

Non-Confidential Version

Final Determination

Determination in the dispute between Colt Telecom Ireland and Eircom in relation to alleged failure by Eircom to provide Wholesale Terminating Segments of Leased Line based on Uncontended Ethernet Access.

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The Commission for Communications Regulation and the legislative framework for disputes

- 1. The Commission for Communications Regulation ("ComReg") was established under Section 6 of the Communications Regulation Act, 2002 ("the Act of 2002")¹. ComReg is the regulator for the electronic communications and postal sectors. It is charged with the regulation of amongst other things, fixed and mobile electronic communications service providers in the State. ComReg is the national regulatory authority in the State for the purpose of Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services ("the Framework Directive"). The functions of ComReg are set out in Section 10 of the Act of 2002 and a body of secondary legislation, including statutory instruments that transpose the requirements of various EU directives.
- The Framework Directive was transposed into Irish law by the Act of 2002 and the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2003 ("the Framework Regulations")².
- 3. Article 20 (1) of the Framework Directive obliged member states to provide in their national legislation for dispute resolution mechanisms for the purpose of issuing *"binding decisions"* to resolve disputes between undertakings³. Regulation 31 of the Framework Regulations transposes Article 20 (1) of the Framework Directive into Irish law and provides that:

"In the event of a dispute arising between undertakings in connection with obligations under the Framework Directive, the Specific Directives, these Regulations or the

¹ As amended by the Communications Regulation (Amendment) Act, 2007.

² The Framework Regulations have been amended by the European Communities (Electronic Communications Networks and Services) (Framework) (Amendment) Regulations 2006 and the European Communities (Electronic Communications Networks and Services) (Framework) (Amendment) Regulations 2007.

³ Under Regulation 2 of the Framework Regulations an "undertaking" means a person engaged or intending to engage in the provision of electronic communications networks or services or associated facilities.

Specific Regulations, the Regulator shall, subject to paragraph (2), at the request of either party, initiate an investigation of the dispute and, as soon as possible but, except in circumstances which the Regulator considers exceptional, within 4 months from the date on which the dispute was notified to it by either party, make a determination, aimed at ensuring compliance with the requirements of these Regulations and the Specific Regulations, to resolve the dispute."

- 4. Under Regulation 31 (6) of the Framework Regulations, an undertaking to which a determination applies must comply with it.
- 5. Regulation 31 (8) of the Framework Regulations provides that an undertaking which fails to co-operate with an investigation under Regulation 31 or to comply with a determination thereunder is guilty of an offence.
- 6. Regulation 31 (9) of the Framework Regulations provides that any obligations imposed on an undertaking by ComReg in resolving a dispute must respect the provisions of "the Framework Directive, the Specific Directives, these Regulations, the Specific Regulations and section 12 of the Act of 2002".
- Section 12 of the Act of 2002 describes the objectives of ComReg in exercising its functions under Section 10 of the Act of 2002. This issue is addressed in greater detail in this Determination.
- 8. Regulation 31 (11) of the Framework Regulations provides that neither party to a dispute is precluded from bringing an action before the courts and that the dispute resolution procedure is without prejudice to their rights of appeal
- 9. In accordance with the Framework Regulations and Section 12 of the Act of 2002, ComReg set out its Decision Notice on Dispute Resolution Procedures, D18/03. This document outlines what constitutes a dispute and the procedures that must be followed.

The parties to this dispute

- 10. Eircom Limited ("Eircom") is an authorised undertaking under the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations, 2003 ("the Authorisation Regulations"). Eircom has registered in the Electronic Register of Authorised Undertakings maintained by ComReg that it provides Data Services, Internet Access Services, Publicly Available Telephony Services and other Voice Services.
- 11. Colt Telecom Ireland ("Colt") is also an authorised undertaking under the Authorisation Regulations. Colt has registered in the Electronic Register of Authorised Undertakings maintained by ComReg that it provides that it provides Data Services, Internet Access Services, Publicly Available Telephony Services and other Voice Services

Background to this dispute

Service requested

- 12. Colt has requested Eircom to provide Wholesale Uncontended Ethernet access components. Colt believes Eircom has obligations to meet reasonable requests for access to the Terminating and Trunk Segments of Leased Lines on foot of ComReg document D7/05⁴ which imposes obligation pursuant to Eircom's designation following a market analysis as having Significant Market Power ('SMP') in the markets for Terminating and Trunk Segments of Leased Lines.
- 13. This determination relates to a dispute between Colt and Eircom in relation to an alleged failure by Eircom to provide Wholesale Terminating Segments of Leased Lines based on Uncontended Ethernet Access.

⁴ Decision Notice - Designation of SMP and Related Remedies: Market Analysis: Retail Leased Line and Wholesale Terminating and Trunk Segments of Leased Lines (National) (Decision No: D7/05, Document No: 05/29, Date: 30 March 2005)

- 14. Colt sent a formal request on the 23 October 2007 to Eircom, requesting it to provide Wholesale Uncontended Ethernet access components. Eircom responded to Colt request, stating that a Wholesale Ethernet product had not yet been developed, and that more information would be forwarded to Colt when the development of such a solution was envisaged.
- 15. On 18 February 2008, Colt formally wrote to ComReg requesting resolution in respect of a dispute with Eircom over its failure to provide Wholesale Uncontended Access Segments to support an Ethernet service, in breach of Eircom's obligations imposed by way of ComReg Decision Notice D7/05, Wholesale Terminating and Trunk Segments of Leased Lines (National) dated, 30 March 2005. ComReg wrote to Colt acknowledging receipt of the request.

Scope of this dispute

16. The scope of the dispute concerns an alleged failure by Eircom to provide Wholesale Terminating Segments of Leased Lines based on Uncontended Ethernet Access to Colt in response to Colt's request.

Summaries of the parties' submissions

- 17. On 18 February 2008, Colt submitted a dispute resolution request to ComReg. In its submission Colt outlined that it had requested Wholesale Uncontended Access Segments from Eircom, and that Eircom had not met this request. Colt outlined its belief that Eircom had an obligation to meet this request. Colt also included a copy of the Statement of Requirements that it had submitted to Eircom together with copies of correspondence related to this request.
- 18. 19 February ComReg sent a letter of acknowledgement to Colt.
- 19. On 26 February 2008, ComReg wrote to both Colt and Eircom confirming its initial acceptance of the dispute. In accordance with the Dispute Resolution Procedures established under Decision Notice D18/03, ComReg provided a copy of the dispute to Eircom and provided 5 working days within which

Eircom could comment on the suitability of the issue to the dispute resolution process.

- 20. In Eircom's response on 4 March 2008 it made the following points:

ComReg requested that if Eircom wished to comment in relation to Colts request that it should forward its comments by close of business 18th March 2008.

22. In Eircom's response of 9 January 2009 it stated:

As set out in paragraph 21, ComReg confirmed that the independent requests received by ComReg from Colt and BT Communications Ireland Limited for dispute resolutions are being dealt with separately.

- 23. In its response of 18 March 2008 Eircom restated it's opinion that it did not believe it had any obligation under D7/05 to provide an Wholesale Uncontended Access Segments product as requested by Colt
- 24. On 25 March 2008 ComReg confirmed final acceptance of the dispute. In its letter to Eircom on 25 March 2008, accepting the dispute, ComReg enclosed a copy of the dispute resolution request and requested Eircom to respond to the issues raised and explain the rationale for any decision not to provide the requested service by close of business 8 April 2008.
- 25. Eircom responded to ComReg on 8 April 2008 in relation to the final acceptance of the dispute stating that Eircom did not consider Colt's request to be reasonable in accordance with Section 5.1 of D7/05.
- 26. On 9 April 2008 ComReg sent a letter to Eircom requesting technical information relating to the Eircom Ethernet product set.
- 27. On 10 April 2008 Eircom's letter dated the 8 April 2008 was forwarded to Colt upon confirmation from Eircom that it contained no confidential information.
- 28. In accordance with ComReg's Dispute Resolution Procedures ComReg published the Information Notice below on its website on 15 April 2008

ComReg has received and accepted a request for dispute resolution from Colt Telecom Ireland under Regulation 31 of the Framework Regulations. The scope of the dispute concerns an alleged failure by Eircom to provide Leased Line terminating segments based on uncontended Ethernet Access. 29. On 16 April 2008 Eircom confirmed that pursuant to ComReg's information request of 9 April 2008 the technical Ethernet product information it had sent to ComReg for the purpose of a previous dispute resolution request could be replicated and used in connection with the Colt dispute resolution request.

