



Commission for
Communications Regulation

Pricing of Eir's Wholesale Fixed Access Services:

Response to Consultation Document 15/67 and
Final Decision

Response to Consultation and Decision

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Redacted Information

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Chapter 1

1 Introduction

- 1.1 This response to consultation and final decision document (referred to throughout this document as the '**Decision Document**') sets out the Commission for Communications Regulation ('**ComReg's**') decision on current generation wholesale fixed access services.
- 1.2 In reaching its final decision, ComReg has considered the submissions of interested parties to its consultation process. ComReg published one consultation document as part of its consultation process. In ComReg Document No 15/67¹ (the '**Consultation Document**'), ComReg set out its preliminary views on the appropriate pricing regime for current generation wholesale fixed access services and sought interested parties' views on same.
- 1.3 This Decision Document provides a summary of ComReg's preliminary views from the Consultation Document, the submissions from interested parties, ComReg's assessment of those submissions and ComReg's final position. The non-confidential responses to the Consultation Document have been separately published in ComReg Document 15/67s².
- 1.4 This Decision Document considers four matters.
- 1.5 Firstly, this Decision Document further specifies the existing price control obligation of cost orientation for the following wholesale fixed access services provided by Eircom Limited (trading as '**Eir**') on its wholesale fixed access network:
- Local Loop Unbundling ('**LLU**');
 - Sub-Loop Unbundling ('**SLU**');
 - Line share ('**Line Share**');
 - Current generation Standalone Broadband ('**SABB**');
 - Civil engineering infrastructure ('**CEI**') namely duct and pole access; and
 - Dark fibre.

¹ Eircom's Wholesale Access Services: Further specification and amendment of price control obligations in Market 4 and Market 5 and further specification of price control obligations in Market 2; dated 3 July 2015.

² <http://www.comreg.ie/fileupload/publications/ComReg1567.pdf>

- 1.6 Secondly, this Decision Document amends the existing price control obligation for Single Billing-Wholesale Line Rental (**'SB-WLR'**) from a retail-minus to a cost orientation price control.
- 1.7 Thirdly, this Decision Document determines the cost-oriented rental charges for LLU, SLU, SB-WLR, Line Share, SABB, duct and pole access and dark fibre to be implemented from [1 July] 2016.
- 1.8 Lastly, this Decision Document further specifies the margin squeeze obligation set out in ComReg Decision D05/15³ on the wholesale fixed (voice) access and call origination markets (the **'FACO Decision'**). In this Decision Document, we further specify the margin squeeze obligation between retail line rental⁴ and SB-WLR. In addition, this Decision Document further specifies the margin squeeze obligation such that an appropriate economic space is maintained between the price of POTS⁵ based virtual unbundled access (**'VUA'**) against the price for standalone VUA / next generation access (**'NGA'**) Bitstream (including a contribution towards managed voice over broadband⁶ (**'Managed VoB'**) costs). This is discussed in Chapter 10.
- 1.9 For the purpose of this Decision Document, in order to provide price certainty and stability over the price control period the geographic footprint used to calculate costs/prices in urban and rural areas is fixed. We have used the term **'Modified LEA'** to mean the footprint of urban exchanges and **'Outside the Modified LEA'** to mean rural exchanges. Please see paragraphs 6.38-6.40.⁷
- 1.10 The main charges for ancillary services (e.g., connections) associated with SB-WLR (as set out in the Eir reference interconnect offer (**'RIO'**) price list on the Eir wholesale website) and the wholesale fixed access network (as set out in the Eir access reference offer (**'ARO'**) price list on the Eir wholesale website) have also been reviewed as part of this Decision Document.
- 1.11 The wholesale fixed access services of LLU, SLU, Line Share, SABB, SB-WLR, CEI and dark fibre are referred to collectively as the **'Wholesale Access Services'** throughout this Decision Document.

³ ComReg Document 15/82: Market Review: Wholesale Fixed Voice Call Origination and Transit Markets, dated 24 July 2015.

⁴ Retail line rental includes standalone lower level voice access (**'LLVA'**), Bundled LLVA and higher level voice access (**'HLVA'**) as discussed in Chapter 10.

⁵ Plain Old Telephony Service (**'POTS'**).

⁶ Managed VoB means managed voice over broadband provided by a fixed service provider either directly using its own network, or indirectly by renting the access path from a third party.

⁷ For regulatory consistency between this Decision Document and ComReg Decision D11/14, the rural footprint to determine the costs/prices for SABB is the same. In other words, the rural footprint as specified in ComReg D11/14 as "Outside the LEA" has the same meaning and scope as the term Outside the LEA in this Decision Document.

1.12 The wholesale markets relevant in the context of the Decision Document are set out below:

- The Wholesale Physical Network Infrastructure Access (**'WPNIA'**) market (also referred to as **'Market 4'** in the 2007 European Commission Markets Recommendation⁸ (**'2007 Commission Recommendation'**)), as set out in ComReg Decision D05/10⁹ (**'WPNIA Market Decision'**). ComReg are currently in the process of updating the market analysis for the old Market 4, now known as Market 3a in the 2014 European Commission Markets Recommendation¹⁰ (**'2014 Commission Recommendation'**). A consultation on the market review for Market 3a is expected in Q2 2016. In the meantime we consider that the current WPNIA Market Decision remains relevant — see Annex 7 of this Decision Document;
- The Wholesale Broadband Access (**'WBA'**) market (also referred to as **'Market 5'** in the 2007 Commission Recommendation), as set out in ComReg Decision D06/11¹¹ (**'WBA Market Decision'**). ComReg are currently in the process of updating the market analysis for the old Market 5, now known as Market 3b in the 2014 Commission Recommendation. A consultation on the market review for Market 3b is expected in Q2 2016. In the meantime we consider that the current WBA Market Decision remains relevant — see Annex 7 of this Decision Document;
- The FACO market (also referred to as **'Market 2'** in the 2007 Commission Recommendation). It is important to note that the obligation on Eir to provide SB-WLR is imposed in Market 2 rather than Market 1 (where it previously resided) — as set out in the FACO Decision.

1.13 ComReg has considered the views of its expert consultants TERA (**'TERA'**) in arriving at this Decision Document.¹²

1.14 This document is structured as follows:

- Chapter 2: provides an executive summary of the main points of the Decision Document and ComReg's overall objectives.

⁸ Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

⁹ ComReg Document No 10/39: 'Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4) – Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision', dated 20 May 2010.

¹⁰ The Commission issued a new recommendation on 9 October 2014 on relevant product and service markets (2014/710/EU).

¹¹ ComReg Document No 11/49: Market Review: Wholesale Broadband Access, dated 8 July 2011.

¹² For information purposes only, their report (**'TERA Report'**) is published at Annex 6. TERA's views expressed are not necessarily the views of ComReg.

- Chapter 3: provides a background on the Wholesale Access Services under review, the regulatory background (including related market analysis relevant to the Wholesale Access Services and the identified competition problems associated with the relevant markets) as well as the consultation process.
- Chapter 4: sets out the price control obligations as well as the costing methodologies for determining the relevant costs for each of the Wholesale Access Services.
- Chapter 5: sets out the cost model for determining the appropriate costs for LLU, SLU, SB-WLR, SABB, CEI and dark fibre.
- Chapter 6: sets out the pricing approach for LLU, SLU, SB-WLR and integrated services digital network (**'ISDN'**) services.
- Chapter 7: sets out the pricing approach for SABB outside the Larger Exchange Area (**'Outside the LEA'**).
- Chapter 8: sets out the pricing approach for CEI and dark fibre.
- Chapter 9: sets out the pricing approach for Line Share.
- Chapter 10: sets out the retail margin squeeze test for line rental and the wholesale margin squeeze test for POTS based VUA.
- Chapter 11: sets out the review of ancillary charges.
- Chapter 12: sets out other regulatory measures.
- Chapter 13: sets out a summary of the charges for LLU, SLU, Line Share, SB-WLR, SABB Outside the LEA, CEI and dark fibre.
- Chapter 14: sets out an analysis of the likely effect of the changes to the price control obligation, the costing/pricing methodologies and the margin squeeze obligations.
- Chapter 15: sets out the views of respondents in relation to the draft Decision Instruments for WPNIA, WBA and FACO and ComReg's position.

Chapter 2

2 Executive Summary

- 2.1 ComReg is the regulator for the electronic communications sector in Ireland.
- 2.2 Our regulatory objectives in line with Section 12 of the Communications Regulations Act 2002¹³ (**‘the Communications Regulations Act’**) are to promote competition, to contribute to the development of the internal market and to promote the interests of users within the community. In the context of this document the following objectives¹⁴ are also relevant:
- Incentivise efficient network investment by Eir and other operators, as appropriate;
 - Ensure Eir recovers its actual efficient investment together with an appropriate rate of return;
 - Ensure that Eir cannot price excessively; and
 - Ensure Eir cannot predatory price or foreclose other operators from the market.
- 2.3 The European Commission in the 2007 Commission Recommendation recommended a number of markets as being susceptible to *ex ante* regulation. These markets have been reviewed in an Irish context and obligations were imposed where operators were designated with significant market power (**‘SMP’**).
- 2.4 Eir has been designated as having SMP in the following markets¹⁵:
- Market 4 (WPNIA market);
 - Market 5 (WBA market); and
 - Market 2 (FACO markets).
- 2.5 As a result of these designations a number of obligations were imposed on Eir in each of the wholesale markets, including the obligation of a price control and the obligation not to cause a margin squeeze.

¹³ Communications Regulation Act 2002 (No. 20 of 2002), as amended by the Communications Regulation (Amendment) Act 2007 (No. 22 of 2007), the Communications Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 (No. 2 of 2010) and the Communications Regulation (Postal Services) Act 2011 (No. 21 of 2011).

¹⁴ In line with Regulation 13 of the Access Regulations - S.I. No 334 of 2011 European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011.

¹⁵ S.I. No 333 of 2011 European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011.

- 2.6 In setting the wholesale fixed access prices, ComReg must take utmost account of the recent European Commission Recommendation in 2013¹⁶ on non-discrimination and costing methodologies (the '**2013 Recommendation**'). The 2013 Recommendation, among other things, looks at the way copper and NGA wholesale access prices should be set and where cost orientation is appropriate. It is important to note that this document looks at current generation wholesale fixed access services only.
- 2.7 As set out in Figure 1 we are maintaining the obligation of cost orientation for the wholesale fixed access services in Market 4 and Market 5. In this Decision Document we are further specifying what we mean by cost orientation. For SB-WLR in Market 2 we are amending the retail-minus price control to a cost orientation price control.

Figure 1: Overview of price controls for Wholesale Access Services

Wholesale product	access	Price control (prior to this Decision)	New price control
LLU		Cost orientation	Cost orientation
SLU		Cost orientation	Cost orientation
Line Share		Cost orientation	Cost orientation
SB-WLR		Retail minus	Cost orientation
SABB Outside the LEA		Cost orientation	Cost orientation
Duct and pole access		Cost orientation	Cost orientation
Dark fibre		Cost orientation	Cost orientation

- 2.8 Having regard to ComReg's regulatory objectives (at paragraph 2.2) and in light of the 2013 Recommendation (paragraph 2.6) we consider that the wholesale access prices achieve the appropriate balance between ensuring on the one hand that Eir can recover costs that are efficiently incurred (including an appropriate return on invested capital), while on the other hand the appropriate investment signals are provided to the market place — in terms of efficient market entry and sufficient incentives to invest especially in the relevant areas of the country.

¹⁶ Commission Recommendation dated 11 September 2013 on 'Consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment'.

- 2.9 In this regard, we have used in some instances the bottom-up long run average incremental cost plus an apportionment for joint and common costs ('**BU-LRAIC+**') pricing approach and in other cases we have used the top down historic cost accounting ('**TD HCA**') approach.
- 2.10 The BU-LRAIC+ methodology is based on current costs. This methodology values the operator's assets at the current market value and allows for changes in asset prices. By linking the value of the assets to newly deployed network it promotes efficient investment incentives and ensures that the Incumbent (i.e., Eir) recovers its future costs thereby encouraging investment. A potential entrant is charged an access price in principle similar to what it might pay to build its own network, and thus has a finely balanced 'build-or-buy' decision.¹⁷ In the context of this review the BU-LRAIC+ approach has also been generally applied to those assets that cannot be reused for the provision of NGA services. This approach is consistent with the 2013 Recommendation.¹⁸
- 2.11 The TD methodology means the Incumbent's (i.e., Eir's) accounting data. TD HCA in the context of this Decision Document means Eir's actual accounting data adjusted for efficiencies as well as the forecast for future expenditure over the price control period similarly adjusted for efficiencies.¹⁹ The accounting net book value of each asset is taken as the basis for capital costs and this value is depreciated over the remaining lifetime of each asset. Operating expenditure is also estimated from historic accounting information and common cost items are allocated to different services using allocation keys. An uplift to allow for the rate of return²⁰ is added to the Eir costs. This approach is referred to as '**Eir's Actual Costs Adjusted for Efficiencies**'. In the context of this review, Eir's TD data has also been generally applied to those assets that can be reused for the provision of NGA services e.g., poles and ducts. This is consistent with the 2013 Recommendation.²¹
- 2.12 We consider that it is important to achieve an appropriate balance between setting the necessary investment signals in the relevant areas (i.e., urban areas²²) while at the same time ensuring that Eir does not over / under recover its actual efficient costs nationally. If the access price is too high in areas where infrastructure investment is also unlikely to develop (as the deployment cost for each line is high i.e., in rural areas²³), this would not be desirable due to the detrimental long-term impact on consumers arising from a lack of competition, as competition from operators acting as resellers may also be dampened. On the

¹⁷ Please refer to Chapter 4.

¹⁸ Please refer to Chapter 4 and Chapter 5.

¹⁹ *ibid.*

²⁰ *ibid.*

²¹ *ibid.*

²² Referred to in this document as the Larger Exchange Area ('**LEA**') or Modified **LEA**.

²³ Referred to in this document as Outside the LEA or Outside the Modified LEA.

other hand the access price should not be too low, especially in urban areas, as it could deter investments in the long term.

- 2.13 An additional consideration in this document is whether the wholesale access services under review should be priced based on national costs or on geographic de-averaged costs. We have also considered the risk that geographically de-averaged prices could lead to a digital divide if the prices of access services prove prohibitively high in rural areas which may be to the detriment of consumers. This is discussed in Chapter 6.
- 2.14 In the proceeding paragraphs we have summarised the approach to setting the wholesale access prices for LLU, SLU, Line Share, SB-WLR, SABB Outside the LEA, duct access, pole access and dark fibre.
- 2.15 The price control period will come into effect on [1 July] 2016 and will last for three years (the '**Price Control Period**') but in any event it should remain in place until further notice by ComReg. The implementation date for the prices set by this Decision Document is [1 July] 2016 – please see Chapter 13.

Local loop unbundling ('LLU'):

- 2.16 The national LLU monthly rental prices for each year of the Price Control Period is:

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
LLU ²⁴	9.34	9.88	10.40

- 2.17 The national monthly rental price is based on a BU-LRAIC+ model for the Modified LEA. We have applied a BU-LRAIC+ approach to those assets that cannot be reused for NGA services and we have used Eir's TD data for those assets that can be reused for NGA services (e.g., ducts and poles). This is consistent with the 2013 Recommendation.
- 2.18 In addition, the LLU costs are adjusted to reflect the fact that lines greater than 5km are unlikely to be technically capable of supporting the required standard of broadband services. Therefore, the cost of LLU lines longer than 5km are excluded from the LLU price calculation.
- 2.19 We consider that this monthly LLU price should send the appropriate 'build or buy' signals. Our approach relies on the assumption that only lines in urban areas are likely to be unbundled. Given the high cost of lines in rural areas, an LLU

²⁴ This price excludes monthly fault repair charge of €0.96.

price based on national costs could raise the LLU price to a non-competitive level — in particular in those areas where LLU or alternative infrastructure investment may be viable (i.e., in urban areas) — and is considered not to be appropriate given the ‘build-or-buy’ signals are not relevant for private operators in rural areas.

2.20 For further details please refer to Chapter 6.

Sub Loop Unbundling (‘SLU’):

2.21 The national SLU monthly rental prices for each year of the Price Control Period is:

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
SLU ²⁵	5.41	5.60	5.77

2.22 The national monthly rental price is based on a national BU-LRAIC+ model. The BU-LRAIC+ costs are applied to those assets that cannot be reused for NGA services and we have used Eir’s TD data for those assets that can be reused for NGA services (e.g., ducts and poles). This is consistent with the 2013 Recommendation.

2.23 In addition, the SLU costs are adjusted to reflect the fact that lines greater than 1.5km are unlikely to be technically capable of supporting the required standard of broadband services. Therefore, the cost of SLU lines longer than 1.5km are excluded from the SLU price calculation.

2.24 We consider that this monthly SLU price should send the appropriate ‘build or buy’ signals. Our approach relies on the assumption that there could be a demand for SLU lines nationally — including in the less economic exchanges (i.e., in rural areas). The demand for SLU may emerge in rural areas where private operators may require SLU to deliver broadband services as part of the national broadband plan (‘**NBP**’).

2.25 For further details please refer to Chapter 6.

Line Share:

2.26 The maximum national Line Share monthly rental price for each year of the Price Control Period is €0.77.

²⁵ This price includes fault repair costs.

2.27 The maximum national monthly rental price for Line Share is based on the incremental costs relevant to the ongoing day to day running of the Line Share service.

2.28 For further details please refer to Chapter 9.

Single Billing – Wholesale Line Rental ('SB-WLR'):

2.29 The national SB-WLR monthly prices for each year of the Price Control Period is:

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
SB-WLR ²⁶	15.91	16.20	16.41

2.30 This SB-WLR monthly price is based on Eir's TD costs and adjusted for efficiencies associated with the provision of SB-WLR nationally.

2.31 This monthly rate achieves a balance of allowing Eir to recover its national efficiently incurred costs while at the same time ensuring that there are appropriate investment incentives in urban areas.²⁷

2.32 For further detail please refer to Chapter 6.

Integrated services digital network ('ISDN') services:

2.33 Following ComReg's consultation process we have determined that for ISDN basic rate access ('BRA'), primary rate access ('PRA') and fractional rate access ('FRA') services that Eir should not charge in excess of the current ISDN BRA, PRA and FRA rental prices (as per the Eir reference interconnect offer ('RIO') price list).

2.34 For further detail please refer to Chapter 6.

Standalone Broadband:

2.35 The maximum monthly rental for SABB Outside the LEA for each year of the Price Control Period is:

²⁶ This price includes the rental, fault repair costs and connection/provisioning costs.

²⁷ This balance is achieved by the fact that the SB-WLR price is always the higher of either: Eir's TD costs adjusted for efficiencies for providing SB-WLR nationally; or, a combination of the BU-LRAIC+ costs and TD costs for provision of SB-WLR in the Modified LEA, as described in Chapter 6.

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
SABB Outside the LEA	21.68	22.09	22.45

- 2.36 This maximum monthly price, Outside the LEA, is based on Eir's TD costs (adjusted for efficiencies) associated with the provision of SABB Outside the LEA.
- 2.37 We consider that this monthly SABB price Outside the LEA should ensure that there is no over or under recovery of costs by Eir. The build or buy signals are less relevant in this area given the objective is not to stimulate alternative operator investment where it is clear no commercial operator might invest without subsidies. In addition, the BU-LRAIC+ approach could lead to over-recovery of costs and could give rise to significant increases in prices Outside the LEA.
- 2.38 For further details please refer to Chapter 7.

Margin squeeze tests

- 2.39 In addition to the above there are two margin squeeze tests in Market 2.
- 2.40 The first test between retail line rental and wholesale line rental (or SB-WLR) should ensure a sufficient margin between the retail line rental services and wholesale line rental so that another authorised operator ('**OAO**') can replicate Eir's retail prices on a standalone basis.
- 2.41 The second test is to ensure sufficient economic space between the price for POTS based VUA and the price for standalone VUA / NGA Bitstream (including a contribution towards the cost of Managed VoB) so that an operator is not disincentivised to move to alternative technologies as appropriate. This should ensure technological neutrality.
- 2.42 For further details on both margin squeeze tests please refer to Chapter 10.

Duct Access:

- 2.43 The maximum annual price per metre of sub duct is differentiated between duct access in Dublin²⁸ exchanges and duct access in provincial exchanges. Please see Figure 23 and Figure 24 in Chapter 13.

²⁸ Annex 15 contains the exchanges which are subject to "Dublin" duct access prices. All other exchanges are subject to "provincial" duct access prices.

2.44 The maximum price for duct access is based on a blend of Eir's TD costs for those ducts that can be reused for NGA and the long-run view (or BU-LRAIC+ costs) of replacement of ducts for the provision of NGA services. This is consistent with the 2013 Recommendation.

2.45 For further details please refer to Chapter 8.

Pole Access:

2.46 The maximum annual prices for Pole Access²⁹ in the Modified LEA³⁰ and Outside the Modified LEA³¹ for each year of the Price Control Period is:

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
Pole access in the Modified LEA	23.15	24.30	25.46
Pole access Outside the Modified LEA	19.18	20.00	20.84

2.47 For pole access the maximum price is based on a blend of Eir's TD costs for those poles that can be reused for NGA (and including Eir's forecasted capital spend on poles over the next 3 years) and the long run view (or BU-LRAIC+ costs) of replacement of poles for the provision of NGA services. This approach is consistent with the 2013 Recommendation.

2.48 For further details please refer to Chapter 8.

²⁹ The annual rental price per operator will vary depending on the number of operators on the pole to which the OAO is seeking access (including Eir itself).

³⁰ As discussed in Chapter 6 of this Decision Document.

³¹ As discussed in Chapter 6 of this Decision Document.

