting separation upon eircom to be justifiable and based upon the nature of the problem identified.
- C.820 If ComReg were to withdraw this obligation, it would not have any means of monitoring non discrimination 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 it, as given the size of such organisations must already have management accounting systems in place to support internal business decision-making.
- C.821 ComReg proposes to consult further on the detailed implementation of accounting separation under the new framework. In the interim, ComReg is proposing that it maintains the existing level of accounting separation on eircom until such time as any further consultations are completed.
  - Q. 106. Do you believe operators designated with SMP in the Call Transit market should have an obligation of accounting separation? Please elaborate on your answer.

C.822 All respondents agreed that any operator designated with SMP in the transit market should be obliged to provide separated accounts. Two respondents said they considered the current level of accounting separation to be sufficient with one operator saying that any further obligations should be consulted on together with a regulatory impact assessment.

#### ComReg's position

- C.823 ComReg will impose this obligation on SMP operators in the call transit market and conduct a consultation on further transparency which is considered necessary to enhance the current Accounting Separation process.
  - Q. 107. Do you agree that where an obligation for Accounting Separation or Cost Orientation has been proposed in the call transit market on an SMP operator that they should have an obligation to maintain the appropriate Cost Accounting Systems that will fulfil these obligations? (See the Cost Accounting Systems section below for further discussion in relation to these systems.) Please detail your response.

#### Views of respondents

C.824 All operators agreed that accounting systems were necessary to support the accounting separation process. Some respondents made further comments, one saying that the current systems in place were sufficient and another saying that any further requirements should be considered in the light of the additional costs that may be incurred against the potential benefits of providing them.

#### ComReg's position

C.825 ComReg will continue to impose the current requirement to have sufficient accounting systems in place by SMP operators in the transit market, pending the outcome of the current consultation<sup>36</sup>.

## **Cost Accounting Systems**

- C.826 A cost accounting system 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 three particular 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.
- C.827 In this regard, the obligation of cost accounting systems supports the obligations of cost-orientation and accounting separation and can provide greater assurance to ComReg in monitoring of the obligation of non discrimination and address the competition problems identified earlier and is appropriate for the purposes of promoting efficiency, promoting sustainable competition, and conferring the greatest possible benefits on the end-users of public electronic communications services.
- C.828 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 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.
- C.829 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.
- C.830 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. Therefore an obligation of Cost Accounting Systems can provide greater assurances in monitoring non discrimination and address the competition problems identified.
- C.831 ComReg does not consider that this obligation will be time consuming and impose a heavy burden on eircom, as given the size of such organisations, they must already have management accounting systems in place to support internal business decision making.

<sup>&</sup>lt;sup>36</sup> ComReg docs 05/18, 05/18A, 05/18B, 05/18C

#### Interconnection Market Review

C.832 ComReg is currently consulting further on cost accounting systems and accounting separation methodologies supporting cost accounting<sup>37</sup>. 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.

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<sup>&</sup>lt;sup>37</sup> ComReg documents 05/18, 05/18A, 05/18B, 05/18C