"all of the material requested was provided by $\Box \Box \Box \Box \Box \Box$ on 2 April and may be relied upon for the purpose of this dispute"

- 30. On 17 April 2008 ComReg wrote to Eircom noting its confirmation that the technical information provided in connection with the a previous dispute resolution request could be replicated and used in connection with the Colt dispute resolution request.
- 31. On 25 April 2008 Colt wrote to ComReg requesting confirmation that as part of the dispute process ComReg would be determining if Eircom's Ethernet products are contended and if so to what extent.
- 32. On 30 April 2008 ComReg responded to Colt's letter dated 25th April 2008, confirming that as part of the dispute process ComReg will be determining if Eircom's Ethernet products are contended and if so to what extent.
- 33. On 25 August 2008, ComReg sent a letter to both parties informing them that this dispute would not be resolved within the four month timeline.
- 34. On 2 October 2008, ComReg sent a letter to both parties stating the reasons for the why the dispute would not be resolved within the four month timeline.
- 35. On 16 October 2008 ComReg stated in a general meeting with Colt that ComReg's aim was to issue the Ethernet draft determination by 20 November 2008. This date was later revised to 28 November 2008.

- 36. On 30 October 2008 ComReg asked Eircom to confirm the factual accuracy of a number of technical statements after reviewing the technical documents received from Eircom. Eircom replied on 4 November 2008 responding to the queries raised by ComReg.
- 37. On 17 December 2008 ComReg sent a copy of its draft determination to both parties. Eircom requested an extension for it to reply to this document. ComReg granted Eircom and extension until 9 January 2009.
- On 22 December 2008 ComReg received Colt's comments regarding the draft determination.
- 39. On 9 January 2009 ComReg received Eircom's comments regarding the draft determination.

Market analysis issues

- 40. At the time that Colt submitted its request for access to Eircom and a the time that it submitted its dispute resolution request Eircom had been designated as having Significant Market Power ('SMP') on the markets for Wholesale Terminating Segments of Leased Lines and Wholesale Trunk Segments of Leased Lines. On foot of this designation obligations on Eircom, including obligations of access and non-discrimination, by way of ComReg decision D7/05.
- 41. ComReg published a decision in respect of a further analysis of these leased line markets on 22 December 2008 (ComReg decision D6/08.) This again imposed obligations in the Wholesale Terminating Segments of Leased Lines on the basis of Eircom's SMP.
- 42. In Eircom's response of 9 January 2009 it stated:

- 43. It has therefore been argued that this dispute should not be determined under the obligations imposed by D7/05 because there has been a new set of obligations imposed in the market carried out since the dispute was notified to ComReg.⁵
- 44. ComReg believes that this line of reasoning is flawed. Colt has made a request for service that falls within the obligations imposed on Eircom by way of D7/05, the SMP operator in the relevant market, particularly the obligations of access and non-discrimination imposed on foot of that designation.
- 45. In considering the circumstances of the dispute ComReg is of the view that it is appropriate for ComReg to consider the obligations that applied at the time that the dispute arose. In ComReg's view in order to resolve the dispute ComReg should attempt to put the parties in the position they would have been in had the obligations at the time that the dispute arose been met. It is ComReg's opinion that D7/05 sets out the relevant obligations in this regard as Colt initially requested the Ethernet access segment at a point in time whether the obligations imposed by way of D07/05 applied to Eircom.

⁵ In Eircom's response of 9 January 2009 it stated:

Eircom's response 9 January 2009 identified an editorial error in the draft determination which ascribed an argument as having been made by Eircom. This should have been couched in the draft determination as being a potential argument that might be made. This editorial error does not affect the analysis of this potential argument nor the assessment that this line of argumentation would not result in a decision not to consider the dispute.

- 46. In considering the issues relating to the obligations imposed by way of D06/08 ComReg notes the following
- 47. For the purposes of this dispute, only the Wholesale Terminating Segments of Leased Lines is relevant (based on the analysis set out at paragraphs 58 to 66). Pursuant to a market analysis Eircom was designated as having SMP, and the following obligations were mandated: Access, Non-Discrimination, Transparency, Accounting Separation, Price Control and Cost Accounting pursuant to D07/05. ComReg analysis as set out in this determination has shown that the facility requested by Colt was within the Terminating Segment Market as defined under D7/05 and also as set out in this determination was in ComReg's view a reasonable request for access. Accordingly Eircom had an obligation to provide the access requested and should have granted this facility at the time of the request.
- 48. If Eircom had met its obligations under D7/05 in respect of Colt's request this would have been a facility already granted prior to the publication of ComReg decision D6/08 and so would have been comprehended by Section 6.2 (iii) of D6/08 and could not have been withdrawn without ComReg's permission.
- 49. Section 6.2 (iii) of D6/08 states:

"iii. Pursuant to Regulation 13(2)(c) of the Access Regulations, not withdraw access to facilities granted without the prior approval of ComReg. For the avoidance of doubt, Eircom shall continue to make available the in-situ transfer of end to end leased lines;"

50. Considering the situation that would exist if Eircom had met this request ComReg notes that there is demand for the service, based on the analysis set out herein it falls within a regulated market and also based on this analysis it is based on a reasonable request. Accordingly based on the information to hand ComReg does not consider that there would be a clear basis for it to agree to a withdrawal of access to this requested service had it been in existence at the effective date of D6/08.

51. Additionally ComReg notes that the access obligations under D6/08 would independently apply to this request had it been made after 22 December 2008 and therefore a determination which required Eircom to meet this request would not have the effect of imposing an access requirement on Eircom that would not also exist under the set of obligations imposed pursuant of D6/08 which includes an obligation to meet reasonable request for access.

In assessing the issues in the dispute ComReg has considered the following

- 52. In assessing this dispute a question arises as to whether Eircom has an obligation to provide the form of access requested. A second question arises as to whether Colt's request is reasonable and technically feasible for Eircom to provide. Answers in the affirmative to these questions are likely to lead to a conclusion that in the circumstances of the dispute Eircom has an obligation to provide the access requested.
- 53. Regulation 31 (1) of the Framework Regulations requires that ComReg "make a determination, aimed at ensuring compliance with the requirements of these Regulations and the Specific Regulations, to resolve the dispute". Therefore these questions regarding whether Eircom has met the requirements currently imposed on it are material to a proper determination of the dispute.
- 54. In examining these questions ComReg has considered the following issues
- What obligations relate to the issue under dispute?
- What was requested from Eircom?
- Is what is requested in the market for Wholesale Terminating Segments of Leased Lines?

- Is what is requested in the market for Wholesale Trunk Segments of Leased Lines?
- Is what was requested reasonable?
- Is the request for associated facilities reasonable?
- What considerations should be taken into account to formulate the determination?

1. What obligations relate to the issue under dispute?

- 55. Colt alleged Eircom's failure to provide its request for wholesale uncontended Ethernet access components breached Eircom's obligation to provide Access. Colt based its belief that Eircom has an obligation to meet this access request on Eircom's obligations as imposed by way of ComReg decision D7/05 on foot of Eircom's designations of having SMP in the markets for Wholesale Terminating Segments of Leased Line and Wholesale Trunk Segments of Leased Lines.
- 56. ComReg document D7/05 sets out Eircom's access obligation in the market for Wholesale Terminating Segments of Leased Lines:

"Eircom shall have the obligation to meet reasonable requests for access to, and use of, such wholesale access products, features or additional associated facilities by undertakings requesting access or use of such access products, features or additional associated facilities, which form part of the market for wholesale terminating segments of leased lines."

57. The issue of Obligations under D8/06 has also been addressed at paragraphs 40-51 above

2. What was requested from Eircom?

58. Colt has requested Eircom to "offer to OAO's a set of wholesale uncontended Ethernet access components on a non-discriminatory basis". Based on the customer access portion of Eircom's retail Ethernet offering (which in summary is an uncontended connection between the customer premises and the serving Ethernet enable exchange)⁶ and its own understanding of the meaning of "Ethernet access component" ComReg is of the view that what was requested was a connection between an end user's premises and a local Eircom exchange to be implemented using uncontended Ethernet technology.

- **3.** Analysis of whether what was requested falls within the market for Wholesale Trunk and Terminating Segments of Leased Lines
 - 59. ComReg has considered whether access segments based on uncontended Ethernet technology fall within the market for Wholesale Terminating Segments of Leased Line.

Market definition issues

60. Section 1.5 of D7/05 states:

"As a starting point of its review, ComReg established that the functional characteristics of a leased line are: 'point to point symmetric capacity between network termination points, whether contended or uncontended, which does not include 'on demand switching' or routing functions controlled by the end user."

61. In Eircom's response of 9 January 2009 it disagreed with ComReg's reliance on section 1.5 of D7/05 in its analysis. Eircom stated:

62. Section 1.5 sets out the functional characteristics of a leased line used as the basis for the market analysis. This was set out at the initial stages and remained unchanged throughout the market analysis process. Section 1.6 of the Decision instrument sets out that *"Hence as part of the market definition process, the*

⁶ Eircom letter to ComReg, 4 April 2008.

functional characteristics of a leased line were used to assess the intended use of products offering a service similar to a traditional (i.e. dedicated) leased line. Where demand-side substitution is evident, then the market is broadened to include products similar to a traditional leased line."