Dark Fibre:

- 2.49 The maximum annual price per metre³² of Dark Fibre for each year of the Price Control Period is:

Services	[1 July] 2016 – 30 June 2017	1 July 2017 – 30 June 2018	1 July 2018 – 30 June 2019
Dark fibre - Dublin	0.24	0.25	0.26
Dark fibre – Provincial	0.13	0.13	0.14

- 2.50 For dark fibre the maximum price is based on a blend of Eir's TD costs for those assets that can be reused for NGA and the BU-LRAIC+ costs for those assets that cannot be reused for NGA services. This approach is consistent with the 2013 Recommendation.
- 2.51 The maximum price for dark fibre only applies in those circumstances where access to civil engineering infrastructure (ducts and poles) is not available for economic, technical or capacity reasons and where dark fibre is reasonably available.
- 2.52 For further details please refer to Chapter 8.

Ancillary services:

- 2.53 We have reviewed the ancillary charges associated with connections, migrations, collocation services in Market 4 and the main ancillary charges associated with SB-WLR.
- 2.54 For further details please refer to Chapter 11.

Other regulatory measures:

- 2.55 On an annual basis Eir should review the inputs and assumptions of the Revised CAM. However, the Revised CAM will only be reopened where significant and sustainable changes are noted to key parameters. Please see the details regarding the annual review of SB-WLR and poles at Chapter 12.

Conclusion:

- 2.56 ComReg believes that the pricing framework set out in this Decision Document should strike the right balance between ensuring Eir's recovery of costs while

³² Based on a single Dark Fibre strand.

also providing the appropriate investment signals to Eir and other operators for efficient infrastructure investment in areas where it is considered appropriate. This document when considered in conjunction with ComReg Decision D04/13³³ (**'Bundles Decision'**), ComReg Decision D03/13³⁴ (**'NGA Decision'**), ComReg Decision D06/12³⁵ (**'WBA Price Floors Decision'**) and ComReg Decision D11/14³⁶ (**'WBA Pricing Decision'**) should ensure that competition is incentivised and fostered in the long-term so that consumers benefit from a wide variety of choice at affordable prices.

³³ ComReg Document No. 13/14: Price Regulation of Bundled Offers: Further specification of certain price control obligations in Market 1 and Market 4 dated 8 February 2013 (**'Bundles Decision'**).

³⁴ ComReg Decision No D03/13, ComReg Document No 13/11: Remedies in Next Generation Access Markets; dated 31 January 2013 (**'NGA Decision'**).

³⁵ ComReg Document No 12/32: Wholesale Broadband Access: Further specification to the price control obligation and an amendment to the transparency obligation; dated 5 April 2012 (**'WBA Price Floors Decision'**).

³⁶ ComReg Document No 14/73R: 'Wholesale Broadband Access: Price Control obligation in relation to current generation Bitstream (**'WBA Pricing Decision'**).

Chapter 3

3 Background

3.1 Introduction

3.1 In this chapter we discuss the technical and regulatory background associated with the Wholesale Access Services as well as the consultation process, under the following headings:

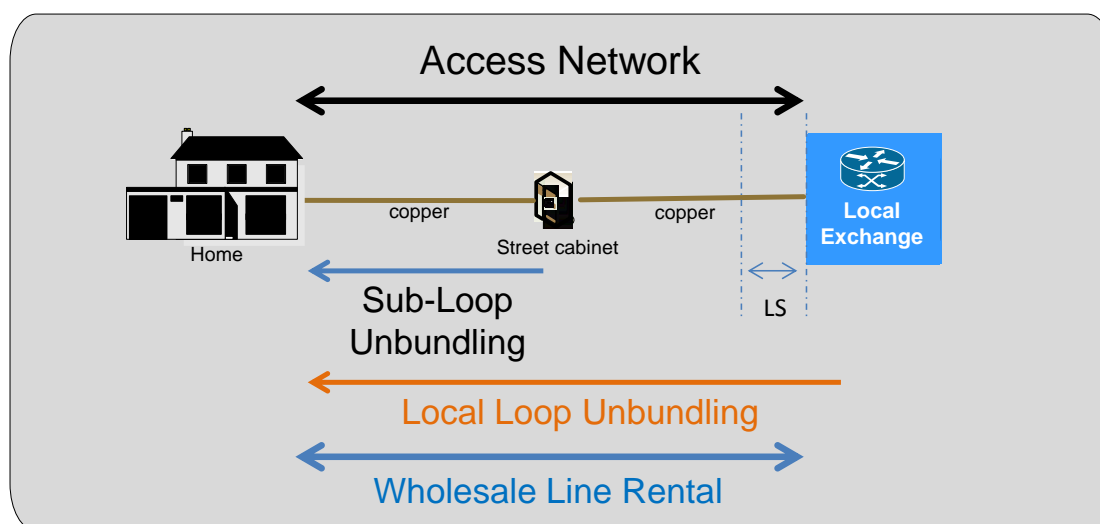
- Technical background;
- Regulatory background; and
- Consultation Process.

3.2 Each is discussed in turn below.

3.2 Technical background

3.3 Figure 2 illustrates the access network in terms of the provision of SLU, LLU, SB-WLR and Line Share.

Figure 2: Overview of the access network



3.4 As detailed in Chapter 3 of the Consultation Document, the fixed wholesale access services offered by Eir over its wholesale copper network include the following:

1. Copper-based Market 4 services:

- a) **LLU**: This allows unbundled access to the local loop. The local loop is the physical path which connects a local exchange to a home or premises usually via a street side cabinet. LLU allows OAOs access to Eir's local network at regulated prices and facilitates them in the provision of services directly to customers. LLU is an important driver of competition in the delivery of high speed broadband.
- b) **SLU**: This allows unbundled access to the local sub-loop. A sub-loop is the portion of the local loop which runs from a street side cabinet to a home or premises. SLU allows OAOs to unbundle loops at the street side cabinet.
- c) **Line Share**: This allows for renting the broadband capability of a loop only. When an operator uses a full LLU service it takes control of the entire capability of the loop, which means that no other operator can use that loop to provide services to the end customer. However, it is also possible to isolate the broadband capability of the line from the narrowband capability and allow an operator to provide broadband separately. When using Line Share to offer services to a customer an operator rents the broadband capability of a local loop only, while another operator (e.g., Eir Retail) provides narrowband services (mainly voice) over the same loop.

2. Copper-based Market 5 services:

- a) This comprises the current generation non-physical or active network access (Bitstream access) at a fixed location, including but not limited to:
 - **Current generation SABB**: This provides a standalone DSL broadband service over the local loop, without a Public Switched Telephone Network ('PSTN') service.

3. Copper-based Market 2 services:

- a) **SB-WLR**: This allows a fixed service provider to issue one single bill to end-users for carrier pre-select ('CPS')³⁷ "all calls" and line rental charges, which maintains a primary relationship with the end user. Some OAOs purchase SB-WLR services from Eir to provide retail fixed telephony services directly to retail customers, while other OAOs do so for the purpose of re-selling services as part of a broader suite of their own wholesale services which are made available to OAOs.

³⁷ Carrier Pre Select (CPS) is a call origination product, which allows the end user to purchase all or portion of calls (e.g. national or international calls) from one service provider (usually an OAO) while purchasing line rental from another service provider (usually Eir). OAOs have continued to migrate their customers from CPS only to SB-WLR or WLA so that only a small percentage of end users have a CPS-only service.

4. Ancillary Services

- a) Ancillary Services in the context of SB-WLR means the ancillary services set out in sections 4.2 and 4.3 of the document entitled “Single Billing through Wholesale Line Rental Product Description” (issue 2.2, dated 5 December 2007) as may be amended from time to time and published on Eir’s wholesale website. The ancillary services associated with SB-WLR are set out on Eir’s Wholesale website³⁸. The SB-WLR ancillary services include Eir alarm reminder, caller return, direct dialling inwards (‘DDI’), call barring, call answering, call forwarding, Eir mailbox, wholesale low value customer premises equipment (‘CPE’) as well as a number of other services.
- b) Ancillary services in Market 4 includes associated facilities, connections, fault repair charges and any other related charges (set out in the access reference offer (‘ARO’) price list on Eir’s wholesale website).

5. Civil Engineering Infrastructure:

- a) Civil Engineering Infrastructure (also known as passive infrastructure) means physical local loop facilities deployed by Eir to host local loop cables such as copper wires, optical fibre and co-axial cables. It includes but is not limited to, subterranean or above-ground assets such as sub-ducts, ducts, manholes and poles. This Decision Document will consider the pricing for ducts (including sub-ducts and manholes) and poles.

6. Dark Fibre:

- a) Dark fibre is optical fibre that is currently installed in the core and access network but is not in use. For the purposes of this Decision Document, dark fibre shall mean unlit fibre in Eir’s access network. The prices determined for dark fibre in this Decision Document is for a single strand of dark fibre. Pursuant to the NGA Decision, where access to civil engineering infrastructure is not available for economic, technical or capacity reasons, Eir is obliged to provide access to dark fibre, where it is available. Therefore, where access to civil engineering infrastructure cannot be met for economic or technical reasons, requests may be met by the provision of available dark fibre. Please refer to Chapter 4 (subsection 4.1.3) of the NGA Decision where this is discussed in more detail.

³⁸ In sections 4.2 and 4.3 of the document entitled “Single Billing through Wholesale Line Rental Product Description” (issue 2.2, dated 5 December 2007) as may be amended from time to time.

3.3 Regulatory background

3.3.1 Overview

- 3.5 In Chapter 3, subsection 3.3, of the Consultation Document, we discussed the markets susceptible to ex-ante regulation.
- 3.6 Following market analysis undertaken by ComReg, Eir is currently considered to have SMP in a number of markets as set out in Figure 3. Eir was designated with SMP in the WPNIA Market (Market 4), the WBA Market (Market 5) and the FACO Markets (Market 2).

Figure 3: Overview of markets

	Market	Title	Relevant ComReg document
Retail Level	Market 1	Retail Access to The Public Telephone Network at a Fixed Location	Market Review 2014: See ComReg D12/14
	Market 2	Wholesale Call Origination on the Public Telephone Network Provided at a Fixed Location	Market Review 2015: See ComReg D05/15
Wholesale level	Market 3	Wholesale Call Termination on Individual Public Telephone Networks Provided at a Fixed Location	Market Review 2007: See ComReg D04/07 Currently being reviewed – see ComReg 12/96
	Market 4	Wholesale (Physical) Network Infrastructure Access (including shared or fully unbundled access) at a Fixed Location	Market Review 2010: See ComReg D05/10 ComReg has recently commenced review
	Market 5	Wholesale Broadband Access	Market Review 2011: See ComReg D06/11 ComReg has recently commenced review

- 3.7 The Consultation Document also set out the competition problems that may arise, absent regulation, from the SMP operators conduct, including:

- Exploiting customers or consumers by virtue of its SMP position through, for example, setting excessive wholesale charges;
- Leveraging its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets; and
- Engaging in behaviours, similar to those identified above in the context of leveraging, which delay/deter network investment and entry into the upstream and/or downstream markets.

3.8 Each of these competition problems are discussed in more detail in Chapter 3, paragraph 3.8 of the Consultation Document. The purpose of ex-ante regulation is to prevent the possibility of such abuses and to promote competition by facilitating entry into the relevant markets. ComReg's overall objective in imposing regulatory remedies on an operator with SMP is therefore to promote economic efficiency by setting regulation which 'mimics' a competitive market and as far as possible to maximise viable infrastructure investment which has the most efficient outcomes for consumers. The obligations imposed can include conditions such as transparency, non-discrimination, price control and accounting separation.

3.4 Consultation Process:

3.9 ComReg, along with its Consultants, TERA, updated the previous copper access model³⁹ in order to determine the updated wholesale access prices based on the preferred costing methodology set out in the Consultation Document. Before arriving at a final decision on the appropriate wholesale access prices, ComReg consulted publicly on this process, the details of which are set out in the Consultation Document and in this Decision Document.

3.10 On 3 July 2015 we published the Consultation Document seeking views from interested parties on a number of proposals including *inter alia* updated wholesale access prices and changing the pricing approach for SB-WLR from retail-minus to cost orientation. In addition, we sought views on the proposal to have a retail margin squeeze test between retail line rental and SB-WLR and secondly to have a sufficient economic space between the price for POTS based

³⁹ Which was used in ComReg Decision D01/10 (Document 10/10) to determine the LLU and SLU monthly rental prices.

VUA and the price for standalone VUA / NGA Bitstream (including a contribution towards the cost of Managed VoB).

- 3.11 Following a number of requests, ComReg made access available to the non-confidential models associated with the Consultation Document. Please refer to ComReg Information Notice 15/96⁴⁰ and 15/100⁴¹ for further details. This allowed for further transparency regarding the modelling work undertaken by ComReg as part of the consultation process and it also meant that other operators could have access to similar information (albeit that some information was redacted due to the confidentiality of the data) to that of Eir.
- 3.12 During the consultation period Eir submitted a letter to ComReg seeking clarifications on certain aspects of the Consultation Document and also seeking an extension to the consultation response deadline. Please refer to ComReg Document 15/67d for details of the Eir letter and ComReg's response to it. The points raised by Eir in its letter to ComReg of 5 August (referred to as the "**Eir August Letter**") are further considered by ComReg in the relevant chapters in this Decision Document.
- 3.13 On 25 September we received six responses to the Consultation Document as follows:
- Alternative operators in the communications market ("**ALTO**");
 - BT Communications Ireland Limited ("**BT**");
 - Eir Group Limited ("**Eir**");
 - Enet ("**Enet**");
 - Sky Ireland Limited ("**Sky**"); and
 - Vodafone Ireland Limited ("**Vodafone**").
- 3.14 Eir's submission also included reports from three external consultants as follows:
- CEG;
 - Compass Lexecon; and
 - Michael Rhodes.

⁴⁰ http://www.comreg.ie/_fileupload/publications/ComReg1596.pdf

⁴¹ http://www.comreg.ie/_fileupload/publications/ComReg15100.pdf

- 3.15 The non-confidential submissions to the Consultation Document have been published separately in ComReg Document 15/67s.
- 3.16 On 22 October 2015, following a request from Eir, ComReg met Eir and its consultants CEG to discuss the key points from their submissions to the Consultation Document. At the meeting Eir and its consultants CEG made a presentation to ComReg, a non-confidential version of this presentation is published in Annex 8 of this Decision Document.
- 3.17 Subsequent to the Eir / CEG meeting, on 23 October 2015, ComReg requested by email⁴² some clarifications from Eir / CEG, within the scope of the Consultation Document, relating to the treatment of pole costs, details on SB-WLR promotions, plans for ISDN services and line volume movements.
- 3.18 On 10 November 2015, Eir / CEG provided clarifications to ComReg, via email⁴³, in relation to the points set out in paragraph 3.17, which is referred to later in this Decision Document as “**Eir / CEG clarifications of 10 November 2015.**”
- 3.19 On 17 November 2015, ComReg sought further clarifications by email⁴⁴ regarding Eir’s response received on 10 November, in particular relating to poles, SB-WLR promotions and ISDN services. On 24 November 2015, Eir provided further clarifications to ComReg, via email⁴⁵, in relation to the points set out in paragraph 3.17, which is referred to later in this Decision Document as “**Eir clarifications of 24 November 2015**”.
- 3.20 On 27 November 2015, Sky submitted a letter⁴⁶ to ComReg which set out Sky’s concerns regarding points raised by Eir in its non-confidential response to the Consultation Document. The points raised in Sky’s letter are addressed in the main body of this document at Chapter 4 and Chapter 10.
- 3.21 On 2 December 2015, Vodafone submitted a letter⁴⁷ to ComReg. This letter set out a number of Vodafone’s concerns regarding points raised by Eir in the non-confidential version of Eir’s response to the Consultation Document. The points raised in Vodafone’s letter are addressed in the main body of the Decision Document.

⁴² Email from ComReg to Eir, as set out in Annex 8.

⁴³ Email from Eir to ComReg, as set out in Annex 8.

⁴⁴ Email from ComReg to Eir, as set out in Annex 8.

⁴⁵ Email from Eir to ComReg, as set out in Annex 8.

⁴⁶ Letter dated 27 November, as set out in Annex 8.

⁴⁷ Letter dated 2 December 2015, as set out in Annex 8.

- 3.22 Vodafone also submitted a letter to ComReg on 13 December regarding Eir's separated accounts and a subsequent letter on 16 December 2015 regarding its review of the non-confidential Revised CAM. The main points raised by Vodafone in both letters as well as ComReg's consideration of them are set out in Annex 10.
- 3.23 ComReg has taken full account of all of the responses in reaching its final decision. ComReg has not repeated in each instance respondents' views where they did not object to or comment on our proposed approach from the Consultation Document. However, where respondents specifically commented on, expressed a view or raised an issue with respect to any of our preliminary views from the Consultation Document we have set out the main points raised and response to these comments in this Decision Document.

3.5 Additional related regulatory considerations

3.5.1 Retail Line Rental

- 3.24 As set out in Chapter 3 of the Consultation Document, Eir is subject to a retail price control pursuant to ComReg Decision D12/14⁴⁸ on the retail fixed voice access market ('**RFVA Decision**'). The RFVA Decision concluded that Eir possesses market power with respect to standalone voice access services. As such, in the absence of remedies, it would have the incentive and ability to raise prices to the direct detriment of consumers who avail themselves of standalone voice access services.
- 3.25 Consequently, ComReg decided that a price control was necessary and proportionate to protect those consumers who currently purchase their voice services on a stand-alone basis and do not value broadband to such an extent that they would switch to (more competitively priced) bundled services, or to mobile only. The price control measure consists of a requirement not to charge excessive prices for the supply of lower level services, that is, PSTN and integrated services digital network ('**ISDN**') basic rate access ('**BRA**') access as well as a retail price cap measure ('**RPC**'). The RPC is in the form of a RPI-X cap, that is, CPI-0⁴⁹. The RPC which relates to consumer's standalone PSTN and ISDN BRA line rental and connection fees (excluding voice calls) means that any increase by Eir in the latter prices will be based on the rate of inflation (i.e. CPI-0) pending further consultation.

⁴⁸ http://www.comreg.ie/_fileupload/publications/ComReg1489.pdf

⁴⁹ Price caps are subject to an increase depending on the inflation rate.

- 3.26 As set out in the Consultation Document, ComReg considers that even if a cost oriented SB-WLR price prevents Eir from increasing its wholesale charge and hence avoiding the risk of excessive SB-WLR prices, absent appropriate remedies, the risk of a potential margin squeeze remains. In this respect, Eir could, by reducing the retail price, reduce the retail margin available to OAOs that need to match Eir's retail prices in a competitive retail market.
- 3.27 Therefore, even if the SB-WLR price is set on the basis of cost orientation, some form of a margin squeeze test is required to ensure that alternative operators can continue to compete in the retail market using SB-WLR. This is discussed further in Chapter 10.

3.5.2 NGA Decision

- 3.28 In the NGA Decision ComReg recognised the importance of the link between copper and fibre prices.
- 3.29 In that regard ComReg imposed a margin squeeze test between the VUA service in Market 5 and the SLU service in Market 4. This should ensure that VUA is not priced so low that it would dis-incentivise investment by alternative infrastructure operators during the transition to NGA services. SLU and LLU are both priced on a cost-oriented basis.
- 3.30 As set out in the NGA Decision, if a reduction to the SLU price is required under this test so also would a reduction be required to the LLU price, as appropriate.
- 3.31 It is important to note that Eir must continue to respect the link that is already established between the price of SLU and VUA as set out in the NGA Decision.

3.5.3 National Broadband Plan ('NBP')

- 3.32 The NBP focuses primarily on the Government's objective to increase broadband speeds especially in the more rural areas of Ireland.
- 3.33 The NBP will facilitate broadband download speeds of a minimum of 30 Mbps where a commercial provider will not deliver the equivalent service on a commercial basis. It is envisaged that the NBP will cover a significant proportion of exchanges in more rural areas of the country i.e., Outside the LEA.
- 3.34 The NBP may have implications for the potential uptake of some Wholesale Access Services, including duct access, pole access and dark fibre in these areas.

3.5.4 Universal service obligation ('USO')

- 3.35 Eir is currently designated as the universal service provider ('**USP**') for the purposes of providing access at a fixed location to an electronic communications network and voice services under the USO ('**AFL USO**') until 30 June 2016.⁵⁰
- 3.36 ComReg published a consultation on whether there is a need for an AFL USO in Ireland post December 2015. In that consultation, ComReg's preliminary view was that there is a continued need for some kind of AFL USO in Ireland for at least the next 5 years and possibly for 7 years.⁵¹ ComReg's consultation in respect of the need for an AFL USO will mean that related requirements to the AFL USO post 2015, if appropriate, will be decided in the coming period.
- 3.37 In the meantime, Eir has various obligations relating to the provision of an AFL USO including a requirement to provide geographically average prices (i.e., where AFL USO charges (including retail line rental, see paragraphs 3.24-3.25) are the same for all subscribers irrespective of their geographical location).
- 3.38 The AFL USO alone would not mitigate concerns regarding a potential margin squeeze vis-a-vis retail and wholesale fixed voice access as set out in paragraph 3.24 to 3.27. Such margin squeeze concerns however could potentially be intensified absent an AFL USO requirement for geographically averaged prices.

⁵⁰ ComReg Decision D10/15, ComReg Document No. 15/144 entitled "Universal Service Obligation - Provision of Access at a Fixed Location", dated 31 December 2015.

http://www.comreg.ie/_fileupload/publications/ComReg15144.pdf

⁵¹ ComReg Document No 15/124: *Universal Service Obligation – Access at a fixed location*, http://www.comreg.ie/_fileupload/publications/ComReg15124.pdf

Chapter 4

4 Price Control and Costing Methodology

4.1 Introduction

- 4.1 This chapter considers the form of price control and costing methodology used to determine the appropriate level of costs for Eir's Wholesale Access Services.
- 4.2 The respective discussion is considered under the following headings:
1. Forms of price control for access services generally
 2. Forms of price control for SB-WLR
 3. Appropriate costing methodology; and
 4. Appropriate costing methodology specific to assets.
- 4.3 In Chapter 4 of the Consultation Document we set out a number of options available to ComReg in the form of a price control for the Wholesale Access Services, including regulatory forbearance, benchmarking, retail minus, margin squeeze test and cost orientation. Each approach is discussed in detail in the Consultation Document in paragraphs 4.13 – 4.45.

4.2 Forms of price control for access services generally

4.2.1 Overview:

- 4.4 In the Consultation Document we proposed that the obligation of cost orientation should continue to apply to Eir with regard to the rental prices for the provision of LLU, SLU, Line Share, civil engineering access (duct and pole access) and SABB Outside the LEA.
- 4.5 In addition, we proposed that the ancillary charges relevant to Market 4 products and services and for SB-WLR should also continue to be subject to cost orientation. Please refer to the Consultation Document at Chapter 4, paragraphs 4.36 – 4.38 and 4.42 – 4.45 for further details.

4.2.2 Submissions to the Consultation Document:

- 4.6 Respondents generally agreed that cost orientation remained appropriate to determine the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and for the ancillary services associated with Market 4 and SB-WLR.
- 4.7 Vodafone stated that it: “...agrees with maintaining cost orientation”.⁵²
- 4.8 Enet also agreed with and supported ComReg’s preliminary view. Enet listed a number of reasons why it supported ComReg’s preliminary view including:
- “...Cost orientation can adequately allow the SMP operator to secure a reasonable return on incurred costs.
 - The application of an efficient operator reference in cost orientation prevents the SMP operator from recovering costs associated with historical poor investment decisions or current operational inefficiencies, ultimately to the detriment of end users.
 - Cost orientation brings predictability to the access price alternative operators will incur allowing better investment decisions.
 - ...Cost orientation adequately allows for recovery of past investment and does not mitigate against efficient ongoing renewal and replacement investment on the part of the SMP operator.”⁵³
- 4.9 Eir stated that: “For LLU (ULMP), Sub-Loop Unbundling, and Line Share...Eir has agreed for some time that price control by cost orientation is appropriate.”⁵⁴
- 4.10 However, for the SB-WLR ancillary charges Eir noted that: “...the same retail minus approach that applies to the price control for SB-WLR line rental should also apply to SB-WLR ancillary services.”⁵⁵
- 4.11 While Sky agreed with ComReg it stated that it: “...is concerned that despite essentially maintaining a costing approach that has been in place for several years now (BU-LRAIC+) to set price ceilings for SLU and LLU, the results of the most recent assessment of the maximum monthly rental prices highlights a substantial difference in the relative prices of the two services.”⁵⁶

⁵² Vodafone Response to Consultation 15/67, page 2.

⁵³ Enet Response to Consultation 15/67, page 1.

⁵⁴ Eir Response to Consultation 15/67, page 19

⁵⁵ Eir Response to Consultation 15/67, page 20.

⁵⁶ Sky Response to Consultation 15/67, page 4.

4.2.3 ComReg's Position:

- 4.12 ComReg notes that there was general agreement from respondents regarding the continuation of the cost orientation obligation to determine the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and for the ancillary services associated with Market 4 and SB-WLR.
- 4.13 Further to Eir's view, see paragraph 4.10, that the SB-WLR ancillary charges should be subject to a retail minus approach, ComReg notes that the obligation of cost orientation for the SB-WLR ancillary charges was already imposed on Eir in the FACO Decision. Please refer to the FCVO Decision at Chapter 9, paragraphs 9.232-9.235 for further details.
- 4.14 The point raised by Sky at paragraph 4.11 regarding the difference between the price for LLU and SLU is addressed in paragraphs 6.81 - 6.82.
- 4.15 Having considered the submissions from respondents we remain of the view that the cost orientation obligation should continue to apply to Eir with regard to the rental charges for LLU, SLU, Line Share, civil engineering access (duct and pole access) and SABB Outside the LEA as well as the ancillary charges for Market 4 services and for SB-WLR.

4.2.4 ComReg's Final Position:

- 4.16 The obligation of cost orientation shall continue to apply to Eir with regard to the rental prices for the provision of LLU, SLU, Line Share, civil engineering access (duct and pole access) and SABB Outside the LEA.
- 4.17 The obligation of cost orientation shall continue to apply to Eir with regard to the ancillary charges relevant to Market 4 products and services and for SB-WLR.

4.3 Forms of price control for SB-WLR:

4.3.1 Overview:

4.18 For SB-WLR, ComReg proposed that the price control should be amended from a retail-minus price control to a cost orientation obligation. The reasons for the proposed amendment are set out in the Consultation Document at Chapter 4, paragraphs 4.39 – 4.41.

4.3.2 Submissions to the Consultation Document:

4.19 Eir did not agree that the price control for SB-WLR should be amended from a retail-minus to a cost orientation price control. All other respondents agreed SB-WLR should be cost-oriented.

4.20 Sky welcomed ComReg's proposed decision to adopt a cost orientation price control for SB-WLR services. Sky stated that "*...the implementation of a cost orientated price control for WLR is long overdue ... the new price control will bring to an end Eir's ability to exploit the retail minus regime to its competitive advantage by causing uncertainty and disruption to its retail competitors that rely on WLR.*"⁵⁷ Sky made a number of points to support its view as follows:

- *"Cost orientation would likely lead to a reduction in wholesale charges which would ultimately benefit retail customers.*
- *Despite Eir reportedly having undertaken an extensive cost saving exercise over several years there was no reduction in any wholesale access charges over the period including for WLR.*
- *The regulatory objective of a retail minus regime (to encourage efficiencies and investment by Eir) was not being fulfilled as evidenced by its ongoing failure to achieve its USO targets for fixed line access.*
- *The advantage the existing regime gave Eir Retail over its competitors due to an asymmetry of information about future pricing would be removed under a cost orientation regime (e.g. Eir could plan retail price changes that impacted wholesale charges for OAOs that did not have insight to these plans).*

⁵⁷ Sky Response to Consultation 15/67, page 1.

- *The sudden and surprise announcement that Eir was removing its €3 WLR discount (implemented in May 2013) from January 2015 highlighted the extent to which Eir could materially impact OAOs from a business planning perspective.*⁵⁸

- 4.21 Vodafone' submission stated that *"it agrees with the move to cost orientation."*⁵⁹ Furthermore, in its letter of 2 December 2015, Vodafone noted *"eir's most recent SB-WLR effective price increase of €3 per month per customer (on lines shared with NGA), and also NGA price increase of €2 per month...undermines eir's assertion in its response [to consultation 15/67] that 'eircom is significantly constrained in the prices it can set'..."*⁶⁰ Vodafone also stated that *"...this move from Retail minus to cost orientated pricing will bring greater certainty to wholesale pricing and this is in the long term interest of the wider industry and consumers."*⁶¹
- 4.22 Vodafone's letter of 2 December 2015 also stated that *"eir's argument that other operators have the capability of moving in and out of the Retail Markets, in reaction to eir's Retailing activities, appears deeply flawed."*⁶² Vodafone considered that this assumption *"...ignores that other operators would incur retailing stop and restart costs which would be significant if Eir is given the freedom it appears to be suggesting."*⁶³ Vodafone believed that *"...other operators, in particular smaller operators, would more simply exit the market completely, as these additional costs to the business could not be funded from margins being earned at the Wholesale level, as is the case for eir."*⁶⁴
- 4.23 BT and ALTO both agreed with the move to cost orientation. BT welcomed the proposal stating that *"...removing the Retail Minus regulation for Single Billing Wholesale Line Rental (SB-WLR) and replacing it with cost based regulation as such removes a lever where eir Group can influence the market at will."*⁶⁵
- 4.24 In addition, BT set out reasons for supporting the move from retail minus to cost orientation for SB-WLR: *"...eir Group were able to reduce the price of WLR by three Euros within a bundle with broadband as part of its package to launch NGA and once the product had been established, eir Group was then able to act independently to increase the price by three Euros per month per customer..."*⁶⁶ In addition, BT stated that *"...moving to cost based regulation will ensure eir Group receive an adequate return for its investment, and will lessen its ability to*

⁵⁸ Sky Response to Consultation 15/67, page 2

⁵⁹ Vodafone Response to Consultation 15/67, page 2.

⁶⁰ Vodafone letter of 2 December, page 7, at Annex 8.

⁶¹ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁶² Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁶³ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁶⁴ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁶⁵ BT Response to Consultation 15/67, page 1.

⁶⁶ BT Response to Consultation 15/67, page 3.

control the market through its wholesale prices to competing retail providers. I.e. wholesale pricing will no longer be linked or controlled by eir Group Retail prices.”⁶⁷

- 4.25 BT further considered that “... *the three Euro discount and then the separate 2 Euro per month increase to the Standalone Broadband (SABB) earlier this year highlighted eir Group’s ability to change the wider market through its control of wholesale pricing.*” and that “*Cost based regulation will remove this market behaviour and we support [it]*”⁶⁸. ALTO made similar submissions on this issue to those of BT.⁶⁹
- 4.26 ALTO and BT both raised concerns that given the advances of technology and growth of VoIP based voice services in coming years that absent cost orientation (for SB-WLR) that Eir would have the “...*ability to distort the market through the manipulation of the price for traditional voice in the form of SB-WLR.*”⁷⁰
- 4.27 ALTO also noted that “*The SB-WLR market is well established, the investment has long been sunk and ComReg have the detailed HCA information necessary to establish cost orientation for SB-WLR...*”⁷¹.
- 4.28 Eir, and its consultants CEG, disagreed with ComReg’s proposal to move the price control to cost orientation for SB-WLR. Eir and CEG respective submissions have been categorised and dealt with under separate headings in turn below.

Regulation of SB-WLR:

- 4.29 Eir stated that there should be withdrawal of SB-WLR regulation stating that “...*the European Commission believes that national regulators should be looking to remove SB-WLR regulation over time and that a number of regulators have decided to withdraw SB-WLR regulation (or have never imposed such regulation given the adequacy of commercial offers)...*”⁷² CEG also considered that the extent of competition in the LEA warrants the relaxation of WLR access obligations in the LEA and stated that “...*even if regulation is retained there is little economic justification for the proposed switch from retail minus to a cost obligation.*”⁷³

⁶⁷ BT Response to Consultation 15/67, page 3.

⁶⁸ BT Response to Consultation 15/67, page 3.

⁶⁹ ALTO Response to Consultation 15/67, page 4 / 5.

⁷⁰ ALTO Response to Consultation 15/67, page 5.

⁷¹ ALTO Response to Consultation 15/67, page 6.

⁷² Eir Response to Consultation, page 13.

⁷³ CEG Report, page 9,

- 4.30 CEG considered that *“A number of EU Member States have withdrawn or never imposed regulated access to WLR including Austria, Belgium, Finland and Germany...”*⁷⁴
- 4.31 Eir considered that competition in the LEA is intense *“...with Eir’s broadband market share much smaller than UPC’s within that operator’s network coverage area...LLU-based providers and SIRO is in the process of creating greater network competition to Eir. Mobile substitution continues to be an important competitive factor nationally...”*⁷⁵ In this context Eir believed that *“...ComReg should be considering the deregulation of SB-WLR in the LEA and that retail minus regulation remains appropriate for SB-WLR outside the LEA.”*⁷⁶ CEG made similar comments stating that there should be *“...relaxation of SB-WLR price regulation in the LEA. Competition between these players can be expected to be effectively constraining retail prices without the need for regulation at the SB-WLR level...”*⁷⁷
- 4.32 CEG also stated that Eir’s high share of the national market as per the Consultation Document *“...fails to distinguish the difference in competitive conditions as between the LEA and outside the LEA.”*⁷⁸

Form of price control:

- 4.33 Eir referred to the 2013 Recommendation stating that *“...the price for NGA wholesale access should not be regulated when, among other matters: ‘there is a demonstrable retail price constraint resulting from the infrastructure competition or a price anchor stemming from cost oriented wholesale copper access prices’.”*⁷⁹ and that *“A downstream market should only be subject to ex ante regulation if competition on that market still exhibits significant market power despite the presence of ex ante regulation on the related wholesale upstream market(s).”*⁸⁰ CEG made reference to the 2010 Recommendation stating that *“The Commission’s 2010 NGA Recommendation notes (para. 37) the use of retail minus can be appropriate where ‘there are sufficient competitive constraints on the downstream retail arm of the SMP operator’.”*⁸¹
- 4.34 Eir stated that *“...choosing to apply more intrusive regulation in the form of cost orientation is based on a flawed assessment of the relative merits of retail minus and cost orientation in the Irish context.”*⁸² Eir stated that the Consultation Document *“...has only a limited discussion of the benefits of a retail minus*

⁷⁴ CEG Report, page 8.

⁷⁵ Eir Response to Consultation 15/67, page 3.

⁷⁶ Eir Response to Consultation 15/67, page 3.

⁷⁷ CEG Report, page 8.

⁷⁸ CEG Report, page 9.

⁷⁹ Eir Response to Consultation 15/67, page 17.

⁸⁰ Eir Response to Consultation 15/67, page 17.

⁸¹ CEG Report, page 9.

⁸² Eir Response to Consultation, page 13.

approach which suggests that ComReg may be overlooking the actual trade-offs that would be involved in switching to a cost orientation obligation for SB-WLR.”⁸³

- 4.35 In addition, Eir considered that *“Neither the Consultation nor TERA consider a key reason as to why most European regulators use retail minus for SB-WLR...[while] other regulators have recognised that by setting SB-WLR at retail minus, they will promote investment upstream including in competing network infrastructures and in network investments utilising upstream access products...”⁸⁴* Eir asked *“Why should a potential operator undertake a risky investment in rolling out a new network when it can obtain regulated cost-based access to Eir’s existing network?”⁸⁵*
- 4.36 Eir also stated that it *“...has not increased its retail line rental charges since 2007 as a result of the competitive pressure we face... A regulator should not aim to protect OAOs from competition.”⁸⁶*
- 4.37 Eir states that the Consultation Document misstates the purported benefits of cost orientation. Eir stated that the *“...Consultation argues (4.39) that cost orientation provides for greater certainty...[however] Over multiple regulatory periods, the outputs of cost models can change significantly as methodologies, inputs and forecasts change over time.”⁸⁷* CEG raised a similar point that *“...the practical significance of achieving greater predictability seems limited given that the stability in Eir’s retail line rental charges and that...ComReg’s proposed costing approach is likely to lead to large changes in cost-based regulated prices between regulatory reviews.”⁸⁸*
- 4.38 Eir referred to the CEG report stating that *“...CEG’s analysis of ComReg’s costing approach indicates that it is likely to lead to a large price spike at the start of the next regulatory period. A retail minus approach is much more likely to provide a reasonable margin over time because it is focused on the margin...”⁸⁹*
- 4.39 Eir also noted that *“...cost-based SB-WLR prices undermine the incentive for OAOs to make the risky investment in their own networks or to enter using upstream access products.”⁹⁰* Eir added that *“This is the normal competitive process - firms enter when profitable opportunities exist. The incentive to investment in a competing network is largely negated by the ability to simply obtain cost-based SB-WLR from eircom.”*

⁸³ Eir Response to Consultation 15/67, page 14.

⁸⁴ Eir Response to Consultation 15/67, page 14.

⁸⁵ Eir Response to Consultation 15/67, page 14.

⁸⁶ Eir Response to Consultation 15/67, page 16.

⁸⁷ Eir Response to Consultation 15/67, page 15/16.

⁸⁸ CEG Report, page 9.

⁸⁹ Eir Response to Consultation 15/67, page 16.

⁹⁰ Eir Response to Consultation 15/67, page 16.

- 4.40 Eir stated that a cost oriented approach “... carries a clear risk of undermining the incentive for OAOs to invest upstream while it offers no benefits that cannot otherwise be achieved through less harmful alternative regulation...retail minus would protect investment incentives and it can be combined with other measures to provide a price predictability, and protection, for customers in rural areas.”⁹¹
- 4.41 Eir also raised concerns about recovery of the cost of enhancements for SB-WLR if there is a move to cost orientation stating that “The move from retail-minus to cost orientation runs the risk that Eir cannot make a business case for all the beneficial enhancements because the price controlled at the cost level before the enhancements will not allow the investment in those enhancements to be recovered from service revenues.”⁹²
- 4.42 Eir referred to the Consultation Document, in particular paragraph 4.40, regarding the reasons for justifying a cost orientation obligation for SB-WLR. Eir made the following comments:
- (i) “The first reason put forward is that the FACO market is national and Eir has SMP. This may be a sufficient reason why there should be a remedy of price control but does not indicate that this control should be by cost orientation rather than another form of price control such as retail minus or margin squeeze test.”⁹³
 - (ii) “The second reason put forward is the ComReg view that eircom has a 100% market share in the FACO. Aside from the fact that this again does not indicate that cost orientation is not the most appropriate form of price control the view is erroneous. The UPC network now delivers in excess of 300,000 fixed voice access services on which UPC self-supplies FACO. In addition to this LLU operators and purchasers of eircom stand-alone Bitstream and VUA services self-supply FACO using VoIP services on up to 80,000 lines.”⁹⁴
 - (iii) “The third and fourth reasons relate to the retail share of respectively the low level and high level fixed voice access supplied by Eir on the copper access network – being estimated by ComReg at 80%. The first observation on this as a reason is that this share reflects a steady decline in the total amount of both services by Eir as the volume of the self-supply described above increases. The second observation is that decline of the retail volume of narrowband access services sold by Eir leads to a higher unit retail cost for line rental as fixed costs are recovered over a smaller number of services – and this leads to the retail-minus control delivering

⁹¹ Eir Response to Consultation, page 19.

⁹² Eir Response to Consultation 15/67, page 19.

⁹³ Eir Response to Consultation 15/67, page 19.

⁹⁴ Eir Response to Consultation 15/67, page 20.

a lower wholesale price. The combination of price controls that will deliver the lower wholesale price is the price cap on retail line rental that is tantamount to a price freeze together with the retail minus wholesale price control that will require an increase in the 14% margin as retail volumes fall.”⁹⁵

Margin squeeze obligation:

- 4.43 Given the proposal to impose an obligation of cost orientation on SB-WLR, Eir considered that “...*the imposition of the line rental margin squeeze test would effectively amount to the regulation of Eir’s retail line rental charges. Eir’s pricing flexibility would be substantially constrained by the requirements of both the retail margin squeeze test (setting a price floor) and the retail price regulation in place. ComReg has not carried out the analysis or procedural requirements for intervention at the retail level. It is also highly unlikely that the Irish retail market in which line rental is supplied would be found to meet the Commission’s three criteria test for ex ante regulatory obligations.*”⁹⁶
- 4.44 In addition, Eir believed that if the price of SB-WLR is set at cost “...*there is no case for the proposed new margin squeeze test between retail and wholesale line rental...[as]...wholesale access would support effective competition at the retail level and competition law is sufficient to address any potential competition risks.*”⁹⁷

4.3.3 ComReg’s Position:

- 4.45 ComReg notes that the majority of respondents agreed that SB-WLR should be subject to a cost orientation obligation. ComReg’s position with regard to the points raised by respondents are addressed under the relevant headings below.

Regulation of SB-WLR:

- 4.46 Further to Eir’s submission, as set out at paragraph 4.29, where it claims that SB-WLR regulation should be withdrawn, ComReg does not agree. The recently published FACO Decision found Eir to have SMP in the FACO market nationally. As a result, ComReg imposed a range of remedies on Eir in the FACO market in order to address the potential competition problems that might arise absent regulation. One of remedies imposed on Eir included the obligation to provide access to SB-WLR. Similarly, CEG’s submission (see paragraph 4.30) that a number of EU member states have withdrawn or never imposed regulated access to WLR, ComReg considers that in the context of finding SMP and having identified remedies to protect against potential abuses by a dominant operator,

⁹⁵ Eir Response to Consultation 15/67, page 20.

⁹⁶ Eir Response to Consultation 15/67, page 18.

⁹⁷ Eir Response to Consultation 15/67, page 18/19.

precedent based on other possible market circumstance in other countries is irrelevant.

4.47 In response to Eir's and CEG's submissions', as set out at paragraph 4.31 and 4.32, regarding consideration of different competitive conditions between LEA and Outside the LEA in terms of the pricing remedies as well as their views on the relaxation or deregulation of SB-WLR in the LEA, ComReg has a number of points to raise as follows:

- (i) In the recent FACO Decision, as discussed at paragraph 4.46, Eir has been designated with SMP in the FACO market, and as result Eir is subject to regulation nationally.
- (ii) In the FACO Decision ComReg stated that despite structural variations identified between urban and rural areas in the provision of retail fixed voice access ("**RFVA**") and broadband, ComReg indicated that it had not observed a clearly identifiable break in the pricing of retail fixed telephony services ("**RFTS**"), such that would support the definition of sub-national geographic markets.⁹⁸
- (iii) As noted in the FACO Decision, in Chapter 4, ComReg disagreed that there are marked differences in the competitive conditions for RFVA within the LEA (where UPC is present), and Outside the LEA. ComReg noted that there is no significant evidence to suggest that the competitive conditions are different in the provision of FACO between these two types of areas. As noted in the FACO Decision, Eir is the sole provider of FACO in both the LEA and Outside the LEA, and there is no evidence of Eir responding to indirect constraints arising from RFTS competition within the LEA (or Outside the LEA). In particular, Eir has national FACO and WLR prices, despite having a degree of flexibility to date under the regulatory pricing regime to de-average its wholesale charges having regard to the need to comply with its obligations not to cause a margin squeeze.⁹⁹
- (iv) ComReg also stated in Chapter 4 of the FACO Decision that Eir's proposal to apply the SB-WLR discount of €3 only to bundles implied that the more intense competitive conditions relate specifically to the provision of retail bundles and not to the FACO market specifically. For example, Eir has not lowered the price of standalone SB-WLR, or its FACO component, in any specific geographic area. ComReg also considered in the FACO Decision that Eir's withdrawal of the above SB-WLR discount in January 2015 is suggestive that Eir does not face significantly different competitive

⁹⁸ Paragraph 3.4(f) of the FACO Decision.