63. Section 1.15 of D7/05 also states:

"As far as managed services are concerned, ComReg concluded on the basis of substitutability from a demand and supply-side perspective that certain contended capacity based products (ATM, IP VPN and Ethernet) are to be included in the scope of the market for retail leased lines for bandwidths above 2 Mb/s."

64. In Eircom's response of 9 January 2009 it disagreed with ComReg's relying on section 1.15 of D7/05 in its analysis. Eircom stated:

- 65. Retail product functionality must be supported by underlying wholesale input functionality. As such it is directly relevant to the wholesale market to consider the retail functionality that must be supported. To the extent that leased lines based on Ethernet are part of the retail market then wholesale inputs to support these Ethernet products must be in the related wholesale market.
- 66. Paragraphs 103 to 107 of this determination set out that the existing wholesale inputs are not sufficient to support OAOs offering retail Ethernet offerings and therefore a Wholesale Ethernet offering is required.

Technology neutrality

- 68. ComReg's position is not that technology neutrality is sufficient in itself to cause Ethernet based products to be included in the market. Rather that the fact that the obligations in D7/05 are technologically neutral does not allow a request to be excluded simply on the basis of the technology.
- 69. Therefore the fact that the requested access is based on a different technology (Ethernet) to existing mandated products which fall within the Market for Wholesale Terminating Segments of Leased Lines does not in itself form a basis to conclude that Eircom's access obligation does not apply to this request for Ethernet based access.

No Requirement for a substitutability test

70. In Eircom's response of 9 January 2009 it stated:

71. It should be noted that the obligations in D7/05 are technologically neutral. Therefore the fact that the requested access is based on a different technology to existing mandated products which fall within the Market for Wholesale Terminating Segments of Leased Lines does not in itself form a basis to conclude that Eircom's access obligation does not apply to this request for access.

- 72. Market definitions describe the functional characteristics of products or services which fall within a market. Where a product or service has functional characteristics conform to these it is by definition within the market. It is sufficient for ComReg to show that a particular product or service conforms to the market definition for it to fall within the market. Any other approach including conducting a substitutability analysis amounts to a redefinition of the market. The purpose of *ex ante* regulation is prospective in nature and must be sufficiently flexible to encompass market developments, including the introduction of new products, during the period covered by the review. Any requirement for a new market analysis each time a new product is introduced would render unworkable the process of market review set out in the Framework Regulations. There is therefore no need for the determination to analyse the substitutability or otherwise of products that fall within the market definition.
- 73. It should be noted that products based on Ethernet technology were clearly considered to be comprehended by the market definition as is evidenced by the reference to Ethernet based products in ComReg document 05/03⁷ and there explicit inclusion in the related retail market.
- 74. Notwithstanding ComReg's position that a substitutability test is not required ComReg is of the view that if Ethernet products are in the same retail market as leased lines based on traditional solutions then if a hypothetical monopolist increased the price of the wholesale terminating segment inputs to traditional leased lines OAOs would switch to Ethernet based terminating segments in order to remain competitive in the related retail market. ComReg notes that this might also prompt a migration to an Ethernet based trunk segment however this migration would be in a separate market.

⁷ Response to Consultation and Draft Decision Market Analysis: Retail Leased Lines and Wholesale Terminating and Trunk Segments of Leased Lines (National) 05/03. 17 January 2005

Boundary split between Trunk and Terminating Segments

- 75. The definition as set out in D7/05 encompasses services based on uncontended Ethernet technology and as such services based on this technology fall into the markets for trunk and terminating segments of leased lines, as defined in D7/05.
- 76. In Section 1.18 of D7/05 ComReg sets out that the appropriate boundary split between trunk capacity and terminating segments occurs at the customer's Leased Line serving exchange.
- 77. Eircom's National Ethernet product comprises two components, a core network component and a customer access component.
 Confidential to Eircom] customer access component is an uncontended connection between the end-user's premises and the serving exchange and falls within the definition of the market for Wholesale Terminating Segments of Leased Lines.
- 78. In its response to the Draft Determination Eircom states that

79. In this regard ComReg notes that as set out at paragraph 50-55 of the draft determination the boundary split for Terminating Segments is the customer's leased line serving exchange and not as stated by Eircom in its response the local exchange. Eircom's statement that for Eircom to provide the product

would require that it must be extended to the relevant Ethernet Switching Unit (ESU) reflect ComReg's understanding of the Technical Design Document for National Ethernet. The ESU acts as the exchange based Ethernet interface for the customer connection and Ethernet based services cannot be offered without connection to the ESU. Therefore for the purposes of an Ethernet based leased line the leased line serving exchange is the relevant ESU in the Eircom network. Based on the Technical Design Document for National Ethernet where the ESU is not in the same exchange as the copper loop access to the customer's premises (the local exchange) then the connection to the ESU is effected using an "access tail" between the local exchange and the ESU exchange. This enables a dedicated uncontended connection between the customer's premises and the ESU. For Ethernet based services the earliest point in the Eircom network where it would be possible to hand a customer's Ethernet connection over to another operator for onward routing is the exchange where the relevant ESU is located. On this basis the totality of the connection between the customer's premises and the ESU is in the terminating segment market.

- 81. Based on the above ComReg is of the view that an access Segment of a Leased Line provided using uncontended Ethernet technology, falls within the market for Wholesale Terminating Segments of Leased Lines but not into the market for Wholesale Trunk Segments of Leased lines.
- 82. In Eircom's response of 9 January 2009 it stated:

83. As can be seen from paragraphs 59-65 ComReg's analysis shows segments based on uncontended Ethernet technology fall within the market for Wholesale Terminating Segments of Leased Line and is consistent with section 1.20 of D7/05.

Setting out of analysis in Draft determination

84. In Eircom's response of 9 January 2009 it stated:

85. ComReg disagrees with Eircom on this issue. The draft determination at paragraph 47 defined the characteristics of a leased line, paragraph 49 set out that services based on Ethernet may be leased lines, paragraphs 68-72 set out that the provision by Colt of Ethernet wholesale inputs based on the existing PPC portfolio is not viable. Paragraphs 50-53 described the boundary split for Terminating and Trunk Segments, paragraphs 46-55 set out that the requested access conforms to the functional definition of a leased line and also conforms to the boundary split for trunk and terminating segments.

86. This final determination expands on these points and addresses additional issues raised by Eircom such a the requirement for a substitutability test

Conclusion

- 87. Colt wishes to be able replicate the Eircom National Ethernet product. For this product access between the serving exchange and the customer premises is required. Colt has requested that Eircom "offer to OAO's a set of wholesale uncontended Ethernet access components on a non-discriminatory basis". The functionality that would be required to allow Colt to replicate the customer access portion of Eircom's National Ethernet product would be equivalent to that that comprises Eircom's own Ethernet customer access links that is an uncontended connection between the customer's premises and the serving exchange.
- 88. Accordingly ComReg is of the view as set out both in the draft determination and this determination that this functionality falls within the definition of the market for Wholesale Terminating Segments of Leased Lines and therefore Colt's access request is for wholesale terminating segments of leased lines. Requests for access based on this functionality are subject to the obligations set out in D7/05.

a. Assessment of the facilities that Eircom provides to itself in respect of Ethernet access components.

89. Eircom stated in its letter on 4 March 2008 that it doesn't provide the service requested.

- 90. ComReg has examined whether Eircom provides an input to its own retail Ethernet product, facilities which fall into a regulated market and which have been requested by Colt.
- 92. Based on the above it is ComReg's view that Eircom supplies itself Wholesale Terminating Segment of Leased Line based on uncontended Ethernet technology as an input to its retail Ethernet product.
- 93. In Eircom's communication to ComReg dated 8 April 2008, Eircom compared Colt's request to Eircom's retail Ethernet product. However, the requested access is different to the overall Eircom Retail Ethernet product, in that the Eircom Retail Ethernet product has as inputs underlying components, which fall into two wholesale markets, the market for Wholesale Trunk Segments of Leased Lines and the market for Wholesale Terminating Segments of Leased Lines. Only functionality equivalent to the terminating segment input to Eircom's overall retail Ethernet product has been requested. This is the same functionality as Eircom self supplies as part of its National Ethernet Product.
- 94. In Eircom's response of 9 January 2009 it stated:

95. ComReg has clearly set out its rational in paragraphs 89-94 for its conclusion that only functionality equivalent to the terminating segment input to Eircom's overall retail Ethernet product has been requested. In this dispute determination ComReg is not attempting to directly or indirectly regulate Eircom's retail National Ethernet product but only relevant wholesale inputs to the product which fall into regulated markets.

4. Is what was requested reasonable?

96. In assessing whether or not Eircom has an obligation to meet this particular request, ComReg has considered whether Colt's request is reasonable. In doing so it considered the Access Directive⁸ and Regulation 13(4) of the Access Regulations. This analysis underpinned ComReg's reasons for adopting this approach in this case are set out below.

8 Directive 2002/19/EC Of The European Parliament And The Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive)

97. In the Response to Consultation and Draft Decision for the existing market analysis ComReg document 05/03⁹ issued by ComReg prior to the publication of D7/05, ComReg set out as follows:

"Additionally and to allow innovation, ComReg considers that an obligation to meet reasonable requests should be attached to the access obligation. This is necessary to allow OAOs to request variants of products (for example the provision of wholesale leased lines above 2 Mb/s or non traditional interface products such as Ethernet backhaul) and is appropriate given the experience of OAOs and ComReg to date in requiring Eircom to introduce new products. ComReg does not propose at this stage to mandate the provision of any such new products or features but expects Eircom to consider requests for such from OAOs in the light of Regulation 13 (4)."

- 98. Therefore ComReg believes it is appropriate to assess Colt's request in the light of Regulation 13 (4) of the Access Regulations. Eircom itself endorsed this approach in its submission of 8 April 2008.
- 99. Regulation 13(4) of the Access Regulations sets out the factors that must be taken into account when assessing whether or not to impose access obligations. These are:

(a) The technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved;

(b) The feasibility of providing the access proposed, in relation to the capacity available;

(c) The initial investment by the facility owner, bearing in mind the risks involved in making the investment;

⁹ Response to Consultation and Draft Decision Market Analysis: Retail Leased Lines and Wholesale Terminating and Trunk Segments of Leased Lines (National) 05/03. 17 January 2005

- (d) The need to safeguard competition in the long-term;
- (e) Where appropriate, any relevant intellectual property rights; and
- (f) The provision of pan-European services.
- 100. Therefore, in considering the reasonableness of this request for access in the context of an access obligation, ComReg has assessed the request against each of these factors.
- 101. Recital 19 of the Access Directive states the following :

"Where obligations are imposed on operators that require them to meet reasonable requests for access to and use of networks elements and associated facilities, such requests should only be refused on the basis of objective criteria such as technical feasibility or the need to maintain network integrity."

102. As has been set out at paragraph 56 an access obligation in the market for Wholesale Terminating Segments of Leased Line has been imposed on Eircom. As has also been set out above at paragraphs 59 to 65 the service requested by Colt falls into this market. Therefore ComReg considers it appropriate to consider whether there are objective criteria for Eircom not to meet this access request.

Assessment of Colt's Request for Wholesale Terminating Segments of Leased Line in the light of Regulation 13 (4) of the Access Regulations.

- a. Consideration of the technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved;
- 103. In ComReg's view it maybe technically possible for Colt to provide the requested service using elements purchased from the existing Partial Private

Circuit ('PPC') product set. For a 10 Mbit/s Ethernet connection this would require Colt to buy 5 separate 2Mbit/s EULs and "bond" these circuits together to form a composite 10Mbit/s connection. Ordering this would require coordination of the five individual End User Links ('EUL') orders and purchase and installation of additional requirement to "bond" the individual circuits together.

- 104. It is ComReg's understanding that in order to provide one 2Mbit/s leased line;
 □ □ □ □ □ □ ∴ ≫ [Confidential to Eircom] copper pairs are used between the customer premises and the local Eircom exchange. In the case of Eircom's National Ethernet product, Page 10 of the technical description sets out that a 10Mbit/s Ethernet connection requires □ □ □ □ □ □ ∴ ≫ [Confidential to Eircom] copper pairs. A solution that requires the bonding of 2Mbit/s leased lines together would require □ □ □ ∴ ≫ [Confidential to Eircom] pairs , rather than the □ □ □ ∴ ≫ [Confidential to Eircom] pairs required in Eircom's solution. It is likely that the former configuration would have a longer delivery lead time due to the requirement to use and source this greater amount of copper pairs in the access network.
- 105. The resulting configuration would have a higher likelihood of faults as the number of components used in its construction would be much higher with up to six separate pieces of customer premises equipment (one for each of the 5 2MBit/s EULs plus one to bond them together) together with two and a half times as many copper pairs than the equivalent implementation used by Eircom Retail. This means that from a quality and economic point of view, it would be extremely difficult for Colt to replicate the wholesale input supplied to Eircom Retail.
- 106. For a 100Mb/s Ethernet product, a similar situation applies. Colt could bundle separate 34Mb/s, 45 Mb/s EULs or use an STM1 EUL. In these scenarios Colt would be forced to buy multiple products or alternatively a product which is

larger than required. This approach would require Colt to purchase bundled elements which are not necessary for the provision of the requested service.

107. For the reasons set out in paragraphs 103,105 and 106, ComReg does not consider that it is technically or economically viable for Colt to install competing facilities, in light of the rate of market development, taking into account the nature and type of access involved. Further to this, having regard to ComReg's objectives under section 12 of the Communications Regulation Act 2003 ("the 2003 Act"), and in the interests of promoting competition and contributing to the development of the internal market, ComReg considers that Colt's request, in relation to Regulation 13(4) (a), appears to be reasonable.

b. The feasibility of providing the access proposed, in relation to the capacity available;

- 110. Based on the fact that Eircom envisages the augmentation of capacity on the National Ethernet platform it is ComReg's view that there is no absolute capacity constraint which would prevent this access request being met.
- 111. By definition the functionality of Eircom's retail Ethernet access product would be equivalent to the functionality of any wholesale access product supplied on foot of Colt's request. Therefore it is ComReg's view that due to the necessary common technical functionality and constraints between the two then the prospective end-users of retail services supplied by Colt using the wholesale access segment would significantly overlap with the prospective users of Eircom's retail service based on the same input. Therefore any end user consuming capacity on the Eircom National Ethernet platform could be either a wholesale or an Eircom Retail customer and it is ComReg's view that wholesale demands on the Ethernet platform will not be entirely incremental to Eircom's own requirements but will in some measure substitute for it.
- 112. Based on the above analysis it is ComReg's view that it is feasible to provide the access requested in relation to the capacity available.

c. The initial investment by the facility owner, bearing in mind the risks involved in making the investment.

- 113. As the systems to support terminating segments are already in place for Eircom Retail, any investment required would only be to the extent necessary to productise these elements for external supply. It is ComReg's view that the technology used for its own self supply could be substantially re-used by Eircom to supply this product to Colt. This in turn would spread the cost of any fixed elements associated with this product improving the cost recovery of the initial investment and lowering investment risk.
- 114. In the market for Wholesale Terminating Segments of Leased Lines, Eircom has an obligation of cost orientation, imposed by way of Section 10 of the

Decision and pursuant to Regulation 14 of the Access Regulations¹⁰. Cost orientation guarantees Eircom a set level of return. Eircom's Weighted Average Cost of Capital (WACC) is currently set at 10.21%.¹¹ This ensures that Eircom has an adequate rate of return and has the ability to recover its network build costs.

- 115. ComReg is of the view that based on the analysis set out at paragraphs 103 to 106 the use of Ethernet based technology to deliver the wholesale inputs to retail customer access links is a more cost efficient means of delivering dedicated capacity than the use of the existing wholesale inputs. Hence there was very little risk involved for Eircom in investing in Ethernet based wholesale inputs once it had decided to offer a retail Ethernet offering. (This investment choice was in essence a choice to use higher cost existing wholesale inputs or lower cost Ethernet based wholesale inputs to the customer access link portion of its product)
- 116. Eircom may also benefit from additional economies of scale due to the fact it will be able to factor in Colt's future Ethernet orders into its future network build plans.
- 117. Given the investment risks already assumed by Eircom in relation to the Ethernet product deployment and the potential additional revenue stream that arises from the offering of a Wholesale Uncontended Ethernet Access product, ComReg considers that under Regulation 13(4)(c), Colt's request appears reasonable.

118. In Eircom's response of 9 January 2009 it stated:

¹⁰ Section 6, Market Analysis for Retail Leased Lines and Wholesale Terminating and Trunk Segments of Leased Lines 07/05 30 March 2005.

¹¹ Review of Eircom's Cost of Capital 07/88 1 November 2007

- 119. ComReg notes that Regulation 13(4) of the Framework Regulations sets the criteria to be used by ComReg in deciding whether or not to impose an access obligation. In the context of the absence of regulation it is therefore an *ex ant*e test prior to the imposition of regulation. ComReg notes that in this market Eircom has had an access obligation imposed. In this context the consideration of Colt's request in the light of Regulation 13(4) is not an *ex ante* test prior to imposing an obligation but an ex post test after the imposition.
- 120. ComReg notes that the requested service falls within a regulated market. Even if Eircom had not launched an Ethernet product then based on the market definition this service would still fall within this market. Provided it passed the other tests for reasonableness, and provided Eircom could recover its costs, Eircom would have to meet requests for this product even in the absence of its self-supply. ComReg is of the view that the share of innovation issue raised by Eircom is therefore not relevant in the context of the access obligation.
- 121. ComReg considers that it is proper to consider investment risks in the context of regulation having been imposed and obligations existing and in the context that Eircom had already launched the product and as such had already assumed the investment risk for this wholesale input. As set out at paragraph 115 in ComReg's opinion this is a low risk

- 122. As previously stated in paragraph 116 Eircom may also benefit from additional economies of scale due to the fact it will be able to factor in Colt's future Ethernet orders into its future network build plans.
- 123. Given the investment risks already assumed by Eircom in relation to the Ethernet product deployment and the potential additional revenue stream that arises from the offering of a wholesale Ethernet Access product, ComReg considers that under Regulation 13(4)(c), Colt's request appears reasonable

d. The need to safeguard competition in the long-term

124. Eircom's letter dated 8 April 2008, stated the following:

"eircom's National Ethernet product was developed in response to competition in the retail leased lines market."