⁹⁹ Paragraph 4.77 of the FACO Decision.

conditions specifically in the provision of FACO between different geographic areas.¹⁰⁰

- 4.48 We consider that our pricing approach for determining the national price for SB-WLR based on the higher of the TD costs of providing SB-WLR nationally or a combination of the BU-LRAIC+ costs and TD costs in the Modified LEA achieves the appropriate balance between setting the build / buy signals in the Modified LEA while ensuring that Eir does not over / under recover its actual efficient costs nationally. Please refer to Chapter 6, paragraphs 6.156 – 6.162, of the Consultation Document for a discussion on the objectives of the SB-WLR pricing approach.

Form of price control:

- 4.49 In relation to Eir's point, as set out at paragraph 4.33, with reference to the 2013 Recommendation where a downstream market should only be subject to ex ante regulation if competition on that market still exhibits significant market power despite the presence of ex ante regulation on the related wholesale upstream market(s), ComReg notes that as set out in the FACO Decision Eir has SMP in the FACO markets nationally despite the presence of ex-ante regulation. It should be noted that the line rental margin squeeze obligation imposed in this Decision Document does not mean that the retail market is regulated. The margin squeeze test only ensures that there is sufficient economic space between retail and wholesale prices.
- 4.50 With regard to CEG's point at paragraph 4.33 that the use of retail minus can be appropriate where there are sufficient competitive constraints on the downstream retail arm of the SMP operator, ComReg would like to highlight the point noted in the recent FACO Decision that the withdrawal by Eir of the wholesale SB-WLR discount (of €3) is consistent with ComReg's broader observation that there is no evidence to suggest that Eir is constrained in the FACO markets.¹⁰¹ See also paragraph 4.47.
- 4.51 Further to Eir's point, as set out at paragraph 4.34, regarding ComReg's "*flawed assessment*" of the relative merits of retail minus and cost orientation in the Irish context, ComReg disagrees. Chapter 4, paragraph 4.22 of the Consultation Document sets out the main advantage of a retail minus approach. ComReg considers that a retail minus price control is comparatively easy to implement as there is no need to develop a detailed cost model. However, a model of Eir's access network already existed which meant that the cost based price for SB-WLR could be relatively easily ascertained. For cost orientation, Chapter 4, paragraphs 4.33 to 4.39 of the Consultation Document sets out the merits of a cost orientation obligation. The Consultation Document noted that ComReg

¹⁰⁰ Paragraphs 4.79 and 4.80 of FACO Decision.

¹⁰¹ Paragraph 5.38 of the FACO Decision.

considers that a cost orientation provides greater pricing certainty for all operators, should ensure cost recovery for Eir, should provide the correct build-or-buy signals for all operators and it should avoid inconsistencies across the investment ladder. ComReg maintains that view. Each of the benefits of cost orientation are summarised in turn below:

- In terms of greater price certainty, setting a cost oriented price in advance for the three year Price Control Period provides certainty to the regulated firm (Eir) as to what it has to do in order to ensure compliance with its obligation and also to the firms (OAOs) that use the regulated product as to what the price will be for the service it is buying. This compares with the retail minus approach where there is less price certainty as the wholesale price may change depending on changes by Eir to the retail price.
- With regard to cost recovery, the cost orientation obligation takes into account the investment made by the operator and allow a reasonable rate of return on adequate capital employed. This approach also takes into account the risks involved as well as ensuring that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits.
- With regard to investment signals, when a regulator sets prices it is important to ensure that these prices send the “correct” signals to market participants – in other words, that the prices set will incentivise efficient behaviour. Efficient behaviour should result in the economy getting the greatest value from its resources and would benefit consumers. By imposing a cost orientation obligation across all wholesale access services, we avoid any inconsistencies across the investment ladder from WLR right up to LLU.

4.52 Aside from the regulatory objectives associated with the choice of price control as discussed at paragraph 4.51, ComReg notes the importance of SB-WLR in the context of the wholesale telecoms market in Ireland. Of the total ISDN and PSTN lines (circa 1.56 million) in Ireland, 25% are provided through SB-WLR, as illustrated in Figures 2.2.1 and 2.2.2 of ComReg’s Quarterly Report¹⁰². OAOs often buy Line Share and SB-WLR from Eir in order to provide voice and broadband packages to customers. Figure 3.2.2 of ComReg’s Quarterly Report¹⁰³ shows that there are 5 times more shared LLU lines (or Line Share) than full LLU lines in Ireland. The proportion of shared access is much lower in other countries.¹⁰⁴

4.53 As SB-WLR is a main building block which allows an OAO to control the billing of that customer and thus facilitates the layering of additional services to that

¹⁰² http://www.comreg.ie/_fileupload/publications/ComReg15102.pdf

¹⁰³ http://www.comreg.ie/_fileupload/publications/ComReg15102.pdf

¹⁰⁴ Broadband indicators - January 2015

customer (in the form of bundles), we consider that price certainty and stability is an important factor in order to provide the appropriate build or buy signals to operators as well as ensuring cost recovery for Eir. Therefore, ComReg considers that the obligation of cost orientation is proportionate for SB-WLR and we consider that our approach is consistent with our regulatory objectives and in particular the long-term benefits of end-users.

- 4.54 Regarding Eir's view, see paragraph 4.35, that neither the Consultation Document nor TERA discuss why most other European regulators use retail minus for SB-WLR, ComReg notes that the choice of pricing remedies is a matter for each National Regulatory Authority to determine in light of market circumstances. ComReg notes that in this context the continued importance of SB-WLR in the Irish market (see paragraph 4.52 and FACO Decision) coupled with the justification of moving to a cost-oriented price (see paragraphs 4.49-4.66) that a move to a cost-orientated price for SB-WLR is more appropriate.
- 4.55 Regarding Eir's point, as set out at paragraph 4.35, that cost orientation will alter incentives in favour of competitors relying more on reselling Eir's services than investing upstream and why would a potential operator undertake a risky investment in rolling out a new network when it can obtain regulated cost-based access to Eir's existing network, ComReg does not agree. ComReg considers that since the pricing approach for SB-WLR nationally, is the higher of the TD costs of providing SB-WLR nationally or a combination of BU-LRAIC+ and TD costs for providing SB-WLR in the Modified LEA, then all those efficient competitors considering investing upstream should find it profitable to do so. This approach should provide the appropriate balance between providing investment incentives for OAOs (build or buy signals) in the Modified LEA and Outside the Modified LEA while ensuring cost recovery for Eir nationally. See also paragraph 4.62-4.63 on investment incentives.
- 4.56 In relation to Eir's point at paragraph 4.36 that it has not increased its retail line rental charges since 2007 as a result of the competitive pressure it faces, ComReg would like to point out that as the retail price cap of (CPI-X) for retail line rental prices (discussed at paragraph 3.24) is linked to inflation then the retail line price could not have increased during periods where inflation was negative, as was the case in recent years. In addition, we note that the retail price cap allows Eir to reduce its retail line rental price however despite Eir's views that it faces competitive pressure it has not reduced its standalone line rental price. In addition, while we note that Eir previously reduced its SB-WLR price in the LEA where WLR was sold in a bundle with broadband, Eir subsequently decided to withdraw the SB-WLR discount which suggests that Eir does not face significant competitive pressure. See paragraph 4.47(iv).
- 4.57 Furthermore, in regard to Eir's view at paragraph 4.36 that ComReg should not protect OAOs from competition, ComReg notes that one of its regulatory

objectives – as discussed in the RIA at Chapter 14 - is to promote competition. It is important that there is a level playing field for all operators to compete – both OAOs and Eir. With respect to the competition objective, we must consider the trade-off between infrastructure-based competition, when each competitor constructs its own local loop, and service-based competition, when OAOs purchase different access services from the Incumbent. We consider that our approach on the basis of the higher of TD costs of providing SB-WLR nationally or a combination of BU and TD costs in the Modified LEA maintains the correct build-or-buy signals in the Modified LEA (where there is varying prospective competitive conditions) and it ensures that Eir does not under-recover its actual efficiently incurred costs (plus a reasonable rate of return) nationally for SB-WLR. Our approach for SB-WLR also recognises the importance of facilitating the development of efficient competition (in the relevant areas – Modified LEA) and the delivery of relevant competitive benefits to consumers.

- 4.58 In relation to Eir and CEG's views at paragraphs 4.37 regarding the provision of greater price certainty over regulatory periods and that ComReg's approach is likely to lead to large changes in cost-based regulated prices between regulatory periods, ComReg notes that a retail minus price control would not address the issue of price uncertainty between regulatory periods. See also paragraph 4.51 (first bullet point) and paragraphs 4.59-4.60.
- 4.59 In the Consultation Document (Chapter 4) we assessed the various forms of price control appropriate in the context of SB-WLR given our objectives to provide the appropriate investment signals to operators, including Eir, and to ensure cost recovery by Eir. ComReg considers that a retail minus price control does not provide operators with reasonable price certainty as a change to the retail price has a knock-on effect on the wholesale price. On the other hand cost orientation links prices to the costs of providing the service and therefore provides price certainty to operator during the Price Control Period. Changes to price levels over multiple price control periods are a reflection of various changes including technology changes, varying market conditions, which must be taken into account.
- 4.60 We also acknowledge the submissions from OAOs regarding price certainty for SB-WLR. For example, Sky stated (see paragraph 4.20) that "*...the new price control will bring to an end Eir's ability to exploit the retail minus regime to its competitive advantage by causing uncertainty and disruption to its retail competitors that rely on WLR.*" In addition, we note Vodafone's views at paragraph 4.21 that "*...this move from Retail minus to cost orientated pricing will bring greater certainty to wholesale pricing and this is in the long term interest of the wider industry and consumers.*"

- 4.61 Further to Eir's submission, as set out at paragraph 4.38, that ComReg's costing approach for SB-WLR indicates that it is likely to lead to a large price spike at the start of the next regulatory period, this is addressed in Chapter 5, paragraphs 5.132 to 5.133.
- 4.62 In relation to Eir's submission, at paragraphs 4.39-4.40, that cost based SB-WLR prices undermine investment while a retail minus approach would protect investment incentives, ComReg does not agree. ComReg considers that as the SB-WLR price is the higher of the TD costs of providing SB-WLR nationally or a combination of BU-LRAIC+ and TD costs for providing SB-WLR in the Modified LEA, the costs should not be lower than the cost of investment of a new entrant. Therefore, investment incentives should not be undermined. See also paragraph 4.63.
- 4.63 Furthermore, as set out in paragraphs 6.156 and 6.157 of the Consultation Document, for SB-WLR, it is important to achieve an appropriate balance between setting the necessary build / buy signals in the relevant areas i.e., in the Modified LEA while at the same time ensuring that Eir does not over / under recover its actual efficient costs nationally. If the access price is too high in areas where infrastructure investment is also unlikely to develop (as the deployment cost for each line is high i.e., in rural areas), this would not be desirable due to the detrimental long-term impact on consumers arising from a lack of competition. In this case, competition from operators acting as resellers may be dampened. On the other hand the access price should not be too low, especially in the Modified LEA, as it could deter investments in the long term in infrastructure-based competition. ComReg considers that if there is no prospect of a competitor replicating the service in question (or bypassing the bottleneck with an alternative platform), it is reasonable to base the regulatory price on Eir's TD costs. Therefore, this creates the appropriate investment signals for the Incumbent. Our objectives in setting the appropriate price for SB-WLR is not to incentivise investment in areas where it is unlikely that a commercial operator would invest (i.e., build), absent state funding, but instead to ensure that the objective of cost recovery is met.
- 4.64 With regard to Eir's views, as set out in paragraph 4.39, that it is normal competitive process for firms to enter when profitable opportunities exist, ComReg agrees. However, ComReg notes that the ability and incentive for other operators to enter the market are not trivial. ComReg considers that cost-orientation is a more appropriate pricing remedy to ensure greater pricing certainty for all operators, cost recovery for Eir, provide the correct build-or-buy signals for all operators and it should avoid inconsistencies across the investment ladder. See paragraphs 4.49-4.66.
- 4.65 Further to Eir's submission, as set out at paragraph 4.41, regarding recovery of the cost of enhancements to the SB-WLR service if there is a move to cost

orientation, ComReg considers that the projected decline in SB-WLR line volumes (as discussed in Chapter 5) and the expected increase in efficiencies by Eir over the Price Control Period should mitigate the need to account for these costs over the control period. In addition, the enhancements listed by Eir are also capable of generating additional efficiencies that could give rise to further cost savings for Open Eir. For example, the proposed enhanced provisioning process, which would see Open Eir taking end-to-end responsibility for new line connections around a range of issues such as failed customer appointments, could lead to a more efficient provisioning control process as Eir has direct contact with the end customer, rather than through the retailer's customer care team, when scheduling appointments. Also, such enhancements are likely to be relevant to the broadband service such as SABB and not just to the narrowband voice service, which means that not all of these costs would be recoverable from narrowband services. This point can be further assessed as part of the annual review of SB-WLR (at Chapter 12) when it should become evident from the historical cost accounts ('HCAs') what additional costs, if any, have been incurred and what services (voice or broadband) Eir has allocated these costs against. Therefore, for these reasons we consider that no further adjustments are required to the SB-WLR price at this time.

4.66 In relation to the three points raised by Eir, as set out at paragraph 4.42, regarding the reasons provided by ComReg for justification of a cost orientation obligation for SB-WLR, ComReg notes the following:

- i) With regard to ComReg's point that the FACO market is a national market, ComReg considers that this factor is relevant given that our decision imposes a cost orientation obligation for SB-WLR, nationally.
- ii) With regard to ComReg's point that Eir has 100% market share in the FACO market, ComReg considers that Eir's SMP in the FACO market is particularly strong with a wholesale market share of 100%. Therefore, when choosing between the option of retail minus and cost orientation, ComReg considers that a stricter form of regulation i.e., cost orientation, may be more proportionate. In addition, in Chapter 4, paragraphs 4.32 – 4.34 and paragraph 4.41 of the Consultation Document, ComReg sets out the main reasons for choosing a cost orientation obligation: recovery of efficient costs plus a reasonable rate of return¹⁰⁵, greater price certainty, informs the build/buy investment decisions of all operators and avoids inconsistencies across the investment ladder.
- iii) With regard to ComReg's reference to the retail shares of the low level and high level fixed voice access markets (at c.80%) and Eir's views that

¹⁰⁵ The reasonable rate of return is the pre-tax WACC rate of 8.18% as determined in ComReg Decision D15/14.

the market share reflects a steady decline and the decline of retail volumes for narrowband services sold by Eir leads to a higher unit retail cost for line rental, ComReg considers that based on the results of the cost model that it is unlikely that the cost oriented price of SB-WLR (at €16.18 over the Price Control Period) would be higher than the price derived under the retail minus approach (of €18.02) — thereby providing a larger downstream economic space between the wholesale and current prevailing retail price. However, even if it were the case that the costs were higher than the price determined for SB-WLR, this Decision allows for these additional costs to be recovered subject to the details set out in Chapter 12, paragraphs 12.17 - 12.18 regarding the annual review. On the other hand, in line with the regulatory approval mechanism described in Chapter 12, Eir has flexibility, subject to ComReg's regulatory approval, to reduce the wholesale access price for SB-WLR nationally below the regulated price subject to a price floor which should be set by reference to the BU-LRAIC+ costs in the Modified LEA. Please refer to Chapter 12 for further details.

Margin squeeze obligation:

- 4.67 Further to Eir's submission, as set out in paragraphs 4.43 that it is highly unlikely that the Irish retail market in which line rental is supplied would be found to meet the Commission's three criteria test for ex ante regulatory obligations, please see paragraph 4.49.
- 4.68 In relation to Eir's views at paragraph 4.44 that competition law would address any potential competition risks, we consider that competition law would not be sufficient in this case — as it would require ex-post assessment after any alleged anti-competitive practice has occurred. Consequently, such an assessment may be too late to prevent competition and efficient infrastructure investment being adversely affected beyond repair. Please see paragraph 10.50.
- 4.69 In response to Eir's point, as set out in paragraph 4.44, that if the price of SB-WLR is set at cost that there is no case for the proposed new margin squeeze test, this point is addressed in Chapter 10, paragraphs 10.43 - 10.57.
- 4.70 Having considered the submissions from respondents we remain of the view that cost orientation should apply to SB-WLR for the reasons set out at paragraphs 4.46 - 4.66 above and for the reasons set out in Chapter 4, paragraphs 4.31 to 4.41 of the Consultation Document.

4.3.4 ComReg's Final Position:

- 4.71 The obligation of cost orientation should apply to Eir for the provision of SB-WLR services.

4.4 Appropriate Costing Methodology and Reuse and Replacement Factors

4.4.1 Overview

4.72 As set out in Chapter 4 of the Consultation Document, the costing methodology determines which costs are included in the cost model and how this is transformed into a unit price. In determining the appropriate costing methodology ComReg considered three factors in the Consultation Document as follows:

1. Appropriate cost standard;
2. Historic costs or current costs; and
3. Appropriate cost model.

4.73 On the appropriate cost standard, ComReg proposed in the Consultation Document that the LRAIC+ approach was appropriate to encourage efficient investment decisions in the access network while ensuring that an operator is capable of recovering (but not over-recovering) all of its costs. The appropriate cost standard is discussed in the Consultation Document at Chapter 4, paragraphs 4.64 – 4.73.

4.74 On the option of historic costs or current costs, ComReg was of the preliminary view that the current cost approach was particularly relevant where the objective is to encourage efficient investment and innovation in new and enhanced infrastructures, particularly in the more competitive areas of the country i.e., the LEA. On the other hand, we proposed that if there was no prospect of a competitor replicating the service in question, it is reasonable to base the regulatory price on historical costs.

4.75 The historic cost accounting ('HCA') approach uses the Incumbents costs, which reduces the chance of under recovery of costs as the value is linked to the actual investment made as opposed to the MEA. Some of the Incumbents assets may be fully depreciated but still in use and the HCA approach should ensure that Eir is not over recovering the costs for these asset. As such, ComReg was of the preliminary view that the HCA approach may be more pragmatic and practical where there are limited prospects of investment by alternative infrastructure. The differences between historic costs and current costs are discussed in the Consultation Document at Chapter 4, paragraphs 4.74 – 4.86.

4.76 In relation to the appropriate cost model, ComReg proposed in the Consultation Document that the top down ("TD") model should be used where the asset(s) concerned are non-replicable and where the objective is to ensure that there is no over-or-under recovery of costs. The TD HCA methodology is referred to as

'Eir's Actual Costs Adjusted for Efficiencies', as described at paragraph 4.103 of the Consultation Document. ComReg was of the preliminary view that the bottom up ("**BU**") model should be used where there is a need to send a build-or-buy signal to alternative operators who may want to replicate the asset(s) and the objective is to encourage the deployment of alternative infrastructure. The cost models are discussed in the Consultation Document at Chapter 4, paragraphs 4.87 – 4.103.

4.77 ComReg also proposed that the scorched node approach should be applied in the context of the updated access network model such that the model should use the real geographic coordinates of Eir's MDF's and cabinets.

4.78 In Chapter 4 of the Consultation Document, ComReg considered whether different costing methodologies should be applied to the different types of assets in the access network. ComReg was of the preliminary view that determining a costing methodology for each asset irrespective of the service was the appropriate methodology for deriving the costs associated with LLU, SLU, SB-WLR and SABB, CEI and dark fibre.

4.79 ComReg determined three main groups of assets:

1. Reusable passive civil engineering assets i.e., assets which can be reused for NGA and which include duct, trenches, chambers and poles (referred to as '**Reusable Assets**').
2. Other passive local loop assets and non-reusable civil engineering assets: i.e., assets including the network termination unit ('**NTU**'), final drops, D-side cables, E-side cables, cabinets, and main distribution frames ('**MDFs**') as well as passive civil engineering assets which cannot be reused for NGA because they cannot support new additional cables, for example. Therefore, ducts, trenches, chambers and poles on the D-Side and on the E-Side which cannot be reused for NGA are also included in this category. All of these assets are referred to as '**Non-reusable Assets**'.
3. Active assets i.e., electronic equipment such as voice and digital subscriber line ('**DSL**') cards and backhaul used for SB-WLR and SABB services.

4.80 ComReg was of the preliminary view that for Reusable Assets no infrastructure-based competition is expected to develop for these assets and that cost recovery should be the key objective. For Reusable Assets ComReg considered that they should be valued on the basis of a Regulatory Asset Base ('**RAB**') approach derived from the SMP operator's accounts. We proposed that the Reusable Assets in our cost model should be valued based on the net book value ('**NBV**') from Eir's accounts and depreciated over the remaining lifetime of the asset by applying a tilted annuity formula which uses as a parameter the asset price index

– this approach was referred to as ‘**Eir’s Indexed Regulatory Asset Base (RAB)**’. Please refer to the Consultation Document at Chapter 4, paragraphs 4.118 – 4.122.