- 125. Colt's request is for access to a wholesale product the retail equivalent of which Eircom acknowledges was developed in response to competition in the related retail market. On this basis, and in light of the difficulties set out above relating to the replicability of the product by Colt of the wholesale input, if this access request is not met it will limit the ability of Colt and Other Authorised Operators (OAOs) to compete in the related retail market. If Eircom's retail Ethernet product is priced as competitively as indicated by Eircom's response then it will force offerings and products based on traditional leased line solutions out of the market. This in turn will reduce overall competition in the market in the long term. This access request therefore does not have the effect of reducing long term competition but safeguarding it, as it ensures that competitive offerings will be available even in the face of declining demand for retail Leased Lines based on traditional solutions.
- 126. In Eircom's response of 9 January 2009 it stated:

- 127. ComReg has already mandated that Eircom should meet reasonable requests for access that fall within the market for Wholesale Terminating Segments of Leased Lines. As set out in the draft determination the provision of this wholesale input would allow Colt to offer competing retail services. The form of access which is the subject of this dispute is only one wholesale input to a retail offering and requires investment by Colt in the other wholesale inputs before it can be translated into as such a retail offering. Therefore granting this request for access encourages investment by Colt.
- 128. The share of innovation issue has also been dealt with at paragraph 120. "Share of innovation" considerations are in ComReg's view not relevant or proper where what is at issue is a low risk innovation which lowers costs for the SMP operator in respect of a self supplied wholesale input.
- 129. In Eircom's response of 9 January 2009 it stated:

[Confidential to Eircom] ".

130. In the draft determination ComReg did not state that a product developed as a substitute for other capacity-based products would limit competition. ComReg did state that the inability of OAOs to offer retail services based on this wholesale input would limit the ability of Colt and OAOs to compete in the related retail market and ultimately force products based on traditional leased line solutions out of the market.

e. Where appropriate, any relevant intellectual property rights;

- 131. ComReg is unaware of, and neither party has raised to ComReg any difficulties which exist with the intellectual property rights in respect of the request.
- 132. ComReg notes that intellectual property rights ('IPR') is an issue which is commonly dealt with in commercial contracts and therefore believes that any specific issues relating to IPR in connection with the requested access can also be dealt with by way of contractual agreement.
- 133. As such this consideration does not impact on the reasonableness of the request made by Colt.

f. The provision of pan-European services

- 134. This access request is only applicable in the Irish market. However, retail services based on Wholesale Terminating Segments of Leased Lines using Ethernet technology can form part of transnational connections between end-user locations.
- 135. The following is an extract from Eircom's published offering as it appears on Eircom's website¹²

¹² Eircom Enterprise website: http://enterprise.eircom.net/solutioncentre/products/

"Private IP MPLS Network Connectivity

eircom business IP, our nationwide IP MPLS network, offers full traffic prioritisation and Quality of Service guarantees for your critical data traffic. Ethernet access speeds from 10Mbs to 100Mbs are ideal for cost effective LAN speed connectivity. Our global partnership with Orange Business Services ensures seamless, end-to-end service for your traffic between Ireland and all your international sites."

136. From this it can be seen that Retail Ethernet facilitates a transnational service, as such having regard to ComReg's objectives under section 12 of the Act, ComReg considers that the provision of Wholesale Ethernet inputs into the market, is not unreasonable in consideration of the furtherance of promoting the interests of users within the European Community.

Assessment of whether there are objective criteria for refusing Colt's request.

137. Eircom stated in its letter of 4 November 2008 that

- 138. ComReg has seen no evidence based on this position that Eircom has carried out an analysis which would allow it to properly conclude that the provision of the requested access would not be technically feasible.
- 139. In the absence of this analysis the following is ComReg's assessment of the technical feasibility of providing the access requested.
- 140. From an examination of the technical documents associated with Eircom's National Ethernet product, it appears that at least one solution to support Colt's request could be based on the design proposed by Eircom for "

at pages 14 and 15 of Eircom's Technical Design Document for National Ethernet. In the case of Colt's $\$ [Confidential to Eircom] . Therefore $\$ ComReg is of the view that it is technically feasible for Eircom to meet this access request. In addition, other more efficient solutions may be possible. Therefore ComReg is of the view that it is technically feasible for Eircom to meet this access request.

- 141. ComReg notes that this solution could also be adapted to provide the requested access to a co-location position within an Eircom exchange.
- 142. It is ComReg's view that if Eircom has designed the solution summarised at paragraph 140 as part of the Retail Ethernet product then it should also have envisaged mechanisms to deal with ordering, provisioning and billing of this solution and therefore it is technically feasible to deal with these ancillary product issues.
- 143. In respect of the development work which Eircom has outlined as being required on ordering, provisioning and billing systems, ComReg is of the view that in the short term, manual processes can be designed and implemented to meet these requirements as the initial order volumes are likely to be low given that Colt will not be in a position to begin making retail offers based on this wholesale input until after the product becomes available and Colt has its own network infrastructure in place to interface with this product.
- 144. In Eircom's response of 9 January 2009 it stated:

ComReg has addressed Eircom concerns in paragraph 140 - 143. Eircom has not stated any technical reasons or objected to implementing manual processes until its systems upgrades have been completed. Of these manual processes, prior to Eircom's minimum 6 month development period, only provisioning should be a significant issue. Leased line bills are issued once a quarter, and therefore it is unlikely that Colt would be issued a bill within the first 6 month period. Additionally repair issues should be at a minimum on a newly provisioned service.

Conclusion

145. Based on the above it is ComReg's preliminary conclusion that Colt's request for a Wholesale Terminating Segment of Leased Lines product is reasonable taking account of the criteria set out in Regulation 13(4) of the Access Regulations and the above assessment of whether there are objective criteria for not meeting the request.

5. Is the request for an associated facility reasonable?

146. In addition to the request for terminating segments, Colt also requested colocation for use in association with the requested Ethernet terminating segments and traffic aggregation of terminating segments. In the first instance ComReg has analysed the reasonableness of Colt's request in relation to Ethernet terminating segments in paragraphs 52 to 145 above. In relation to the associated facilities requested, that is co-location and aggregation, the equivalent analysis for each is set out below.

Request for associated facility - Co-location

- 147. As has been set out in paragraph 145 of this document, Colt's request for the Uncontended Wholesale Ethernet access component, is a reasonable request for a product that is within the relevant Market and therefore subject to the access provisions set out in section 5 of D7/05¹³.
- 148. As this request for access is subject to an access obligation, requests for associated facilities related to this form of access may also be subject to the access obligation.
- 149. In Eircom's response of 9 January 2009 it stated:

150. ComReg considers that this position is not supported by the definition of associated facility. While a facility which is indispensable or necessary must be associated with electronic communications service (if they were not then the service could not exist) it is possible for facilities to be associated with a service

¹³ eircom shall adhere to the principle of non-discrimination when providing leased lines referred to in Regulation 15 of the Universal Service Regulations. eircom shall apply similar conditions in similar circumstances to organisations providing similar services, and shall provide leased lines 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

which support and/or enable the provisions of services but not be indispensable to the provision of services. Eircom's position is that "associated with" means indispensable or necessary. This meaning is at variance with the standard usage and definition¹⁴ of associated which does not have the requirement that the linkage between the associated elements be one of necessity.

- 151. ComReg notes that the doctrine of "essential facilities" is an *ex post* competition law concept. The issue of associated facilities is an *ex ante* regulatory framework concept.
- 152. Arguing in the alternative the definition of associated facility puts no bound on the type of end service to be offered. There is no provision for Eircom to set any constraint on the end service that an OAO might offer. So if an OAO chooses to offer an end service which is based on some feature of its own network (such as the fact that it has extended its infrastructure to a number of Eircom premises and as such may be able to leverage the economics of its network topography to construct a competitive end service) then facilities which are necessary or indispensable to support and/or enable such end services are associated facilities.
- 153. End-to-end retail services from one end user premises to another cannot be provided solely by use of terminating segments. Some other element to connect the terminating segments together is required. As this other element is necessary to make use of the terminating segment to provide a retail service, it is an associated facility.
- 154. In the context of the existing mandated products which fall within the Market for Wholesale Terminating Segments of Leased Lines, this is achieved by Eircom providing connectivity by way of PPC transport links between the

¹⁴ From Concise Oxford Dictionary tenth edition "associate (v) 1 make a conceptual connection between. 2. (usu associate with) meet or have dealings with. (associate oneself with) allow oneself to be connected with or seen to be supportive of."

Terminating Segment and the Access Seeker network. It is then for the access seeker to connect the two ends of the circuit across its own network. The connectivity between the Terminating Segment and the handover point is bundled with the existing product and is an associated facility.

- 155. This is not the only possible solution to providing the connectivity between the two terminating segments. The alternative is for the handover to the access seeker network to be affected on the Eircom premises where the terminating segment ends.
- 156. In order to do this the access seeker would require the ability to locate its own equipment in the Eircom premises. In this configuration the co-location of the access seeker equipment in the Eircom premises is an associated facility, as it is required to make use of the terminating segment.
- 157. ComReg notes that as set out at paragraphs 147 to 156 above in the circumstance where the request for the Wholesale Terminating Segments of Leased Lines is reasonable then co-location may be an associated facility and requests for co-location to be used in conjunction with Leased Line Terminating Segments must be considered on their merits.
- 158. ComReg notes Eircom currently provides a form of exchange based colocation made to third parties in the context of Local Loop Unbundling. It is ComReg's understanding that Colt avails of this on a limited basis and notes that it was open to Colt to request co-location in connection with Wholesale Terminating Segments of Leased Lines based on this existing form of third party co-location. ComReg further notes that Colt did not make such a request.
- 159. Given that Colt couched its request to Eircom in terms which did not reference or draw from the existing third party co-location product availed of by Colt it is reasonable to take a view that Colt required something other than a form of colocation based on this existing product.

- 160. In this particular instance Colt in its original SOR submitted to Eircom requested co-location at the same rates, terms and conditions as Eircom offers to Eircom Retail. Eircom Retail is a sales channel within Eircom and as such Eircom does not offer a co-location product to Eircom Retail for exchange or network based equipment. Even though Colt did request co-location it is not possible to identify the specific technical specifications and characteristics required by Colt for co-location because of the manner in which Colt attempted to describe these which are by reference to something that doesn't exist. Even if a wider interpretation of Colt's request is taken and that Colt meant to reference the form of co-location that Eircom provides itself for network and exchange based facilities then this too would be ambiguous as Eircom does not have terms and conditions nor prices for the internal provision of such facilities.
- 161. While it might be expected that on foot of Eircom's obligation to negotiate in good faith Eircom would inform Colt of the defects in its co-location request it is ComReg's view that it is not possible to clearly identify Colt's specific technical and operational requirements in respect of the particular co-location facility requested by Colt. In the absence of these technical and operational requirements the request is not capable of being assessed by Eircom (or ComReg) as to its reasonableness or feasibility.
- 162. In Eircom's response of 9 January 2009 it stated:

In paragraph 147 - 161 it states clearly ComReg's rational that co-location may be an associated facility and requests for co-location to be used in conjunction with Leased Line Terminating Segments must be considered on their merits.

Request for associated facility - Aggregation:

- 163. As has been set out in paragraph 145, Colt's request for the Uncontended Wholesale Ethernet Access segment, is a reasonable request for a product that is within the relevant market, and therefore subject to the access provisions set out in section 5 of Annex C to Decision No. D7/05. As this request for access is subject to an access obligation, then requests for associated facilities related to this form of access may also be subject to an access obligation.
- 164. In addition to its request for co-location Colt has requested that a facility to aggregate individual Ethernet Terminating Segments be provided by Eircom in conjunction with the Uncontended Wholesale Ethernet Terminating Segment Service.
- 165. It is standard network practice to aggregate the local ends of leased lines, or other data products together to provide connectivity between a network operator's point of presence serving one end of a data connection, and its point of presence serving the far end of a data connection. Aggregating individual customer connections together at a point of presence allows connectivity between such points to be effected in a more cost effective and operationally efficient manner. An example of this aggregation is the manner in which End User Links ('EULs'), which are the product elements that provide the local connectivity for Eircom's existing PPC product are aggregated together onto Transport Links for handing over to OAOs.
- 166. Based on the technical descriptions of the various Eircom Ethernet products which have been provided to ComReg as part of this dispute, Eircom also aggregates Ethernet customer access connections (these customer access connections correspond to the self supply by Eircom of the Ethernet Terminating Segment requested by Colt) at the nodes that make up the core of the Ethernet network associated with each product.

- 168. In assessing whether this request for an associated facility is reasonable ComReg has considered the following;
 - **1.**The technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved;
- 169. An alternative to Eircom providing the aggregation facility requested would be for Colt to perform the aggregation function. This would require that Eircom provide exchange based transmission equipment dedicated to each individual customer connection, which in turn would be connected to Colt's aggregation equipment. As has been outlined above this is at variance with Eircom's own practice and would require Eircom to procure new equipment.
- 170. This new equipment would sit between the Colt aggregation equipment, and the access path serving the customer. The equipment would not be necessary for the provision of the service but would add costs. The recovery of these costs by Eircom would increase the price of the service to Colt and lead to a situation where in order to be competitive against Eircom Retail, Colt would have to accept a lower margin than Eircom on the customer access portion of any service it sold. This would negatively impact on the overall profitability of the

Colt offering and as such this alternative would be less economically viable for Colt.

- 171. Furthermore, the additional equipment would have a finite probability of failure. This would be in addition to the probability of failure of the customer premises equipment and the aggregation equipment (in this case supplied by Colt). This increased probability of equipment failure would render it more difficult for Colt to achieve a level of quality of service performance for those services offered on this basis (i.e. that it performs the aggregation), in comparison to those offered by Eircom, which would not have this additional piece of equipment. To achieve an equivalent quality of service, Colt would have to provide an aggregation solution that had a failure rate which was sufficiently lower than Eircom's aggregation solution to offset the disimprovement introduced by the additional equipment. If such improved performance for aggregation equipment was cost-effective, it would be rational for Eircom to be already using such a solution to lower the operational costs associated with equipment failure, and to improve the quality of the product it offers. This leads to a conclusion that the use of equipment which has a lower failure performance than Eircom already uses would not be cost-effective.
- 172. In addition, requiring an Access Seeker to provide its own aggregation facilities for Ethernet Terminating Segments would be a requirement to purchase the use of transmission equipment dedicated to each customer access connection. This dedicated equipment is not necessary for the provision of the service as the functionality could be provided by a single combined aggregation device, which has multiple transmission connections for customer access connections. This approach would appear to conflict with Eircom's obligations set out in Paragraph 8.2 of Annex C to Decision Notice D7/05¹⁵

^{15 &}quot;...eircom shall publish and keep updated a reference offer ("RO") in respect of the services and facilities referred to in sections 5 and 7 that is sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested."

- 2. The feasibility of providing the access proposed, in relation to the capacity available;
- - 3. The initial investment by the facility owner, bearing in mind the risks involved in making the investment;
- 174. The facility requested is governed by the price control obligations set out in Decision Notice D7/05. This sets out that for Wholesale Terminating Segments of Leased Lines based on PPCs "Eircom's prices for PPCs shall be cost-oriented and such costs shall be calculated using a pricing model based on forward looking long run incremental costs ('FL-LRIC')."
- 175. In addition ComReg has set a WACC as a basis for allowing Eircom an adequate rate of return for regulatory purposes, including the setting of Eircom's regulated wholesale prices. (ComReg decision D1/08, document number 08/35)
- 176. Therefore Eircom has scope to recover costs associated with the initial investment in providing this facility, bearing in mind the risks involved in making the investment.

4. The need to safeguard competition in the long-term;

177. As has been set out previously in paragraphs 107, 124 and 125, granting the request for access to Terminating Segments based on Ethernet safeguards competition in the long term. Failing to give access to this associated facility, which itself makes the uptake of the requested access more likely, directly

diminishes the competition that granting the requested access engenders. As has been set out above, although other mechanisms exist to address the functionality that the requested associated facility provides these are not economically feasible. Therefore the criteria does not form a basis to conclude that Eircom's access obligation does not apply to this request for access.

5. Assessment of any relevant intellectual property rights;

As set out in paragraph 131

- 6. Assessment of whether there are objective criteria for refusing Colt's request for Aggregation.
- 178. Eircom stated in its letter of 4 November 2008 that

"Major development work on the Tellabs Martis platform, used to provision National Ethernet connections, may not be required to support a wholesale variant of the National Ethernet product. However this could only be conformed once design work had been undertaken. Development will almost certainly be required on order management, provisioning and fault management systems/processes. The extent of the development work required would require further analysis."

- 179. ComReg has seen no evidence based on this position that Eircom has carried out an analysis which would allow it to properly conclude that the provision of the requested associated facility would not be technically feasible.
- 180. In the absence of this analysis the following is ComReg's assessment of the technical feasibility of providing the access requested.
- 181. From an examination of the technical documents associated with Eircom's National Ethernet product, the technical solution identified at paragraph 140 above would also appear to provide aggregation. Therefore ComReg is of the view that it is technically feasible for Eircom to meet this access request. In addition, other more efficient solutions may be possible.