- 4.81 For ducts and poles we considered that while a large proportion will be reused for NGA, there will be an element that cannot be reused for NGA and so will need to be replaced based on a BU-LRAIC+ basis. Therefore, we proposed in Chapter 4 of the Consultation Document that a combination of Eir’s Indexed RAB and BU-LRAIC+ costs should be used to determine duct and pole costs.
- 4.82 For determining the appropriate pole access cost, we proposed in the Consultation Document to include the cost of Eir’s budgeted pole investment spend for 2015 (of \times poles) and we assumed the same level of investment each year (adjusted for annual price trend). In addition, we proposed to include future investment requirements to facilitate the deployment of NGA technology on the basis of an 8% replacement of Eir’s current pole base of \times (allowing for an additional \times poles) based on BU-LRAIC+ approach. It was proposed to adjust the existing pole base value by 92%. In total our proposed approach assumed a replacement of \times of Eir’s overall pole base.
- 4.83 We proposed a similar approach for ducts except the rates applied were 5% for replacement and 95% for reuse of existing ducts. Please refer to the Consultation Document at Chapter 4, paragraphs 4.125 – 4.143 for further details.
- 4.84 For active assets (line card, backhaul, etc.) associated with SB-WLR and SABB we proposed a BU-LRAIC+ approach with an adjustment for economies of scale to give sufficient economic space for LLU, SLU and Line Share.
- 4.85 The submissions from respondents are discussed under the following headings:
- Appropriate costing methodology for specific assets; and
 - Appropriate reuse and replacement factors.

4.4.2 Submissions to the Consultation Document:

Appropriate costing methodology for specific assets:

- 4.86 In general, the majority of respondents agreed that a BU-LRAIC+ methodology should apply to Non-reusable Assets and active assets while Eir’s Indexed RAB¹⁰⁶ approach should apply to Reusable Assets.

¹⁰⁶ As described at paragraph 4.120 of the Consultation Document.

- 4.87 ALTO stated that it: *“...agrees with the ComReg’s preliminary views ...ComReg’s rationale for the selected approaches have been properly discussed within the consultation document, and furthermore, the preliminary views expressed at paragraphs 4.157 – 4.159 appear to be rational and consistent with an appropriate approach.”*¹⁰⁷
- 4.88 BT *“generally agree...”*¹⁰⁸ but stated that it was *“...unable to comment on the detailed aspects without the actual data.”*¹⁰⁹
- 4.89 Enet *“agrees that the indexed Regulatory Asset Base should be applied to reusable assets”*¹¹⁰
- 4.90 Vodafone stated that: *“In principle, Vodafone agrees that the proposed approach is in the main aligned with the 2013 European Commission Recommendation.”*¹¹¹ Vodafone added that *“This is particularly true of ComReg’s proposal to use a ‘RAB’ approach for the valuation of the ComReg defined Reusable Assets.”*¹¹²
- 4.91 However, Vodafone stated that *“...the proposed BU approach is not consistent with the 2013 EC Recommendations.”*¹¹³ and requested ComReg to *“...revisit the calculation basis to ensure that where the BU approach is deemed required that this be more clearly linked to additional efficiencies that would come from deploying much newer infrastructure, as Eir would in the main be replacing much older assets that the average, therefore the impact on Eir’s Operating costs, in particular the cost of Repair and maintenance, would be much greater than the percentages of Poles and Duct ‘replaced’.”*¹¹⁴
- 4.92 In addition, Vodafone considered that *“The definition by ComReg of reusable and non-reusable assets could do with a more detailed clarification and discussion...[given that]...a “BU-LRAIC+” mode[] for Non-reusable Assets and Active assets is dependent on this definition”*¹¹⁵.
- 4.93 Vodafone raised a number of points as follows:
- (i) Vodafone disagreed with the proposed use of BU valuation for Non-Reusable Assets stating that *“The proposed BU approach in particular would appear to provide far too much weighting to an assumption that there is an additional requirement to replace existing civil engineering*

¹⁰⁷ ALTO Response to Consultation 15/67, page 7.

¹⁰⁸ BT Response to Consultation 15/67, page 4.

¹⁰⁹ BT Response to Consultation 15/67, page 4.

¹¹⁰ Enet Response to Consultation 15/67, page 2.

¹¹¹ Vodafone Response to Consultation 15/67, page 2.

¹¹² Vodafone Response to Consultation 15/67, page 2.

¹¹³ Vodafone Response to Consultation 15/67, page 4.

¹¹⁴ Vodafone Response to Consultation 15/67, page 4.

¹¹⁵ Vodafone Response to Consultation 15/67, page 3.

infrastructure based on NGA requirements.”¹¹⁶ Vodafone also considered that for the replacement needs for NGA “...a detailed rationale as to the basis, not just of the proposed % replacement factors to be used but also the justification for using a simplified Bottom Up approach is required of ComReg.”¹¹⁷

(ii) Vodafone “...strongly question the need for a Bottom-Up Approach in particular to “Other passive local loop assets and non-reusable civil engineering assets”...the rationale for applying a BU Modelling approach between LLU and VUA appears directly at odds with the principle of ‘replicable investment’...VUA could be regarded as a next generation replacement of LLU, the use of BU modelling of active VUA assets would appear to be directly at odds with this principle.”¹¹⁸

(iii) Vodafone further stated that “...it is very difficult to understand why this principle has been applied to Eir’s own potential ‘replacement’ investments...”¹¹⁹ Vodafone questioned “...the justification for “D-Side” infrastructure being included as ‘non-replacement’, given that Eir current deployment of NGA does not require their replacement?”¹²⁰

4.94 Eir stated that “An appropriately populated regulated asset base (RAB) is indeed the correct basis to develop the charge for re-usable assets.”¹²¹

4.95 Eir also added that: “...a BU-LRAIC+ approach should be applied to price services in all areas in which there is a realistic prospect of future network rollout...This should include areas already announced as forming part of SIRO’s rollout as well as areas that SIRO is likely to be considering for its second rollout phase.”¹²² Eir considered that “It will be too late to only apply BU-LRAIC+ prices to areas after SIRO has determined its plans...”¹²³

Appropriate reuse and replacement factors:

4.96 While BT and ALTO generally agreed with ComReg that Reusable Assets should take account of reuse and replacement of existing assets, there was general disagreement from other respondents regarding the proposed replacement factor of 8% for poles.

¹¹⁶ Vodafone Response to Consultation 15/67, page 3.

¹¹⁷ Vodafone Response to Consultation 15/67, page 3.

¹¹⁸ Vodafone Response to Consultation 15/67, page 3.

¹¹⁹ Vodafone Response to Consultation 15/67, page 3.

¹²⁰ Vodafone Response to Consultation 15/67, page 3.

¹²¹ Eir Response to Consultation 15/67, page 20.

¹²² Eir Response to Consultation 15/67, page 20.

¹²³ Eir Response to Consultation 15/67, page 10.

- 4.97 BT stated that it agreed in principle with ComReg's preliminary view "...that for Reusable Assets the cost should take account of reuse and replacement of existing assets ...rather than assuming 100% reuse of existing assets...as these assets are exposed to the weather and will need to be replaced from time to time."¹²⁴ BT also agreed that "...any such replacement costs should be predic[t]able given the perception that Eir has had periods of underinvestment."¹²⁵
- 4.98 ALTO also stated that it "...considers this approach reasonable as those assets are exposed to the elements and will need to be replaced from time to time...we cannot have years of eircom underinvestment following by a peak of costs. If Eircom commercially decide to underinvest the industry should not be penalised by such decisions."¹²⁶
- 4.99 Enet did not agree that for Reusable Assets any additional allowance should be made. Enet considered that "There is no evidence to support the proposition in 4.131 that the implementation or deployment of NGA drives any requirement for pole or infrastructure replacement over and above what would normally be required in an efficiently and appropriately maintained network."¹²⁷ In addition, Enet considered that even if a replacement factor is required "...a replacement rate of 8% in addition to routine replacement is excessive."¹²⁸
- 4.100 E-net stated that "Typically, on a 12 year test cycle, an operator will encounter pole failure rates on the tested segment of the order of 15%. This drives an effective annual replacement rate of 1.2% of the total pole population. It is not tenable that the deployment of fibre cables on poles will drive a 325% increase in the rate of pole failure on the existing stock driving the encountered fail rate from .2% to 3.9%."¹²⁹
- 4.101 Enet also stated that "The adoption of a BU-LRAIC+ methodology without any adjustment ensures adequate return and incentive for normal network operation..."¹³⁰

¹²⁴ BT Response to Consultation 15/67, page 5.

¹²⁵ BT Response to Consultation 15/67, page 5.

¹²⁶ ALTO Response to Consultation 15/67, page 7/8.

¹²⁷ Enet Response to Consultation 15/67, page 2.

¹²⁸ Enet Response to Consultation 15/67, page 2.

¹²⁹ Enet Response to Consultation 15/67, page 4.

¹³⁰ Enet Response to Consultation 15/67, page 2.

- 4.102 Enet considered that *“There is no means of control as to where the funding emanating from the adjustment will be invested...it may be used to offset existing, targeted, service-related or Eir directed growth investment, rather than being available for general NGA adoption.”*¹³¹ Enet believed that *“...disproportionate allowances for passive infrastructure renewal over the course of a short term price control period will serve to incentivise excessive renewal expenditure, when such a funding source is available. This will drive unnecessarily high end user service prices.”*¹³²
- 4.103 Enet referred to Eir’s Regulated Accounts, stating that *“...Eir anticipates that poles will have a 30 year life. In reality poles have a longer life. The proposed replacement rate indicates a life of 17.5 years...”*¹³³ In addition, E-net stated that *“ComReg D03/09 sets the asset life of a pole at 30 years. This, with no other influence (growth, plant alteration, damage to plant etc), would drive a replacement rate of 3.3% per year...”*¹³⁴
- 4.104 Vodafone had difficulty understanding why a replacement factor is required *“...as ComReg has already incorporated Eir’s Poles and Ducts investments, including those in the period 2015 to 2018 which in effect covers all the investment needs of the proposed Control Period...Vodafone seriously questions the need or use of the BU approach.”*¹³⁵
- 4.105 Separately, in a letter dated 2 December 2015, Vodafone raised issues regarding replacement rates for ducts and poles. Vodafone stated that *“...given that the replacement of Duct and Poles when viewed over a longer term has not matched the expected re-investment profile, Vodafone would strongly suggest that the current asset lives for such infrastructure does not match their economic lives and Vodafone would strongly urge a review and potential lengthening of infrastructures assets such as those for Poles and Duct.”*¹³⁶ As an example, Vodafone highlighted that the regulatory asset life for poles is set at 30 years, which implies a replacement / reinvestment requirement of 3.3% per annum. However, Vodafone stated that *“eir themselves have not had to make this level of re-investment.”*¹³⁷ and it considered that *“...it is now incumbent on ComReg to review what an appropriate replacement ratio should be and thus what the*

¹³¹ Enet Response to Consultation 15/67, page 2/3.

¹³² Enet Response to Consultation 15/67, page 3.

¹³³ Enet Response to Consultation 15/67, page 2.

¹³⁴ Enet Response to Consultation 15/67, page 4.

¹³⁵ Vodafone Response to Consultation 15/67, page 4.

¹³⁶ Vodafone letter of 2 December 2015, page 7, at Annex 8.

¹³⁷ Vodafone letter of 2 December 2015, page 8, at Annex 8

*economic depreciation should be when reviewing appropriate Pole cost modelling.*¹³⁸ Vodafone made a similar point relating to ducts.

- 4.106 In addition, in its letter, Vodafone requested that ComReg “*Justify to Vodafone and the industry why eir requires an 8% uplift due to Poles replacement (with a 5% factor for Ducts), given that ComReg should at the very least have divided this between end of life Poles replacement, which should in no way be completed on a forward looking basis as these investments should already have been made; and additional pole investment being made due to the rollout of Next Generation Access (justified and proven).*”¹³⁹
- 4.107 In its letter, Vodafone also referred to Eir’s response to the Consultation Document and stated that it “*...has serious concerns with regard to the eir suggested recognition of a ‘substantial pole replacement in the medium [term].’*”¹⁴⁰
- 4.108 Vodafone in its letter of 2 December, also stated that ComReg should “*Explicitly detail how ComReg will monitor the necessary and efficient capital investments used to justify pricing; and where such capital investments are not occurring, detail a mechanism for ensuring that pricing will be reflective of any such variances.*”¹⁴¹
- 4.109 Vodafone strongly encouraged ComReg to “*Accept eir’s offer of a holistic and multi-period review (historical and forward looking) of the necessary Pole (and Duct) infrastructure investment that the use of Infrastructure Renewals Accounting implies.*”¹⁴²
- 4.110 CEG stated that “*An asset that is fully depreciated in accounting terms can have economic value if it is being used to generate valuable services. In particular, its economic value can be calculated by considering what costs would be incurred to (efficiently) replace the asset to provide the same services and taking into account the actual remaining useful life of the asset (rather than the book value of accumulated depreciation)...*”¹⁴³
- 4.111 CEG stated that “*Pricing pole access on the basis of forward looking costs would both avoid undervaluing productive assets and send the correct economic signals to both the same market and downstream markets for customers that use pole assets.*”¹⁴⁴

¹³⁸ Vodafone letter of 2 December 2015, page 8, at Annex 8

¹³⁹ *ibid*, page 11, at Annex 8.

¹⁴⁰ *ibid*.

¹⁴¹ *ibid*, page 12, at Annex 8.

¹⁴² *ibid*, page 11, at Annex 8.

¹⁴³ CEG Report, page 12.

¹⁴⁴ *ibid*, page 13.

- 4.112 In addition, CEG added that *“Pricing access to the pole infrastructure at a level that is below the long-run cost of replacement will also undermine competing infrastructure by devaluing the value of assets in parallel existing or future networks...particular concern...given the rollout of SIRO’s network... Underpricing of Eir’s pole network would reduce the returns to the use of alternative networks and thus risk deterring such investment.”*¹⁴⁵
- 4.113 Furthermore, CEG believed that *“A further issue associated with pricing below forward looking costs is that it means the demand side of the market is receiving price signals that do not reflect the long run economic costs of service provision. This could lead to inefficient or unsustainable entry including potentially by National Broadband Plan bidders.”*¹⁴⁶
- 4.114 Eir believed that using primarily a top down valuation of re-usable assets for pricing access services *“...is substantially flawed...because it is based on the current net book value of these assets after the combined effect of a historic peak of investments in years separated from the modelling year by the length of the regulated asset life and the particular implementation of a change in regulated asset lives in 2009.”*¹⁴⁷ In addition, Eir considered that *“The construction by ComReg of an indexed Regulated Asset Base using this pattern of investment is such that the annual charge on the re-usable assets is currently at a historic low level and will increase through the control period to the extent that – if the same approach is used in the next price control - there will be a substantial increase in price levels for regulated access services.”*¹⁴⁸
- 4.115 CEG considered that *“...around 80% of poles are being treated as fully depreciated and hence excluded from the cost base... current users of poles are not contributing to the recovery of the costs of the majority of the poles in use and prices for services that make significant use of pole infrastructure are likely to need to rise significantly in the future as fully depreciated poles are replaced.”*¹⁴⁹ Eir also noted this issue stating that *“...snapshot of the Eir asset register in 2013 used by ComReg is not an appropriate basis ...[as] the current base of poles is aged to the extent that more than half the poles do not attract any depreciation charges”*¹⁵⁰
- 4.116 CEG also considered that using historic costs for poles at a point in the investment cycle where most of the assets have been written down to zero value in accounting terms *“...will also lead to unstable prices to end customers over regulatory periods...because of the ‘lumpy’ nature of the initial investment in the*

¹⁴⁵ CEG Report, page 13.

¹⁴⁶ CEG Report, page 14.

¹⁴⁷ Eir Response to Consultation 15/67, page 21.

¹⁴⁸ Eir Response to Consultation 15/67, page 21.

¹⁴⁹ CEG report, page 12.

¹⁵⁰ Eir Response to Consultation 15/67, page 20

pole asset base...responding by setting artificially low prices today and then significantly increasing the prices at some (currently uncertain) point in the future will not provide the pricing stability that enables network operators to invest in sustainable communication services over the long term and that avoids price spikes to consumers.”¹⁵¹

- 4.117 CEG stated that ComReg’s estimation of the cost of poles in the TD model based on Eir’s capital investment in poles for 2015 and assuming the same number of poles replaced each for the three year control period “... is much lower than the expenditure on poles that will be required over the medium to longer term, particularly taking into account that the large number of poles dating from around 1980 and which will need replacing over the next few years...”¹⁵² Eir also made a similar point stating that “While the proposed treatment of poles takes into account some replacement of poles, it does not address the sharp rise in replacement costs over the medium term...”¹⁵³
- 4.118 CEG stated that: “There is an alternative approach available to ComReg ...the approach of Infrastructure Renewal Accounting (IRE) was developed precisely to address long-lived assets where the precise asset life is uncertain...”¹⁵⁴ CEG explained that “Under IRE, an infrastructure renewal charge would be set to allow for losses in asset value over time and for the need for asset maintenance of the pole network as a whole. The precise charge would be based on the average long-term forecast expenditure required to renew the infrastructure, such as over a 20 year period. This cost would be converted into a smoothed annuity over the relevant period. While Eir’s actual expenditure on pole replacement may vary between years, the infrastructure renewal charge would be relatively stable. It would be adjusted only gradually as the forecast long-term expenditure is reviewed. Differences in any year between the charge level and the expenditure would be added/deducted from an account with the Weighted Average Cost of Capital applied. As such, the charges over time would only recover costs including a return on capital.”¹⁵⁵
- 4.119 CEG further added that: “The IRE approach overcomes the problem of the current approach of prices being artificially low in some years (because of incorrectly estimated asset lives) and achieves much more stable pricing over time. IRE also assists the financial management of the access provider and contributes to the financing of future capital expenditure.”¹⁵⁶

¹⁵¹ CEG Report, page 14.

¹⁵² CEG report, page 15/16.

¹⁵³ Eir Response to Consultation 15/67, page 12.

¹⁵⁴ CEG report, page 15.

¹⁵⁵ CEG report, page 15.

¹⁵⁶ CEG report, page 15.

- 4.120 CEG suggested that *“One approach to estimate the medium term average pole expenditure is to use information on Eir’s total number of poles and an estimated average life of poles of 30 years. We have estimated what annuity would recover the expenditure on pole replacement as forecast in the draft model over the next 3 years as well as, for later years, the higher amount of expenditure that that would be consistent with the long-term average annual number of poles needing to be replaced (i.e. assumed to be equal to Eir’s total poles divided by 30). ✕”*¹⁵⁷
- 4.121 CEG considered that *“By setting prices higher now so as to recover this annuity, revenues can be accumulated over the initial years that reduce the extent to which prices will need to be raised in the future.”*¹⁵⁸
- 4.122 In the subsequent Eir / CEG clarifications of 10 November 2015, CEG confirmed that under the IRE approach *“The investment in poles over the years 2016-2018 is the same as assumed in the [ComReg] Consultation”*¹⁵⁹ However, from 2019 onwards, CEG stated that *“...substantially more poles ✕ will need to be replaced on average per year.”*¹⁶⁰ CEG explained that *“The IR approach effectively brings forward the generation of revenues to help cover some of this future expenditure and thereby achieve more stable pricing over time.”*¹⁶¹
- 4.123 On 17 November ComReg sought further clarification from Eir on whether the projections noted for the period from 2019 onwards, at paragraph 4.122, were deemed be representative of actual pole replacement numbers each year. In the case where the numbers provided were not considered representative, ComReg requested Eir to provide the level of annual pole replacement they anticipate taking place each year from 2019 to 2024.
- 4.124 In the subsequent Eir clarifications of 24 November 2015, Eir confirmed that *“The CEG analysis is not based on any particular set of plans by open eir for pole replacement.”*¹⁶² Eir added that *“It is simply contrasting the model that applies for the period of the control...with an increased rate of pole replacement required later arising from the increased ageing of the pole base arising from limited replacement during the control period. This is contrasted with the IRE approach where a continuous investment to replace the pole base over the regulated asset life is used to develop a constant annual charge.”*¹⁶³

¹⁵⁷ CEG Report, page 16.

¹⁵⁸ CEG Report, page 16.

¹⁵⁹ See page 2 of CEG Memorandum in Annex 8.

¹⁶⁰ See page 2 of CEG Memorandum in Annex 8.

¹⁶¹ See page 2 of CEG Memorandum in Annex 8

¹⁶² Eir note on “Additional information from meeting of 22nd October and mail of 17th November”, page 1, at Annex 8.

¹⁶³ Eir note on “Additional information from meeting of 22nd October and mail of 17th November”, page 1, at Annex 8.

- 4.125 With regard to Eir's view on the level of annual pole replacement anticipated from 2019 to 2024, Eir confirmed that "...the average level of pole replacement between FY16 and FY20 is likely to be close to ∞."¹⁶⁴ Eir based its estimate on "a base level of close to ∞ per annum that arises from the clearance of faults and damage to the network by weather and third parties." and "a combination of the pole testing programme and deployment of new cable on overhead routes."¹⁶⁵ Eir added that depending on its success for the NBP tender or should another bidder opt to deploy fibre optic cable on eir poles "This will drive further replacement at a rate that is hard to anticipate at this point."¹⁶⁶

4.4.3 ComReg's Position:

Appropriate costing methodology for specific assets:

- 4.126 ComReg notes that the majority of respondents agreed that Eir's Indexed RAB approach should apply to Reusable Assets while a BU-LRAIC+ methodology should apply to Non-reusable Assets and active assets.
- 4.127 Further to Vodafone's point, at paragraphs 4.91, 4.92, 4.93(i) and 4.93(iii), regarding consistency of approach with the 2013 Recommendation, the definition of Reusable Assets¹⁶⁷ and Non-reusable Assets¹⁶⁸, justification for D-side infrastructure being included in non-replacement and the use of BU-LRAIC+ costs for Non-reusable Assets, ComReg notes that paragraph 33 of the 2013 Recommendation states that "NRAs should value all assets constituting the RAB of the modelled network on the basis of replacement costs, **except for reusable legacy civil engineering assets.**" [**emphasis added**] Hence, our approach is consistent with that set out in the 2013 Recommendation. See also paragraphs 4.128-4.130.
- 4.128 Furthermore, Paragraph 31 of the 2013 Recommendation further specifies that a BU-LRIC+ costing methodology should be used:

"NRAs should adopt a BU LRIC+ costing methodology that estimates the current cost that a hypothetical efficient operator would incur to build a modern efficient network, which is an NGA network..."

- 4.129 The difference between Reusable Assets and Non-reusable Assets is that copper cables will be replaced by fibre cables in the future while trenches and

¹⁶⁴ Eir note on "Additional information from meeting of 22nd October and mail of 17th November", page 1, at Annex 8.

¹⁶⁵ Eir note on "Additional information from meeting of 22nd October and mail of 17th November", page 1, at Annex 8.

¹⁶⁶ Eir note on "Additional information from meeting of 22nd October and mail of 17th November", page 1, at Annex 8.

¹⁶⁷ See definition for Reusable Assets at paragraph 4.93.

¹⁶⁸ See definition of Non-reusable Assets at paragraph 4.93.

ducts can be reused for NGA purposes. Even if, to date, copper cables are only being replaced by fibre cables by Eir in the Exchange side (or E-side) of the network, there are plans by operators, including SIRO and Eir, to further deploy fibre up to the home (FTTH). Therefore, the rationale is to consider that all cables (Distribution side (or D-Side) and E-Side) will at some stage in the medium to long term be replaced by fibre. Hence, copper cables are defined as Non-reusable Assets.

- 4.130 Furthermore, for Non-reusable Assets, it is important to send the correct build-or-buy signal, so that an OAO is encouraged to take an efficient investment decision. ComReg believes that such a build-or-buy signal is best ensured by adopting a BU LRAIC+ methodology, based on replacement costs. In Chapter 4, paragraph 4.147 of the Consultation Document ComReg specified that unlike the Reusable Assets, the copper cables or Non-reusable Assets, especially in the LEA, are likely to be replaced by optical fibre — at least on the E-side. ComReg considers that in these areas OAOs should be encouraged to invest in the alternative NGA-based infrastructure.
- 4.131 With regard to Vodafone's point at paragraph 4.91 regarding the impact on Eir's operating costs, in particular the cost of repair and maintenance, would be much greater than the percentage of poles and ducts replaced, ComReg's review of the Eir's access network costs indicates that repair and maintenance costs are much more sensitive to the condition of Eir's cable network than to the condition of poles and ducts. Deploying new copper cables reduces the incidence of faults in the network and so replacing a percentage of existing cables with new cables has a much more significant impact on the level of repair and maintenance costs than would arise due to the replacement of an equivalent percentage of poles and ducts.
- 4.132 Therefore, where the Revised CAM values copper cables on an MEA basis the cost analysis assumes a much lower Line Fault Index (LFI) than is actually experienced in Eir's existing network. Consequently the lower LFI due to the assumption of new cables means the level of repair and maintenance costs can be reduced significantly from the levels evident in Eir's HCAs as the model can allow for fewer maintenance staff than Eir actually employ. This reduction in repair and maintenance cost is significantly larger than the percentages of poles and ducts that are assumed to be replaced in the Revised CAM.
- 4.133 With regards to Vodafone's point at paragraph 4.93(i) regarding the detailed rationale as to the basis (not just the proposed % replacement factors) for using a simplified Bottom Up approach, ComReg refers to paragraphs 4.138 to 4.144 on the treatment of poles and ducts.
- 4.134 In relation to Vodafone's point at paragraph 4.93(ii) regarding the use of a BU model for other passive local loop assets and non-reusable civil engineering

assets, the use of the BU-LRAIC+ valuation is relevant when assets are replicable or when assets need to be renewed i.e., active assets and copper cables. In the TERA Report, at Annex 6, TERA state that "*The [BU] model sends correct build-or-buy signals, and so is especially relevant where there is infrastructure based competition or where infrastructure needs to be renewed.*"¹⁶⁹ Please refer to Chapter 4, subsection 4.3.3 of the Consultation Document for further discussion on asset replicability and the use of the BU-LRAIC+ valuation to send appropriate build-or-buy signals to the market place.

- 4.135 With regards to Vodafone's submission that the rationale for applying a BU approach between LLU and VUA appears directly at odds with the principle of 'replicable investment' see paragraph 4.93(ii), we do not agree. The main point is that certain assets i.e., other passive local loop assets and non-reusable civil engineering need replacing in some parts of Eir's legacy network unlike trenches, ducts and poles which can be reused for NGA. As set out in paragraphs 4.127 and 4.128, these assets should be valued at replacement costs. This is consistent with the 2013 Recommendation.
- 4.136 Further to the point raised by Eir at paragraph 4.95 regarding Eir's view that the BU-LRAIC+ approach should be applied to price services in all areas with a realistic prospect of future network rollout, ComReg considers that announcements by SIRO to roll-out network infrastructure in certain areas are only indicative and may be subject to change. Please also see paragraphs 6.37 - 6.41.
- 4.137 Having considered the submissions from respondents we remain of the view that Eir's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets for the reasons set out at paragraphs 4.126 to 4.136 above and for the reasons set out in Chapter 4, paragraphs 4.106 to 4.122 of the Consultation Document.

Appropriate reuse and replacement factor:

- 4.138 ComReg notes that while BT and ALTO agreed that Reusable Assets should take account of reuse and replacement factors, other respondents disagreed in particular with the proposed replacement factor for poles.
- 4.139 E-net and Vodafone raised issues (see paragraphs 4.99 and 4.101 and paragraphs 4.104 and 4.106 respectively) regarding their disagreement of the inclusion of a replacement factor based on BU-LRAIC+ costs in determining the valuation for poles. However, ComReg remains of the view that a replacement adjustment based on the BU-LRAIC+ costs is required if a full NGA network is deployed for a number of reasons set out below:

¹⁶⁹ TERA Report, page 62.

- (i) ComReg considers that a complete (100%) re-use of the existing poles and ducts would only be appropriate if Eir could roll-out its NGA network without any need to replace existing pole or duct assets. However, deriving the pole access price on the basis of a complete TD valuation may result in a price shock in future years in the case where a significant increase in investment in Eir's pole infrastructure is required. This point was raised by CEG (see paragraph 4.116) where it noted that using historic costs for poles will lead to unstable prices to end customers over regulatory periods.

Therefore, in setting the appropriate pole and duct access prices our approach needs to balance the reutilisation of existing poles and ducts (Reusable Assets) as well as the requirement to replace poles and ducts in the future — both in the normal course of business and to take account of the additional investment in poles and ducts for the deployment of NGA. This approach is also consistent with the 2013 Recommendation which clearly separates civil engineering assets that can be reused to those that cannot be reused. See paragraphs 4.127-4.130.

- (ii) As noted in Chapter 4, paragraph 4.119 of the Consultation Document, the TD valuation of Reusable Assets is derived by taking Eir's accounting NBV directly from its accounts and projecting the NBV forward by including an allowance for future investment in related network assets over the Price Control Period (Eir's Indexed RAB). In Chapter 4, paragraph 4.126 of the Consultation Document, ComReg stated that *"...the TD valuation of poles in the model takes account of Eircom's forecasted capital costs associated with ongoing annual investment in poles over the three year price control period"*. This 'ongoing annual investment' is intended to reflect a 'business as usual' scenario and is not meant to include the potential incremental investment that would be associated with NGA deployment. In the case of 'business as usual' investments, our model assumes investment spend of $\text{€} \times$ poles each year based on a TD valuation (or Eir's Indexed RAB).
- (iii) In the context of replacement of poles and ducts we consider that the BU-LRAIC+ cost (BU valuation) would apply to those non-reusable poles and ducts. The replacement factor (of 8% in the case of poles and 5% in the case of duct) is derived with reference to the need to replace existing CEI assets in order to support the deployment of NGA services in all parts of Ireland. The analysis undertaken by ComReg indicates that building such a network will necessitate Eir having to replace a greater number of poles and ducts in order to deploy fibre cables more extensively in the access network than has been the case to date. Failure to recognise the cost of replacing this element of poles and ducts could mean that the charges for

wholesale access services would undermine the business case for NGA investments. Therefore, the purpose of recognising the requirement for asset replacement (at 8% for poles and 5% for ducts) based on BU-LRAIC+ costs is to ensure that in the long run current prices provide the correct build or build incentives with regard to NGA investment decisions.

(iv) ComReg is conscious of the fact that NGA deployment would accelerate the level of replacement beyond what would be required in the ongoing 'business as usual' context. It is the costs associated with this accelerated level of replacement that ComReg is modelling by including a replacement factor of 8% in the case of poles and 5% in the case of ducts.

(v) In the context of poles, NGA deployment can be expected to result in two forms of incremental investment:

- Accelerated replacement of poles as the deployment of NGA overhead fibre optic cables would require Eir to test all poles where new cable is deployed. This would result in a significantly larger proportion of the existing pole base being tested than in the 'business as usual' case. Consequently, a higher number of poles are expected to be identified as requiring replacement.
- The addition of new poles, for example, poles that are required to serve customers that have not previously been served by copper.

(vi) As per the 2013 Recommendation, the inclusion of the replacement factor in the Revised CAM model is intended to account for the fact that not all poles can be reused for the deployment of NGA. In estimating the level of Non-reusable Assets ComReg are conscious of the fact that potentially over 80% of Eir's pole base is in the NBP footprint. Deploying NGA to serve the customer base in the NBP would therefore result in an accelerated level of pole testing with a consequent increase in the number of poles that would need to be replaced.

(vii) To determine how the level of pole replacement consistent with NGA deployment might differ from the 'business as usual level' already incorporated in the projected TD figures, ComReg estimated the number of poles that would be identified as needing replacing if over 80% of the pole base was tested and compared this with the 'business as usual' replacement figure in the Price Control Period, which arises from testing the entire pole base over a period of 12 to 14 years.

4.140 Enet's points out at paragraphs 4.100 and 4.103 that in a 'business as usual' 12 year testing cycle an operator would test in the order of 8% of its pole base each year which, with a failure rate of 15%, is consistent with the replacement of 1.2%

of the pole base each year, resulting in 3.6% of poles being replaced over the 3 years of the price control¹⁷⁰. However, if the deployment of NGA requires, for example, 85% of the pole base to be tested then the 15% failure rate would result in 12.75% of the pole base being identified as needing replacement. Therefore, NGA deployment can be expected to result in a much higher level of pole testing than is undertaken in the ongoing 'business as usual' testing cycles that underpin the projection of the TD cost of poles. It is this differential between the level of pole replacement required to support NGA deployment and the lower level of ongoing pole replacement that would occur if NGA was not deployed that necessitates the inclusion of the replacement factor.

- 4.141 Therefore, our view is that pole access prices should be based on Eir's Indexed RAB on the basis of 92% reuse of Eir's pole base (absent NGA roll-out) using projected TD costs and in addition an allowance of an additional 8% for the accelerated level of pole replacement due to NGA deployment based on BU-LRAIC+ costs. The 8% replacement factor allows for \times poles over the long run based on the BU valuation while in the 'business as usual' case we have allowed for \times poles each year from 2016-2018 based on TD valuation.
- 4.142 Similarly, Eir's experience to date in rolling out NGA in some exchange areas provides evidence that an additional 5% of duct infrastructure needs to be replaced to accommodate FTTC fibres. Our view is that duct access prices should be based on Eir's Indexed RAB on the basis of 95% reuse of Eir's duct base (absent NGA roll-out) using projected TD costs. In addition, there is a provision of an additional 5% for duct replacement due to NGA deployment based on BU-LRAIC+ costs.
- 4.143 As noted by CEG, at paragraphs 4.111-4.113, that forward looking costs should be used to send correct economic and pricing signals and given the views raised by CEG and Eir at paragraph 4.117 that ComReg's estimation of the cost of poles in the TD model is much lower than the expenditure on poles that will be required in the medium to long term, ComReg notes that CEG's and Eir's assessment of ComReg's approach to deriving pole access prices appears to be predicated on the basis that ComReg's approach is not forward looking and is over reliant on Eir's historic costs and current actual investment volumes. However, this would only be the case if ComReg set pole prices solely on TD data. As explained in paragraphs 4.139-4.142 while ComReg's approach uses TD HCA costs for Reusable Assets it also incorporates a replacement factor in the price calculation — which captures the incremental level of investment that would be associated with the level of pole replacement required to support NGA deployment in the future. Given that future NGA deployment could potentially require access to the vast majority of Eir's pole network ComReg considers that the inclusion of a

¹⁷⁰ As the model is projecting forward from 2014 the TD projections of costs up to 2019 actually include four years (2015 to 2019) of additional investment at \times of poles per annum.

replacement factor based on BU-LRAIC+ costs (forward looking costs) is appropriate for estimating the long-run cost of pole replacement and service provision.

- 4.144 In particular, the inclusion of a replacement factor ensures that access seekers are exposed to market prices which are sustainable in the long run to support efficient market entry decisions and avoid price instability for end-users. In deriving the pole access price ComReg has assessed past levels of pole investment and estimated how future pole investment is expected to evolve with the implementation of the NBP and with widespread NGA deployment. This is to ensure that prices reflect forward looking long-run costs thereby encouraging investment by Eir in replacing poles with new poles when existing poles come to the end of their economic lives, while promoting sustainable entry by NBP bidders without undermining the value of similar assets in parallel competing networks.
- 4.145 With regard to the proposed IRE approach suggested by Eir and CEG paragraphs 4.118-4.125, ComReg does not agree with the CEG approach for a number of reasons as discussed below:

- (i) The IRE approach suggested by Eir and CEG is designed to set higher prices now so that “*revenues can be accumulated over the initial years that reduce the extent to which prices will need to be raised in the future*¹⁷¹”. Rather than setting prices that can be expected to rise as the underlying costs of the pole infrastructure rises the CEG approach favours setting an average price based on the forecasted costs of long term pole investment over a 10 year period, compared with ComReg’s 3 year Price Control Period.

While the adoption of a pole price based on the average cost of long-term forecast expenditure to renew infrastructure over a period of say 20 years can be monitored to ensure that Eir do not over-recover costs over the entire life of the poles, it will inevitably lead to Eir over-recovering costs during the current Price Control Period. The reason why the IRE approach proposed by CEG results in lower price increases in the future is because it starts with higher prices in the current Price Control Period. Unit pole costs will rise as older poles are replaced by newer poles so an average price based on long-term investment costs will be higher than the forward looking unit costs that arise during the specific period of the price control.

ComReg considers that investment decisions are better informed by a forward looking view of the costs as they apply during the Price Control Period with an indication as to how those prices are expected to evolve

¹⁷¹ CEG report: page 16, para 52.

beyond that. Better aligning prices with costs in this way will promote efficiency by ensuring that Eir can invest with the expectation of getting an adequate return on their investment while other operators continue to face build or buy decisions appropriate to the period in which the investment is likely to be made. The fact that pole prices can be expected to rise in the future (as older poles are replaced by newer poles) should not deter efficient current investment decisions provided that stakeholders have a clear indication as to how pole prices are expected to evolve.

- (ii) ComReg considers that CEG has not given adequate attention to the forward looking aspect of ComReg's approach, as discussed at paragraphs 4.139 to 4.144. Moreover, the alternative approach proposed by CEG of deriving a charge "*based on the average long-term forecast expenditure required to renew the infrastructure, such as over a 20 year period*" may give assurance to Eir that it can finance future capital expenditure but it may also distort investment decisions for other operators. In particular, as noted in paragraph 4.124, Eir are unable to substantiate such a forward looking pole replacement programme as required for the IRE approach. See also paragraph 4.148
- (iii) CEG's approach requires the cost of current and future investments over the suggested 20 year period to be converted into a smoothed annuity. This means higher prices in the Price Control Period that enable Eir to generate funds to finance future investments but creates a material disjoint between the regulated prices and the investment profile.

The approach in the Revised CAM recognises current and future investment needs but, rather than using a smoothed annuity, it sets prices that will rise as the cost of the investments increase. ComReg has assessed Eir's '*business as usual*' budget plans and the implication of a more extensive NGA rollout for infrastructure investments and we have derived prices that should be consistent with that pattern of capital expenditure. This should ensure that any future price shocks are minimised while striking the required balance between allowing Eir recover its costs for wholesale CGA services while maintaining sufficient incentives to encourage efficient NGA investments.

The scheduled annual review during the Price Control Period, as discussed at Chapter 12, should also provide price certainty to operators, including Eir, as prices can be revised where material and sustainable changes regarding potential over / under investment by Eir in its pole network (compared with forecasts in the Revised CAM) are identified.

- 4.146 In relation to Vodafone's submission at paragraph 4.109 that ComReg should accept the offer of a holistic and multi-period review (historical and forward looking) of the necessary infrastructure investment that the use of Infrastructure Renewals Accounting implies, ComReg intends to review Eir's investments in poles each year, and this review should allow ComReg to determine if the assumptions regarding pole investment contained in the Revised CAM remain appropriate.
- 4.147 With regard to Vodafone's views that ComReg should consider the IRE approach suggested by Eir / CEG, ComReg considers that the IRE approach is not appropriate for the reasons set out at paragraph 4.145. Furthermore, Eir / CEG did not provide any substantiated detail on the anticipated level of pole replacement over the medium term with Eir confirming that "*The CEG analysis is not based on any particular set of plans by open eir for pole replacement.*"¹⁷² but rather "*...is simply contrasting the model that applies for the period of the control ...with an increased rate of pole replacement required later arising from the increased ageing of the pole base arising from limited replacement during the control period...*"¹⁷³
- 4.148 In addition, as part of ComReg's request for information from Eir by way of a Section 13D¹⁷⁴ request for data on Eir's forecasted pole replacement over the Price Control Period Eir responded by stating that "...&" Therefore, absent a fully justified and well grounded forward looking replacement approach from Eir, we consider that our approach of allowing a replacement rate of 8% for poles and 5% for ducts should provide the appropriate economic and pricing signals to operators, including Eir, over the Price Control Period, as discussed at paragraphs 4.139 - 4.144.
- 4.149 We note the point raised by E-net at paragraph 4.102 that there is no means of control as to where the funding emanating from the adjustment will be invested and this could lead to unnecessarily high end user prices and in addition the views of Vodafone (at paragraph 4.108) on how ComReg would monitor the necessary and efficient capital investments used to justify pricing, ComReg refers to the annual review of pole investments as discussed in Chapter 12, paragraphs 12.19 to 12.21.
- 4.150 Furthermore, the Revised CAM includes a replacement factor of 8% to allow for the additional level of pole replacement that is deemed necessary to support the

¹⁷² Eir note on "Additional information from meeting of 22nd October and mail of 17th November", page 1, at Annex 8.

¹⁷³ Eir note on "Additional information from meeting of 22nd October and mail of 17th November", page 1, at Annex 8.

¹⁷⁴ Section 13D(1) of the Communications Regulation Act 2002 (No. 20 of 2002), as amended provides that: "The Commission may at any time, by notice in writing, require an undertaking to provide it with such written information as it considers necessary to enable it to carry out its functions or to comply with a requirement made to it by the Minister under section 13B."

deployment of NGA. Therefore, ComReg would expect that, should NGA be deployed more extensively in the D-Side of Eir's network, Eir's level of pole replacement will increase with the result that the investment costs reported in Eir's Top Down costs will also increase.