Conclusion

- 182. Based on the above aggregation enables and supports the provision of services based on Ethernet Terminating Segments, as evidenced by the use of such aggregation in conjunction with the self supply of Ethernet Terminating Segments by Eircom in the form of Ethernet customer access connections and as evidenced by the use of aggregation in conjunction with terminating segments based on other technologies such as PPCs. Therefore it is ComReg's preliminary view that the aggregation facility requested by Colt is an associated facility for the purposes of Eircom's obligations imposed on foot of Annex C to Decision No. D7/05.
- 183. In Eircom's response of 9 January 2009 it stated:

Service Level Agreements

- 184. Eircom is obliged under section 5.3 of Annex C to Decision No. D7/05, to conclude Service Level Agreements (SLAs) in respect of services provided in the Market.
- 185. ComReg notes that there has been no substantive engagement between the parties on this issue and believes that such engagement in the context of a determination that required Eircom to grant the access requested would be a more appropriate mechanism for determining SLAs. While negotiating the SLA's Eircom is bounded by the obligation to negotiate in good faith.

186. In regard to SLA's, ComReg has not changed its position that it took in the draft determination.

6. Considerations taken into account formulating a determination

187. In accordance with Regulation 31(6) of the Framework Regulations ComReg must have regard to section 12 of the Communications Regulation Act 2002.

This states that:

"The objectives of the Commission in exercising its functions shall be as follows-

12. (1) (a) in relation to the provision of electronic communications networks, electronic communications services and associated facilities-

- *(i) to promote competition,*
- (ii) to contribute to the development of the internal market, and
- (iii) to promote the interests of users within the Community,"
- "(2) In relation to the objectives referred to in subsection (1)(a), the Commission shall take all reasonable measures which are aimed at achieving those objectives, including-
 - (a) in so far as the promotion of competition is concerned-

(*i*) *ensuring that users, including disabled users, derive maximum benefit in terms of choice, price and quality,*

(ii) ensuring that there is no distortion or restriction of competition in the electronic communications sector,

(iii) encouraging efficient investment in infrastructure and promoting innovation, and

- (*iv*) [...]
- (b) in so far as contributing to the development of the internal market is concerned-

(i) removing remaining obstacles to the provision of electronic communications networks, electronic communications services and associated facilities at Community level,

(ii) encouraging the establishment and development of trans-European networks and the interoperability of transnational services and end-to-end connectivity,

(iii) ensuring that, in similar circumstances, there is no discrimination in the treatment of undertakings providing electronic communications networks and services and associated facilities, and

(iv) co-operating with electronic communications national regulatory authorities in other Member States of the Community and with the Commission of the Community in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of Community law in this field, and

- (c) in so far as promotion of the interests of users within the Community is concerned-
 - (*i*) ensuring that all users have access to a universal service,

(ii) ensuring a high level of protection for consumers in their dealings with suppliers, in particular by ensuring the availability of simple and inexpensive dispute resolution procedures carried out by a body that is independent of the parties involved,

(iii) contributing to ensuring a high level of protection of personal data and privacy,

(iv) promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services,

(v) encouraging access to the internet at reasonable cost to users,

(vi) addressing the needs of specific social groups, in particular disabled users, and

(vii) ensuring that the integrity and security of public communications networks are maintained.

- (3) In carrying out its functions, the Commission shall seek to ensure that measures taken by it are proportionate having regard to the objectives set out in this section.
- (4) In carrying out its functions, the Commission shall, without prejudice to subsections (1), (2) and (3), have regard to policy statements, published by or on behalf of the Government or a Minister of the Government and notified to the Commission, in relation to the economic and social development of the State.
- (5) In carrying out its functions, the Commission shall have regard to international developments with regard to electronic communications networks and electronic communications services, associated facilities, postal services, the radio frequency spectrum and numbering.
- (6) The Commission shall take the utmost account of the desirability that the exercise of its functions aimed at achieving the objectives referred to in subsection (1)(a) does not result in discrimination in favour of or against particular types of technology for the transmission of electronic communications services...."
- 188. In the context of this dispute which deals with Ethernet, ComReg has only considered those parts of section 12 which are relevant to the dispute.
- 189. In considering the provisions of section 12(2)(a)(I) ComReg is of the view that based on its analysis in paragraphs 113 to 125 that Colt's request is reasonable and would require recoverable investment from Eircom to ensure that users derive maximum benefit in terms of choice, price and quality of telecoms supplier. To do this it would be necessary to ensure that Colt had access to the necessary wholesale inputs to offer competing retail services to Eircom. The availability of choice should in turn allow a competitive dynamic to develop where quality and price became differentiators between these competing retail offerings. Therefore a determination that gave Colt this access would meet this objective. For this reason it is important in the determination that Eircom has to indicate as to when the service requested would be available for Colt to order.

- 190. In considering the provisions of section 12 (2)(a)(ii) and ComReg's view, based on its analysis that Colt's request is reasonable, if Eircom did not meet this request from Colt it would be in breach of its access and non-discrimination obligations.
- 191. In considering the provisions of section 12 (2)(a)(iii) ComReg takes into account Eircom rationale for the introduction of the Retail Ethernet products. In Eircom's letter dated the 8 April 2008 it stated the following:

"Eircom's National Ethernet product was developed in response to competition in the retail leased lines market".

- 192. On this basis and in light of the difficulties relating to the replicability for Colt and OAOs of the wholesale input, if this access request is not met it will limit the ability of OAOs to compete in the related retail market. Therefore a determination that requires Eircom to provide this facility would safeguard competition in the market.
- 193. In considering the provisions of section 12(2)(b)(i) as stated above, failure by Eircom to provide this access to Colt will impede competition with Eircom in the retail Leased Line market, effectively acting as a barrier to market entry and thus minimizing user choice.
- 194. In considering the provisions of section 12(2)(b)(ii) as set out in paragraph 136 retail services based on Wholesale Terminating Segments of Leased Lines using Ethernet technology can form part of transnational connections between end-user locations.
- 195. In considering the provisions of section 12 (2)(b)(iii) ComReg's analysis in paragraphs 108 shows that Eircom has already deployed the technical, engineering and other systems necessary to provide this facility, as these are

already in place for its self-supplied input to its retail product any investment required would only be to the extent necessary to productize these elements for external supply. ComReg's view that the technology used for its own selfsupply could be re-used by Eircom to supply this product to Colt and OAOs. This in turn would spread the cost of any fixed elements associated with this product improving the cost recovery of the initial investment and lowering investment risk. Therefore a determination that requires Eircom to provide the requested facility would be considered reasonable.

- 196. On 8 March 2007 at ComReg's Next Generation Networks (NGN) Industry Summit, a conference at which Eircom's Chairman Pierre Danon made a presentation titled "Working to put Ireland at the forefront of the Broadband revolution"¹⁶
- 197. In Eircom's presentation, it was stated that in Phase 1 of its overall proposed NGN implementation, Eircom planned to deploy a high bandwidth IP/Ethernet Network to all sites with more than 2000 working lines (240 sites).
- 198. Based on this Eircom has already made a business decision to invest in this technology and therefore a determination that requires Eircom to provide the requested facility will be in line with its current planned deployment.
- 199. In considering the provisions of section 12(3) ComReg's analysis shows that any lack or failure by Eircom to provide Wholesale Leased Line termination segments based on uncontended Ethernet access would not be consistent with its ex ante obligations
- 200. The analysis below shows that the costs would be recoverable. Eircom has an obligation to be cost orientated imposed by way of Section 10 of the Decision

 $^{16\} http://www.comreg.ie/_fileupload/publications/PDanon.pdf$

and pursuant to Regulation 14 of the Access Regulations. Cost orientation guarantees Eircom a set margin level. Eircom's WACC is set at 10.21%.¹⁷ This ensures that Eircom has the ability to recover its network build costs. In the light of this and of the consideration of the dispute in the context of the other relevant provisions of Section 12 of the Act of 2002 as set out above, ComReg is of the view that a determination that requires Eircom to make the requested access available to Colt would be proportionate. A more detailed analysis of the proportionality of the proposed determination is set out below.

201. In considering the provisions of section 12(4) ComReg notes that on 26 March 2004, the Minister for Communications, Marine and Natural Resources issued a General Policy Direction on Competition to ComReg pursuant to Section 13 of the Act of 2002. This Direction provides that:

"ComReg shall focus on the promotion of competition as a key objective. Where necessary, ComReg shall implement remedies which counteract or remove barriers to market entry and shall support entry by new players to the market and entry into new sectors by existing players"

202. Eircom has stated that it developed the National Ethernet product in response to competition in the Retail Leased Line market (see paragraph 124). Colt has stated that at present due to its lack of access to Ethernet Leased Line Terminating segments it can not compete on price with Eircom Retail.

> "Colt notes that eircom is currently providing this product to end customers through the retail arm of its business. COLT is unable to replicate the Ethernet access service aspects of the eircom National Ethernet product using the existing set of eircom wholesale access products that are available. The net result is that competition in the market for Ethernet services is being stifled"

¹⁷ Review of Eircom's Cost of Capital 07/88 1 November 2007

- 203. This means a lack of access to Colt would inhibit an alternative technology platform in the form of Ethernet being effectively competitive in the market and bringing price competition to the end user.
- 204. Additionally as stated in paragraph 197 Eircom has plans to deploy a high bandwidth IP/Ethernet Network. This means that the competitive advantage that Eircom currently hold, if not rebalanced would increase with the further adaptation of Ethernet technology.
- 205. In considering the provisions of section 12 (6) ComReg is of the view that Eircom's SMP designation and the imposition of remedies on foot of ComReg Decision D7/05, reflect the issues of technology neutrality. A determination which failed to give proper effect to the remedies imposed on foot of this designation would not be technology neutral and would therefore have a negative impact on the market availability of products based on Ethernet technology. Therefore a determination which requires Eircom to make the requested access available to Colt would be consistent with the provisions of section 12(6) of the Act.

Other considerations in formulating a determination

- 206. Regulation 31 of The Framework Regulations specifies Dispute Resolution Procedures. Regulation 31(1) requires ComReg to make a determination "aimed at ensuring compliance with the requirements of these Regulations and the Specific Regulations, to resolve the dispute".
- 207. ComReg in formulating a determination for the dispute has taken into account all relevant Eircom obligations including those of Access, Non-Discrimination, Transparency, Price Control, and Cost Accounting.

- 208. Given that ComReg has identified that Eircom has an obligation to meet this access request (paragraphs 55 to 86), any determination under Regulation 31(1) should require that Eircom will meet Colt's request.
- 209. As has been set out at paragraphs 89 to 93, Eircom currently self supplies an equivalent service to that requested, as an input to its retail Ethernet offering. Therefore a determination which allowed an excess of time before the wholesale equivalent of the retail input was available, would not be consistent with Eircom's obligation of non-discrimination and would not be consistent with Regulation 31(1) of the Framework Regulations.

Form of determination

- 210. Based on the considerations set out in paragraphs 187 to 209 above it is ComReg's view that any determination should require Eircom to meet the request for access made by Colt.
- 211. ComReg has considered whether it would be proportionate that a determination should simply require that Eircom stop providing retail products based on the self supplied input to its retail Ethernet product until such time as the wholesale equivalent is available. While this would deal directly with the issues of access and non-discrimination, ComReg is of the view that the negative impact on the users of these retail services would not justify this approach.
- 212. However this view must be balanced against the ability of Colt to offer competing retail Ethernet services based on the requested access. ComReg is of the view that three months is a reasonable period within which Eircom could introduce the requested access product. This view is based on the analysis set out at paragraphs 102 to 112 regarding the technical feasibility of introducing the product and the analysis set out at paragraphs 142 to 145 regarding the implementation of manual support processes in the short term.

- 213. Therefore ComReg believes that it is proportionate and fair to the parties to specify that if after three months from the date of the determination Eircom has not made the product available then it shall cease taking new orders for retail products based on the equivalent inputs to its retail Ethernet product until such time as Colt is able to place orders for the requested access.
- 214. In assessing the proportionality of this approach ComReg has considered the scenario that demands for Eircom's retail service are low. In this case there is limited impact on Eircom or end-users. In the alternative scenario where demand for the Eircom Retail service is high then this approach ensures that Colt is not disadvantaged in the market and that Eircom does not unduly benefit from long lead times in fulfilling its non-discrimination obligation.
- 215. A case could be made that the short timescales will impact on Eircom's ongoing product and network development across a range of products and services. This position must be viewed in the context that Eircom provides itself the equivalent of the requested access. If the timeline for the introduction of the requested access is affected because Eircom applies resources to alternative non-regulated activities which in turn delays its fulfilment of its non-discrimination obligation and access obligations this in ComReg's view would not be acceptable especially in the circumstance where Eircom derives a competitive benefit from such a delay.
- 216. It is anticipated that ComReg will publish the final determination on its website, having regard to the requirements of confidentiality, as set out in Guideline Document No. 05/24.

Determination

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217. Having considered the circumstances of the dispute and having taken account of the considerations set out in paragraphs 187 to 209 ComReg, in accordance with Decision Notice D18/03, hereby makes the following determination:

Determination:

Colt Telecom Ireland's ("Colt") request for Uncontended Wholesale Ethernet Access falls within the market for Wholesale Leased Line Terminating Segments and is subject to the obligations imposed on Eircom Limited ('Eircom') by way of ComReg Decision Notice D7/05. These obligations include but are not limited to obligations of access and nondiscrimination.

Colt's request for Uncontended Wholesale Ethernet Access is a reasonable request for access.

Eircom has an obligation to meet this request.

The aggregation facility requested by Colt from Eircom as part of its access request is deemed to be associated facility and is subject to the obligations imposed on Eircom by way of ComReg Decision Notice D7/05. These obligations include but are not limited to obligations of access and non-discrimination.

Colt's request for aggregation, an associated facility is a reasonable request for access and Eircom has an obligation to meet this request.

Eircom shall provide to Colt a product to meet its access request and the associated facility of aggregation.

If Colt cannot place orders for this product within three months from the date of a final determination then Eircom will cease taking retail orders for Ethernet customer access connections which use uncontended Ethernet terminating segments as an input until such time as Colt can place orders for the requested access product.

A request for a co-location facility to be used in conjunction with the requested access and aggregation facility is deemed to be a request for an associated facility and is subject to the obligations imposed on Eircom by way of ComReg Decision Notice D7/05. These obligations include but are not limited to obligations of access and non-discrimination. In this instance the form of co-location requested by Colt from Eircom is not capable of being met and no issue arises from Eircom's refusal of this request.

Mike Byrne Commissioner For Commission for Communications Regulation The 8th day of April 2009

Annex A

Glossary

Co-location

The use of a telecommunication facility (e.g. telephone exchange), by more than one telecommunications provider.

Contended Access

When two or more users have access to the same line. This means that if five users are using the line at the same time the contention ratio is 5:1.

D7/05

Market Analysis for Retail Leased Lines and Wholesale Terminating and Trunk Segments of Leased Lines. D07/05, 30 March 2005.

Ethernet

Ethernet is a protocol for the management for the transmission of data between points connected to a transmission network.

EUL

End user link: This is the circuit from the Eircom servicing exchange to the end user, via the Eircom exchange serving that end user. For the avoidance of doubt, the end user may be the OAO in whose name the EUL is ordered.

LAN

Local Area Network (LAN) network covering a small local area, such as a home or office.

Leased lines

The term "leased lines" refers to fixed, permanent telecommunications connections providing symmetric capacity between two points. A leased line is permanent, in that capacity is available between the two fixed points. However, capacity could be reserved or shared through the associated network depending on the nature of the leased line.

LLU

Local Loop Unbundling (LLU) is the process where the incumbent operators (Eircom in the Republic of Ireland or BT and Kingston in the UK) makes its local network (the copper cables that run from customers premises to the telephone exchange) available to other companies. Operators are then able to upgrade individual lines using DSL technology to offer services such as always on high speed Internet access, direct to the customer.

MPLS

The essence of Multiple Protocol Label Switching (MPLS) is the generation of a short fixed-length label that acts as a shorthand representation of an IP packet's header. This is

much the same way as a ZIP code is shorthand for the house, street and city in a postal address, and the use of that label to make forwarding decisions about the packet. IP packets have a field in their 'header' that contains the address to which the packet is to be routed. Traditional routed networks process this information at every router in a packet's path through the network (hop by hop routing).

OAO

Other Authorised Operator

Requested service

Colt has requested Eircom to provide a Wholesale Uncontended Ethernet access. Colt believes Eircom has an obligation to meet reasonable requests for access to the terminating segments of leased lines on foot of ComReg document D7/05¹⁸ which imposes obligation pursuant to Eircom's designation following a market analysis as having Significant Market Power ('SMP') in the market for Trunk Segments of Leased Lines.

Terminating segments

Leased Line terminating segments are the connection between the customer premises and the local serving exchange

Transport Link

A transport link is the link between the Eircom network and the OAO network.

Uncontended Access

When a single user has access to a line. This means if that user is not using the line, it is not been used. An example of this is a home phone line. The contention ratio in this example is 1:1.

WACC

When imposing obligations relating to cost recovery and price controls, ComReg takes into account investments made by the relevant operators and allows a reasonable rate of return on adequate capital employed. The Weighted Average Cost of Capital ("WACC") provides a measure of the appropriate rate of return on capital or investment employed in the production of regulated services. As the WACC is a key input in the setting of cost recovery/price control obligations, it has implications for the setting of efficient prices for consumers and the creation of ongoing investment incentives for the regulated firm.

¹⁸ Decision Notice - Designation of SMP and Related Remedies: Market Analysis: Retail Leased Line and Wholesale Terminating and Trunk Segments of Leased Lines (National) (Decision No: D7/05, Document No: 05/29, Date: 30 March 2005)