- 4.151 For example, were Eir to fully deploy an NGA network by 2020 then its investment in poles over this period should align with the pole investments allowed for in the Revised CAM. As a consequence, when the Revised CAM is updated in subsequent price control reviews to cover the period post 2020, the TD pole costs should already include the investments consistent with a fully deployed NGA network and ComReg would not need to include a further replacement factor for poles in the 2020 version of the model. In the likely scenario the NGA network is only partly deployed ComReg would still expect that the replacement factor could be revised downwards to account for the level of pole replacement for NGA that has taken place by that date.
- 4.152 There is also a possibility that ComReg may have under-estimated the level of pole replacement necessitated by the deployment of NGA. On the other hand, if the NGA network is only partly deployed during the Price Control Period then the level of investment evident in the Eir's accounts at the end of the period would still be expected to be lower than the level of investment allowed for in the BU valuation. It is only when an NGA network is fully deployed to all parts of the country that the associated additional investment allowed for in the BU valuation for replacement assets will become evident in Eir's accounts. Therefore, the annual review of pole investment by Eir, as discussed in Chapter 12, paragraphs 12.19 - 12.21, may result in a review of the pole access price by ComReg should there appear to be evidence of a significant over or under recovery of costs.
- 4.153 We consider that paragraphs 4.151-4.152 also addresses the concerns raised by ALTO at paragraph 4.98 where it pointed out that where Eir commercially decide to underinvest the industry should not be penalised. We consider that in order to provide the appropriate investment signals to operators going forward and to ensure cost recovery for Eir we must allow for a level of pole replacement for the deployment of the NGA network. See paragraphs 4.139-4.142.
- 4.154 Further to Vodafone's views at paragraph 4.105 and CEG's views at paragraph 4.110 regarding the economic value of assets, ComReg considers that the use of economic value (which is equal to the net present value of future revenues generated by an asset) is circular in the context of cost oriented prices, since prices are set by reference to costs. The objective of cost orientation is to ensure cost recovery (plus a reasonable rate of return) of the respective assets. In the TD approach, this means that where an asset is fully depreciated but still in use, no further costs are recouped for that asset regardless of the economic lifetime as the costs have already been recovered by the operator. Also, the asset is only

replaced on the basis that it is necessary to do so for network operational reasons (e.g., NGA roll-out) or health and safety reasons and not because the asset has reached the end of its regulated asset life. Therefore, the assumed asset life does not affect the quantity or timing of asset deployment in the Revised CAM and the level of cost recovery for each asset is the same regardless of whether we use the economic life or the regulatory asset life of the asset. ComReg considers that it is also preferable to use TD costs to derive the value of Reusable Assets as it avoids the over recovery of costs.¹⁷⁵

- 4.155 In relation to E-net's views at paragraph 4.103 that the proposed replacement rate indicates a life of 17.5 years, ComReg does not agree that E-net's analysis reflects either the level of pole replacement or the asset life allowed for in the Revised CAM. Firstly, E-net's views that a regulated asset life of 30 years implies a replacement rate of 3.33% of the pole base each year is not consistent with the observed levels of replacement. This is confirmed in Eir's comment that "*a large share of eircom's poles is already over 30 years old and will need replacing in the medium term*"¹⁷⁶. Indeed the percentage of pole replacement allowed for in the TD 'business as usual' scenario at \times is significantly less than 3.33%. Therefore, the level of replacement allowed for in the 'business as usual' case is the rate of \times based on the TD cost data from Eir. However, as noted at paragraph 4.140, NGA deployment can be expected to result in a much higher level of pole testing than is undertaken in the ongoing 'business as usual' testing and it is this differential between the level of pole replacement required to support NGA deployment and the lower level of ongoing pole replacement that would occur if NGA was not deployed that necessitates the inclusion of the replacement factor of 8% for poles and 5% for ducts as described at paragraphs 4.139 - 4.144.
- 4.156 Secondly, we disagree with E-net's calculation of deriving the asset life for the level of investment allowed for in a BU model, by simply dividing the percentage of the asset base that has been valued on a current cost basis by the number of years in the price control. For clarity, in the Revised CAM, poles are valued on a current cost basis only if they are being replaced either for "business as usual" reasons or in order to support NGA roll-out. Poles which do not have to be replaced continue to be valued on the basis of the TD HCA costs even if the pole cost is fully depreciated in Eir's accounts. Therefore, the asset life of poles remains 30 years in the Revised CAM regardless of the percentage of the poles that are assumed to be replaced or the fact the price control is to apply for three years.
- 4.157 ComReg notes the views of Eir at paragraph 4.114, that using primarily a TD valuation of Reusable Assets for pricing access services "*...is substantially*

¹⁷⁵ It is also worth noting, as set out in ComReg Decision D03/09, that the asset lives determined in D03/09 adequately reflect their useful economic life for regulatory purposes.

¹⁷⁶ Eir Response to Consultation 15/67, paragraph 3.8.

flawed...because it is based on the current net book value of these assets after the combined effect of a historic peak of investments in years separated from the modelling year by the length of the regulated asset life and the particular implementation of a change in regulated asset lives in 2009.”¹⁷⁷ and CEG’s point (see paragraph 4.116) regarding the use of historic costs for poles at a point in time in the investment cycle where most of the assets have been written down to zero value in accounting terms “...will also lead to unstable prices to end customers over regulatory periods...”. ComReg considers that it is appropriate to value Reusable Assets on the basis of the current net book value as this represents the costs that Eir has incurred in deploying those assets and therefore the costs that Eir should recover in future wholesale prices. In particular, there is no evidence that Eir has not already recovered the historic depreciation costs of its access network assets to date as the Wholesale Access market has consistently shown returns in excess of the regulated WACC in recent years. Furthermore, we do not agree with Eir “that the annual charge on the re-usable assets is currently at a historic low level and will increase through the control period”¹⁷⁸. Eir will only incur additional costs over and above the current NBV of an asset if it has to replace that asset but if that asset can be reused we see no reason why the annual charge should increase. It is only when Eir have to replace an asset that the annual charge will increase and for this reason the Revised CAM is using a BU approach rather than a TD approach to derive the cost of replacement assets. The inclusion of a replacement factor is intended to capture the estimated increase in asset investments required in future years, which ensures that ComReg’s approach is appropriate for estimating the long-run cost of both reusable and replacement assets, as discussed below at paragraphs 4.139 to 4.142.

- 4.158 In response to the views of CEG and Eir (see paragraphs 4.115 - 4.116) that as poles (which are fully depreciate but still in use) are not included in the cost calculation this gives rise to price increases in the future as fully depreciated poles are replaced, ComReg agrees. See also paragraph 4.157.
- 4.159 Having considered the submissions from respondents our approach for determining pole access prices by taking account of Eir’s Indexed RAB based on 92% reuse of Eir’s pole base (absent NGA rollout) using projected TD costs while in addition taking account of 8% of pole replacement for NGA deployment based on BU-LRAIC+ costs remains appropriate for the reasons set out at paragraphs 4.138 to 4.158 above and for the reasons set out in Chapter 4, paragraphs 4.123 to 4.143 of the Consultation Document.

¹⁷⁷ Eir Response to Consultation 15/67, page 21.

¹⁷⁸ Eir Response to Consultation 15/67, page 21.

- 4.160 ComReg maintains the view that it is appropriate to determine duct access prices by taking account of Eir's Indexed RAB based on 95% reuse of Eir's duct base (absent NGA roll-out) using projected TD costs while in addition taking account of 5% for duct replacement for NGA deployment based on BU-LRAIC+ costs remains appropriate for the reasons set out at paragraphs 4.138 to 4.158 above and for the reasons set out in Chapter 4, paragraphs 4.123 to 4.143 of the Consultation Document.

4.4.4 ComReg's Final Position:

Appropriate costing methodology for specific assets

- 4.161 Eir's Indexed RAB should be applied to Reusable Assets (and non-replicable assets) where the objective is to ensure that there is no over-or-under recovery of costs.
- 4.162 The BU-LRAIC+ methodology should be applied to Non-reusable Assets (or replicable assets) where the objective is to encourage the deployment of alternative infrastructure.
- 4.163 For active assets (line card, backhaul, etc.) a BU-LRAIC+ methodology should be applied with an adjustment for economies of scale.

Appropriate reuse and replacement factors

- 4.164 Pole access prices are based on Eir's Indexed RAB on the basis of 92% reuse of Eir's pole base (absent NGA roll-out) using projected TD costs. In addition, there is a provision of an additional 8% for pole replacement due to NGA deployment based on BU-LRAIC+ costs.
- 4.165 Duct access prices are based on Eir's Indexed RAB on the basis of 95% reuse of Eir's duct base (absent NGA roll-out) using projected TD costs. In addition, there is a provision of an additional 5% for duct replacement due to NGA deployment based on BU-LRAIC+ costs.

Chapter 5

5 Cost Modelling

5.1 Introduction

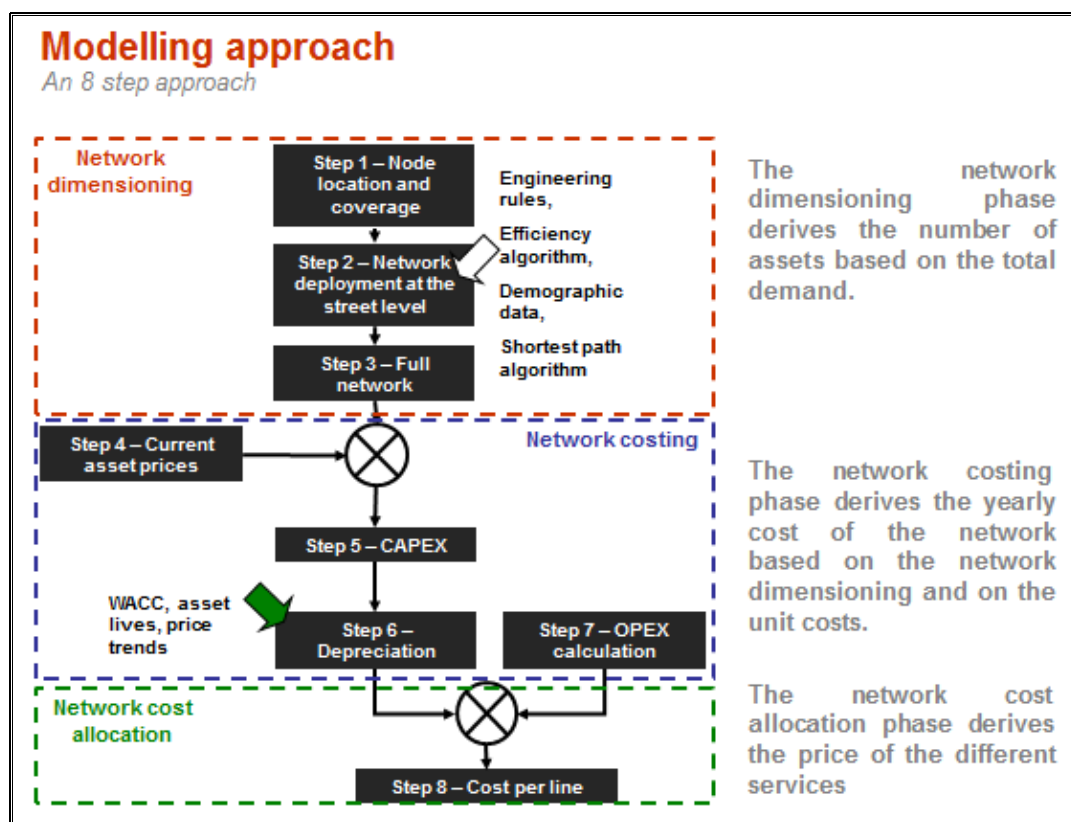
- 5.1 This chapter looks at the modelling approach used to determine the appropriate level of costs associated with LLU, SLU, SB-WLR, SABB, CEI and dark fibre. The model is referred to throughout this Decision Document as the revised copper access model (the '**Revised CAM**').
- 5.2 In Chapter 5 of the Consultation Document we discussed our preliminary view on how the copper access network should be dimensioned in order to determine the number of assets required to meet the network demand and how this should be linked to exchanges (or MDFs) in order to aggregate individual exchange areas into sub-national areas i.e., the LEA. In Chapter 5 of the Consultation Document we also discussed our preliminary view regarding the level of investment and the costs associated with running the access network based on the assets required and the level of demand associated with the dimensioned copper access network.
- 5.3 The respective points are discussed under the following headings:
1. Network dimensioning and network costing;
 2. Network cost allocation - line volumes; and
 3. Network cost allocation - determination of prices.

5.2 Network dimensioning and network costing:

5.2.1 Overview:

- 5.4 ComReg's modelling approach was based on three phases, as described in detail in Chapter 5 of the Consultation Document and as illustrated in Figure 4.

Figure 4: Illustration of cost modelling approach for Eir's wholesale access network



Source: TERA

5.5 In summary, the proposed modelling approach, as set out in Chapter 5 of the Consultation Document, was based on the following three phases:

- Phase 1: Network dimensioning:** this phase derives the number of assets based on the total demand i.e., steps 1 to 3 of Figure 4.
- Phase 2: Network costing:** this phase derives the annual cost of the network. Operating costs for the network are calculated using Eir's TD data as a starting point and applying efficiency adjustments. Phase 2 is captured in steps 4 to 7 of Figure 4.
- Phase 3: Network cost allocation:** this phase derives the costs of the individual services, i.e., step 8 of Figure 4.

- 5.6 For a detailed discussion on the proposed modelling approach please refer to the Consultation Document, Chapter 5, subsections 5.4 – 5.6.

5.2.2 Submissions to the Consultation Document:

- 5.7 There was general agreement from respondents regarding the proposed principles, inputs and assumptions of the Revised CAM but a number of points were also raised.
- 5.8 Vodafone welcomed “...*the use of a Top Down Based RAB, as well as the stated efficiencies adjustment.*”¹⁷⁹ Vodafone also submitted a letter to ComReg on 16 December regarding its review of the non-confidential version of the Revised CAM. Please refer to Annex 10 for a summary of the points raised as well as ComReg’s consideration of them.
- 5.9 BT generally agreed with ComReg, adding that “*it is too early to factor SIRO and NBP into the model as these networks are not yet built (or even finalised) in the case of NBP and at the launch phase in the case of SIRO.*”¹⁸⁰ Eir stated that it “...*generally agrees with the principles, inputs, and assumptions that inform the Bottom-Up modelling of the necessary assets for the CAM.*”¹⁸¹
- 5.10 The points raised by respondents are addressed under the various headings below.

Tilted annuity and price trends:

- 5.11 Eir noted “*several serious issues of principle with the form of tilted annuity that is used to develop the annual charge on these assets through the price control period.*” Eir believed that the proposed tilted annuity approach “...*will require significant price increases over the longer term for services priced using Bottom-Up modelling*”¹⁸² and that “*a standard annuity path should instead be adopted which would provide for greater price stability and a better expectation of cost recovery over time which will support efficient investment.*”¹⁸³
- 5.12 CEG made similar points to that of Eir, suggesting that if ComReg is not willing to allow higher prices in the future “...*it should set prices according to a constant annuity - allowing slightly higher prices now that will (all else being equal) remain nominally constant and ensure full recovery of investment.*”¹⁸⁴ CEG stated that

¹⁷⁹ Vodafone Response to Consultation 15/67, page 5.

¹⁸⁰ BT Response to Consultation 15/67, page 5.

¹⁸¹ Eir Response to Consultation 15/67, page 21.

¹⁸² Eir Response to Consultation 15/67, page 5.

¹⁸³ Eir Response to Consultation 15/67, page 12.

¹⁸⁴ CEG Report, page 57.

“A standard annuity allows equal recovery of capital cost (depreciation and return of capital) of an asset in every period of an asset’s life...”¹⁸⁵

- 5.13 CEG, stated that *“In setting prices based on tilted annuity depreciation, ComReg must continue to allow the capital cost implied by its tilted annuity approach over the asset life for each asset.”¹⁸⁶* CEG stated that if this did not happen then the approach *“...will be time inconsistent and will effectively truncate the future recovery of capital that is embodied in the current decision...[and]...will create an expectation of under-recovery which will lead to under-investment.”¹⁸⁷*
- 5.14 CEG stated that *“it is not credible that ComReg will allow the LLU and SLU prices implied by the tilted annuity path set in its current decision in the future because:*
- (i) It is likely ComReg will consider prices based on a \times capital charge for LLU and a \times capital charge for SLU as unreasonably high (note they are growing at \times per year, respectively, which is faster than inflation);*
 - (ii) The paths could result in prices that are materially above EC guidance;*
 - (iii) ComReg’s current approach will result in SABB and SB-WLR prices converging on LLU prices, which is likely to be unacceptable to ComReg;*
 - (iv) The price paths could create a price squeeze particularly in urban areas if retail prices are not growing commensurately. That is, in the future the margin between retail and regulated input prices (e.g., for the LLU or SABB) will be reducing if retail prices are not growing at a faster rate than the regulated input prices;*
 - (v) In the past, ComReg has left prices constant at the end of regulatory periods instead of resetting prices and ComReg proposes that it may do so again. This would lead to significant under-compensation under the tilted annuity approach.”¹⁸⁸*
- 5.15 CEG compared the prices for SABB and SB-WLR with the price for LLU, stating that *“...Eir’s prices for SABB and SB-WLR services, which rely on largely the same assets as the LLU service, are set on a historical cost accounting basis with straight-line depreciation...”¹⁸⁹* CEG considered that the prices for SABB and SB-WLR should *“...be set with a margin over the price for LLU. SABB and SB-*

¹⁸⁵ CEG Report, page 57.

¹⁸⁶ CEG Report, page 54.

¹⁸⁷ CEG Report, page 54.

¹⁸⁸ CEG Report, page 54/55.

¹⁸⁹ CEG Report, page 56.

*WLR services are downstream services and use active assets (line card, backhaul) on top of LLU.*¹⁹⁰

- 5.16 Vodafone, in its letter of 2 December 2015, noted “...*the most serious error contained in the Annuity formula*”¹⁹¹ and explained that “...*instead of economic lives being used, current regulatory accounting lives have been used.*”¹⁹² Vodafone reiterated their points from Chapter 4 that “...*the observed replacement and reinvestment profile of infrastructure assets, such as Poles and Duct, are not aligned with these current asset lives.*”¹⁹³

Consistency of approach for similar assets:

- 5.17 CEG stated that there is inconsistency by ComReg in relation to its decision on its depreciation methodology stating that “*The application of different depreciation approaches to different services is inconsistent with its decision, earlier in the Draft Decision, to determine a costing methodology for each asset and to apply that same costing methodology for every service that uses that asset.*”¹⁹⁴

Payment terms:

- 5.18 CEG disagreed with ComReg’s approach on the assumed time lag between investment expenditure and generation of revenues. CEG considered that “... *an operator would not be able to realise revenues at the same time as the investment is made, and a time to build of 6 to 12 months is realistic and efficient...*”¹⁹⁵ Furthermore, CEG considered that for suppliers “...*a payment term of 1-2 months seems reasonable so that if Eir receives revenues 7.5 months after incurring expenditure then it would be incurring expenditure around 6 months before receiving revenues...*”¹⁹⁶
- 5.19 Vodafone in its letter of 2 December 2015 disagreed with Eir / CEG’s response to the Consultation Document with regard to the payment terms where CEG are proposing a delay of between 6 and 7.5 months stating that “*If this was a pure tilted annuity model then Vodafone would agree, but it is not, as the NBV, from eir Separated Accounts, already includes the Fixed Asset related WIP (Work in Progress) and thus eir is already being compensated in advance on assets under*

¹⁹⁰ CEG Report, page 56.

¹⁹¹ Vodafone letter of 2 December 2015, page 8, at Annex 8.

¹⁹² Vodafone letter of 2 December 2015, page 8, at Annex 8.

¹⁹³ Vodafone letter of 2 December 2015, page 8, at Annex 8.

¹⁹⁴ CEG Report, page 57.

¹⁹⁵ CEG Report, page 19.

¹⁹⁶ CEG Report, page 19/20.

construction and thus there is no need for an adjustment in the payment period to reflect for this construction (thus non-revenue) generating period.”¹⁹⁷

Formula errors:

5.20 CEG noted two errors in the Revised CAM as follows:

- (i) *“...an error in the calculation of accounting NBV for investment made during 2010-2014... As a result, the accounting NBV calculated by the spreadsheet is over-depreciated. The effect of this error is to reduce the annuity compensation for reusable assets by around \times annually...”¹⁹⁸*
- (ii) *“...an error in the way the payment term has been implemented in the tilted annuity formula in the draft model... There is no reason why the calculation in the draft model subtracts six months from the payment term (the payment term is intended to reflect the time to build). The effect of subtracting six months from the payment term, when the payment term is set to zero, would imply that revenues are being received 6 months in advance of the investment even being made.”¹⁹⁹*

Treatment of Non-reusable Assets:

- 5.21 Vodafone questioned *“...the logic behind the uplift of costs, and prices, for “non-reusable” assets and would strongly encourage a revisit of this by ComReg...”²⁰⁰*
- 5.22 Vodafone raised concerns around the use of BU modelling for *“...civil engineering costs between E and D side cables.”²⁰¹ Vodafone stated “that this is not in line with TERA’s overall approach, whereby all civil engineering costs are to be treated as costs for the Top Down model.”²⁰²*

Other issues:

- 5.23 BT did not agree with paragraphs *“...5.42 and 5.43, and 5.44”²⁰³ stating that “...the clarity concerning a customer’s serving exchange has become less certain with the re-homing of cabinets to different exchanges.”²⁰⁴ BT suggested that “the network deployment at the street level needs to be modified to include re-homed cabinets.”²⁰⁵*

¹⁹⁷ CEG Report, page 19/20.

¹⁹⁸ CEG Report, page 18

¹⁹⁹ CEG Report, page 20.

²⁰⁰ Vodafone Response to Consultation 15/67, page 5.

²⁰¹ Vodafone Response to Consultation 15/67, page 5.

²⁰² Vodafone Response to Consultation 15/67, page 5.

²⁰³ BT Response to Consultation 15/67, page 5.

²⁰⁴ BT Response to Consultation 15/67, page 5.

²⁰⁵ BT Response to Consultation 15/67, page 5.

- 5.24 Vodafone stated that “we would need to understand how costs have been adjusted for efficiencies, for example how are SB-WLR repair and provisioning costs adjusted to reflect these efficiencies, with specific focus on how, for example, the efficient LFI and SLA requirements have been modelled and costed by ComReg...”²⁰⁶.
- 5.25 Vodafone also suggested that “...a comparison between the costing methodologies employed ...[and] results of the proposed modelling approach ...[and]... outputs of Eir annual regulatory accounts, would ensure that there is sufficient reassurance and reconciliations provided ...[and] that Eir is both rewarded for recovering its (efficiently incurred) costs...”²⁰⁷ Vodafone further added that “...this would provide the reassurance to the industry that any inefficiencies are not recovered from other wholesale products, while ensuring the Eir has the necessary encouragement to continue with efficient investments and practices.”²⁰⁸

5.2.3 ComReg’s Position:

- 5.26 ComReg notes that there was general agreement from respondents regarding the proposed principles, inputs and assumptions of the Revised CAM. ComReg’s position with regard to the points raised by respondents are addressed under the relevant headings below.

Tilted annuity and price trends:

- 5.27 Further to Eir and CEG’s submissions’ at paragraphs 5.11-5.13 regarding ComReg’s approach on tilted annuities and their view that a standard annuity should be adopted instead, ComReg has considered the views of Eir and CEG and while we acknowledge the fact that the titled annuity formula may result in price increases in future that there are a number of considerations:
- Firstly, we acknowledge the views of CEG at paragraph 5.13 that deviating between alternative tilted annuity approaches over the asset life for each asset may lead to an expectation of under-recovery and under-investment, and we would generally agree with this. It is important to note that our approach is consistent with the approach adopted in the CAM in 2010 and in the Consultation Document except that (1) we have decided to rebase the price trends to take account of actual price evolution for the period between 2009 and 2013 rather than using forecasts (as was the case in 2010 LLU Pricing Decision and in the Consultation Document) and (2) we are taking account of the change to the valuation for ducts and poles as discussed in paragraphs 4.138 to 4.144. Therefore, we note, that

²⁰⁶ Vodafone Response to Consultation 15/67, page 8.

²⁰⁷ Vodafone Response to Consultation 15/67, page 5.

²⁰⁸ Vodafone Response to Consultation 15/67, page 5.

while this introduces a small inconsistency with the price indices used in the previous CAM, ComReg does not consider that this would have an impact on Eir's ability to recover its costs given that the historic indices affected wholesale prices (mainly LLU) which accounted for a relatively small portion of Eir's overall revenues. If appropriate, for the next price control period, the relative merits of the continuation of the tilted annuity approach and deviation of same would be one of the factors considered by ComReg at that time.

- The future price increases are driven by the ongoing increases in copper access network asset prices which inevitably feed into increases in the average cost of services carried over that network. Eir's preference for using a standard annuity rather than a tilted annuity to determine the timing of cost recovery may result in lower price increases in the long run only by starting with higher prices during the Price Control Period. The standard annuity sets a constant price even when the cost of the underlying asset is changing e.g., the underlying cost of copper increases so the unit cost of the service will also increase. A tilted annuity would factor these increases into the price trend while a standard annuity does not. Therefore, the standard annuity approach may lead to a steeper increase when the price is reviewed in the next control period, as opposed to using a tilted annuity which sets the price each year.
- ComReg are also conscious that having a constant price for the three years of the price control based on the average costs observed in that period can mean that there is a potential price 'spike' when the price control is reset, as prices will need to be adjusted to the higher unit costs expected in the future. As the Revised CAM is capable of calculating a monthly or annual price for each year of the Price Control Period ComReg considers that there is merit in setting prices for the wholesale access services under review based on the costs that are calculated each year. This will result in prices that will rise as the underlying average costs rise but should ensure a smoother evolution in those wholesale prices and reduce the need for future price spikes, as discussed in paragraphs 5.125 to 5.128.
- ComReg considers that setting a monthly or annual price for each year of the Price Control Period is also more aligned with the tilted annuity approach adopted in the Revised CAM, which is implemented to ensure that calculated annual costs reflect the expected changes in the prices of the underlying assets. ComReg also notes that the tilted annuity approach is widely used by NRAs in setting regulatory prices.

- 5.28 Having considered the submissions from respondents, ComReg remains of the view that a tilted annuity is the appropriate approach to determine the timing of cost recovery but we consider that the network price indices should be rebased to reflect the recent history of price changes i.e., for the period between 2009 and 2013. The tilted annuity approach also ensures consistency with the pricing approach taken in other regulatory contexts.
- 5.29 With regard to points raised by CEG at paragraph 5.14 ComReg notes the following:
- (i) In relation to the point that the required level of future LLU and SLU prices are not credible – as the prices are growing at $\%$ per year, respectively, which is faster than inflation, ComReg would like to point out that the LLU and SLU price increases year-on-year relate to a combination of factors including: assumed volume decline year on year (see paragraph 5.96), an increase in assumed investment year-on-year to replace Non-reusable Assets using BU costs (see paragraphs 4.137-4.144), and the movements in price trends year-on-year.

In any event we have decided to set a cost oriented monthly or annual price for each year of the Price Control Period for each of the wholesale fixed access services under review, as set out at paragraphs 5.125 to 5.128. For LLU and SLU, these prices would not prevent Eir from charging lower prices for LLU and SLU monthly rental, when appropriate, provided that any proposed lower charges are subject to ComReg's prior approval and that Eir is in compliance with its regulatory obligations (including for the avoidance of doubt to charge prices consistent with the Revised Copper Access Model) and other laws. Eir has access to the entire cost model (including costing data) and the associated assumptions used in the modelling process in determining the current charges. In addition, during the Price Control Period, Eir should be aware of the actual level of unbundling undertaken by operators at large and small exchanges (or at cabinets) as well as the actual length of lines being unbundled by operators at those exchanges (or cabinets). Changes in these factors may mean that Eir may be able to justify (to the satisfaction of ComReg) that LLU and / or SLU monthly rental prices should be revised below the current charges set by ComReg in this Decision.

- (ii) In relation to the point that price paths could result in prices that are materially above European Commission guidance, ComReg notes that the 2013 Recommendation sets out an "*average monthly rental access price for full unbundled copper local loop within a band between €8 and €10*"²⁰⁹. The full average LLU price of €10.84 (including fault repair costs) determined in this

²⁰⁹ Paragraph 41 of the 2013 Recommendation: <https://ec.europa.eu/digital-agenda/en/news/commission-recommendation-consistent-non-discrimination-obligations-and-costing-methodologies>

Decision is not materially outside the band specified. We consider that given Ireland's topography and line density, cost oriented prices for access line services can be higher than EU averages where objectively justified. A BEREC report on the review of the draft 2013 Recommendation considered that €8-10 price range should not be mandatory and prices outside this range should be acceptable if they can be objectively justified.²¹⁰

- (iii) In relation to CEG's point at paragraph 5.14 (iii) and paragraph 5.15 that the current approach will result in SABB and SB-WLR prices converging on LLU prices, ComReg notes that this is not possible since the SB-WLR price is determined as the higher of either the TD costs of providing SB-WLR nationally or a combination of the BU costs (derived with tilted annuities) and TD costs of providing SB-WLR in the Modified LEA, as discussed in Chapter 6. The SABB price relates to the specific TD costs of providing SABB Outside the LEA only. Therefore, our pricing approach for SB- WLR and for SABB Outside the LEA is always set so as to ensure sufficient margin over LLU. A BU approach is considered for setting prices in the more competitive parts of the country as it provides the appropriate "build or buy" signals to the market place and encourages efficient investment and innovation in new and enhanced infrastructures.
- (iv) In relation to the point that the margin between retail and regulated input prices (e.g., for the LLU or SABB) will be reducing if retail prices are not growing at a faster rate than the regulated input prices, ComReg notes that this may be true under certain circumstances. However, the reason for using a BU approach for setting wholesale prices in the more competitive parts of the country (Modified LEA) is that this approach sends the appropriate "build or buy" signals to the market place and encourages efficient investment and innovation in new and enhanced infrastructures. This is best achieved by using a tilted annuity as the "higher prices now" implied by the constant annuity would distort investment signals during the period of the price control. If the retail prices prevailing in the future are not sufficiently above the price of copper access wholesale services appropriately derived from the projected current costs then this may signal may imply that (i) the continuing provision of copper based services at that time is no longer efficient and instead incentivise investment in alternative infrastructures capable of delivering the retail services to customers in a more cost effective manner and/or (ii) that the prevailing retail prices are too low. In any event, the LLU price can be reduced as set out at (i) above which means that Eir can reduce it subject to ComReg's approval. In addition, the regulatory mechanism discussed in Chapter 12 means that Eir has the flexibility, subject to ComReg's regulatory approval, to reduce the wholesale access price for

²¹⁰ Berec Report BoR (13) 41, page 6.

SABB Outside the LEA below the regulated price subject to a price floor which should be set by reference to the BU-LRAIC+ costs in the Modified LEA.

(v) In relation to the point that ComReg has left prices constant at the end of the regulatory periods instead of resetting prices, this has been addressed at paragraphs 5.132-5.133.

5.30 In response to Vodafone's views at paragraph 5.16 that economic lives instead of regulatory asset lives should be used in the annuity formula, this point is addressed in Chapter 4, paragraph 4.154. ComReg reviewed Eir's asset lives in ComReg Decision D03/09²¹¹ and we consider that the current regulatory asset lives remain relevant at this time.

Consistency of approach for similar assets:

5.31 In response to CEG's views (at paragraph 5.17) that there is inconsistency in relation to the depreciation methodology between different services and assets, ComReg does not agree. The depreciation approach is the same for most products i.e., LLU, SLU, poles, ducts, trenches and dark fibre. Similarly, while the depreciation approach is consistent for SB-WLR the price derived for SB-WLR is based on the higher of the TD costs of providing SB-WLR nationally or a combination of the BU approach and TD costs in the Modified LEA. For SABB, it is important to keep in mind that the economics are very different since we are only addressing the SABB price Outside the LEA.

Payment terms:

5.32 In relation to CEG's views at paragraph 5.18 that ComReg should have an average delay of 7.5 months between investment expenditure and receipt of revenues from that investment, ComReg does not consider that the example of New Developments is relevant in the case of the BU modelling approach undertaken in the Revised CAM. New developments experience longer average delays before revenues can be realised as new houses need to be sold before demand for telecoms services can be provided. However, the Revised CAM is developed on the basis of the operator deploying a network sized to meet the level of demand existing during the Price Control Period. Therefore, the delay between investment being funded and revenues being realised can be assumed to be much shorter than in the example provided by CEG.

5.33 Nevertheless, ComReg has reviewed the assumptions and valuations used in the Revised CAM and we consider that a 3 month delay period seems reasonable in the context of LLU. This is also consistent with Eir's view as set out in the CEG report which highlighted that "*...eircom advises that when building into new housing developments they typically experience a 3 month lag before*

²¹¹ ComReg Document 09/65: Review of the regulatory asset lives of Eircom Limited, 11 August 2009. http://www.comreg.ie/_fileupload/publications/ComReg0965.pdf

any of the premises are sold and the first customers take the service while they expect a further nine months before all homes are purchased and all services are taken.”²¹²

- 5.34 As customers take the service between 3 months and 9 months, which is 6 months on average, and if we remove the 3 months before the first connection takes place (which seems to be specific to housing estates) this results in a time lag of 3 months on average. This has an impact of increasing the LLU price by 13 cents per month. We note Vodafone’s disagreement at paragraph 5.19 that “...eir is already being compensated in advance on assets under construction and thus there is no need for an adjustment in the payment period to reflect for this construction (thus non-revenue) generating period.”²¹³ However, ComReg considers a 3 month delay on the basis that this represents the average delay experienced by Eir between investment expenditure and the receipt of revenues from that investment.
- 5.35 ComReg considers that it is appropriate to apply the 3 months delay to both the BU and TD capital valuations in the context of the provision of the LLU service as the LLU price is intended to inform the OAO’s decision with regards to whether it should buy the service from the incumbent or build in its own infrastructure to provide the service. As the OAO would be expected to face a delay between investing in its own infrastructure and generating revenue from the services it would ultimately provide using this infrastructure, a 3 month payment term is appropriate.
- 5.36 However, in the context of infrastructure access services i.e., access to poles and ducts, ComReg does not consider it appropriate to have a payment term time lag. The access price is intended to ensure that the Incumbent is capable of recovering the costs of the investments it has made in these assets as, in the majority of cases, the OAO is seeking access to infrastructure that already exists. Furthermore, the Incumbent is already generating revenues from services (which uses infrastructure access) such as SB-WLR. Even when it is necessary to replace a pole or a section of duct to facilitate infrastructure access by an OAO the incumbent can immediately generate revenue from the replacement infrastructure once it is deployed. Therefore, ComReg considers that the payment term should be zero months in the case of infrastructure access.

²¹² CEG Report, page 19.

²¹³ CEG Report, page 19/20.

Formula errors:

- 5.37 With regards to the error noted by CEG at paragraph 5.20(i) in relation to the calculation of the accounting NBV for investments made during 2010-2014, ComReg acknowledges the error and this has since been modified in the Revised CAM.
- 5.38 At paragraph 5.20(ii) CEG stated that there is an error in the way the payment term has been implemented whereby the calculation in the Revised CAM subtracts six months from the payment term, when the payment term is set to zero, which would imply that revenues are being received 6 months in advance of the investment even being made. However, ComReg notes that without the subtraction of 6 months, the formula would already embed a 6 month time period and therefore ComReg considers that this aspect of the calculation is implemented correctly.
- 5.39 ComReg also noted an error where the costs associated with one category of chambers in Dublin was used for Provincial areas and vice versa. This has now been corrected in the Revised CAM.

Treatment of Non-reusable Assets:

- 5.40 Further to the point raised by Vodafone at paragraph 5.21 that ComReg should revisit the uplift of costs and prices for Non-reusable Assets, this is addressed in Chapter 4, paragraphs 4.138 to 4.144.
- 5.41 With regards to Vodafone's submission at paragraph 5.22 that the division of civil engineering costs between E and D side cables in the Bottom-Up model is not in line with TERA's overall approach, whereby all civil engineering costs are to be treated as costs in the TD model, this is addressed in Chapter 4, paragraphs 4.127 to 4.130.

Other issues:

- 5.42 In relation to BT's point (see paragraph 5.23) that network deployment needs to be modified to include rehomed exchanges, ComReg does not agree. ComReg considers that the scorched node approach adopted in the Revised CAM is reasonable as it assumes that nodes (including cabinets and MDFs) are located consistent with Eir's network design but the model then links customers to these nodes in an efficient manner. The fact that in reality Eir may have linked some customers to nodes in a less efficient way is not relevant from a BU modelling perspective.
- 5.43 ComReg's notes Vodafone's submission (see paragraph 5.24) where they request an understanding on how costs have been adjusted for efficiencies, in particular, SB-WLR repair and how provisioning costs and the efficient LFI have been modelled and costed by ComReg. Please see paragraphs 5.44-5.70.

- 5.44 As detailed in Chapter 6, the monthly price for SB-WLR is in summary the higher of (i) the national TD costs (including a BU cost for the line card); or (ii) the BU costs for the Modified LEA.
- 5.45 As such, the network that is modelled under TD is assumed to have the same investment history as Eir's existing network. Therefore, the TD cost modelling assumptions used do not have the same level of operating cost savings as under a BU approach.
- 5.46 Similarly, an existing network comprised of older cables tends to experience higher fault rates and require more staff to maintain it. As a result a TD approach allows for a higher number of front line staff to cater for the higher LFI consistent with the age profile of the cables in Eir's existing copper access network. Nonetheless, the staff reduction programmes and the subsequent changes to work practices undertaken by Eir in recent years has resulted in reductions in the levels of direct network operating costs — such as repair and maintenance and installation and provisioning. In the Consultation Document, the TD approach used to derive the SB-WLR prices was based on costs which included as part of their modelling assumptions continuation of such increased cost efficiencies.
- 5.47 A review of Eir's 2015 HCAs published in November 2015 showed significant year-on-year reductions in the costs reported in the Wholesale Fixed Narrowband Access market than those anticipated for that year (in the original Revised CAM as part of the Consultation Document).
- 5.48 In the Explanatory Report published by Eir in the annex to the 2015 HCA Separated Accounts²¹⁴, Eir stated that overall operating costs had declined year-on-year in the Wholesale Fixed Narrowband Access market by 14%.
- 5.49 Eir attributed the operating cost decline of 14% to several factors including: the impact of storm events in 2013/14 that were not repeated in 2014/15, as well as the increased efficiencies arising from staff reductions in December 2013 and the full year impact of revised work practices in 2014/15.
- 5.50 In reaching its Final Decision, ComReg is cognisant that using TD HCAs to inform future cost projections that the impact of one-events must be taken into account so as not to either i) overstate as may have been the case based on the 2013/14 HCAs; or (ii) understate in the case of 2014/15 HCAs, the underlying cost trends evident in the reported HCAs.

²¹⁴ 2014/15 HCAs, Annex 1, page 35.

- 5.51 ComReg acknowledges that re-basing the prices for wholesale services to align with the outturn in any particular year could lead to fluctuations in the derived wholesale charges. A more stable pricing regime is ensured if the price adjustments are confined to only significant and sustainable deviations from the modelled levels of costs or network volumes. Therefore, in reviewing the modelled operating costs against the results reported in the HCAs we have isolated the impact of one-off events that distort the long term cost trends while still allowing the influence of more sustainable changes (for example, increased efficiencies due to lower headcounts and revised work practices) to feed through to wholesale charges.
- 5.52 As part of a more detailed review to understand such drivers of potential fluctuations in the underlying HCAs associated with the Wholesale Fixed Narrowband Access market ComReg noted a number of factors in respect of:
- Installation and Provisioning Costs;
 - Repair and Maintenance Costs;
 - Network Support Costs;
 - Fixed and Common Costs; and
 - Capital Costs
- 5.53 These are discussed in turn below.

Installation and Provisioning costs:

- 5.54 Eir's Explanatory Report in comparing the 2014/15 accounts to the 2013/14 noted that the observed decline (of 49%) in Installation and Provisioning costs was partly due to changes in work practices adopted since 2014. In addition, Eir stated that in 2014/15 there was a greater dependency on the use of contract staff to perform connections. However, Eir also stated that a number of one-off events contributed to the observed cost reduction and Eir expected the ongoing level of installation and Provisioning costs in the future to increase from the 2014/15 level²¹⁵.
- 5.55 However, the Installation and Provisioning costs in the Revised CAM had already normalised the level of these costs by applying the average connection costs expected over the Price Control Period to the average number of connections forecast to occur during the same period.

²¹⁵ 2014/15 HCAs, page 4.

- 5.56 As the average connection costs that were applied in the Revised CAM in the Consultation Document already reflected the efficiencies arising from the revised work practices and the renegotiated contractor rates no further changes to the level of Installation and Provisioning costs included in the final Revised CAM were considered necessary.
- 5.57 As a result the overall level of Installation and Provisioning costs included in the Revised CAM are closer to the 2013/14 costs than the 2014/15 costs and as the total number of connections are forecast to be higher than those in 2013/14 the average cost per connection are 10% lower. The net result being that the Installation and Provisioning costs in the Revised CAM remains unchanged.

Repair and Maintenance costs:

- 5.58 In the Consultation Document, using the TD approach ComReg had based the projection of Eir's future repair and maintenance costs on the operational staff numbers that Eir planned to deploy to its service assurance teams (which supports its access network) over the Price Control Period and used the wage rates that applied in December 2013.
- 5.59 This projected headcount was intended to reflect the efficiencies arising from the revised work practices being adopted by Eir (subsequent to the financial year ending June 2014). In addition, the Revised CAM also allowed for additional resources to cater for the increased fault arrival patterns that accompany significant storm events.
- 5.60 However, in reviewing the 2014/15 accounts it is now apparent that the Repair and Maintenance costs included in the 2013/14 accounts were significantly higher due to the additional resources required to deal with the higher number of fault arrivals — due to the storm events in that year. As such, the continued efficiencies and cost savings (see paragraph 5.58-5.59) using the 2013/14 HCAs as a reference point provided too high a starting position to reflect achievable efficiencies over the Price Control Period (i.e., the actual level of costs should be lower relative to those originally assumed in the Revised CAM due to the higher starting point). Therefore, in the final Revised CAM, ComReg has factored in a further reduction to the repair and maintenance field staff headcount over and above the reduction on the 2013/14 levels originally assumed in the Consultation Document.

- 5.61 However, we also acknowledge the fact that the level of storm activity was lower than average in 2014/15 and that to re-base the costs to 2014/15 levels could understate the level of costs that are likely to arise during the Price Control Period. Already, there is evidence of an increase in storm activity in 2015/16 (compared to 2014/15) which is expected to result in an increase in repair and maintenance costs from that reported in 2014/15 HCAs. Consequently, ComReg still allow for additional resources to cater for storm activity over and above the base level headcounts provided by Eir.
- 5.62 Taking into account ComReg's positions in paragraph 5.60-5.61, the repair and maintenance costs in the final Revised CAM are 7% lower than the costs previously included in the Revised CAM in the Consultation Document. While this figure is lower than the repair and maintenance costs that were originally included in the Revised CAM in the Consultation Document it is still higher than the equivalent repair and maintenance costs reported in the 2014/15 HCAs and is, in ComReg's view, more consistent with the typical level of storm events per year that is expected over the price control period.

Network support costs:

- 5.63 The Eir Explanatory Report identified that the level of "Network Support Costs" reported against the Wholesale Fixed Narrowband Access market declined by 17% in the 2014/15 compared to 2013/14.
- 5.64 Network support costs can be considered as an indirect cost — as they include the costs associated with line managers and work management centres that manage and support the front line staff involved in maintenance and provisioning activities. Consequently, the reduction in reported network support costs in the 2014/15 HCAs is only partly due to the increased efficiencies arising from the restructuring programmes adopted by Eir — as network support costs to the Wholesale Fixed Access Narrowband market will also tend to fluctuate in line with the allocation of direct network costs such as repair and maintenance.
- 5.65 As part of the review of the Revised CAM in light of Eir's 2014/15 HCAs the model now flexes the 2014/15 network support costs to increase in line with the modelled increase in the direct 2014/15 repair and maintenance costs. Consequently, this ensures that ongoing efficiency gains evident in the 2014/15 HCAs are captured in the projected costs.

Fixed and common costs:

- 5.66 The level of fixed and common operating costs have also been reviewed in the Revised CAM in light of Eir's 2014/15 HCAs. In order to capture the full year effect of the cost restructuring programmes adopted by Eir in the Revised CAM the projected fixed and common costs are now set as the average of the costs reported in the 2013/14 and 2014/15 HCAs.

Capital costs:

- 5.67 In Eir's Explanatory Report attached as an annex to the published HCAs, Eir also noted that depreciation charges in the Wholesale Fixed Narrowband Access market in 2014/15 declined by 4%²¹⁶.
- 5.68 In the Wholesale Fixed Narrowband Access market the majority of the depreciation charge is due to network assets including copper cables, poles and ducts. Part of the reason for the observed decline in the depreciation charge is that the growth in current generation SABB is attracting a proportion of these network costs out of the narrowband access market into the broadband access market as the current generation SABB service requires full use of the copper line. However, the Revised CAM derives the TD costs of a copper pair with reference to all services using the copper access network so the migration of copper access costs from narrowband to broadband services is already captured in the modelling algorithms and no further adjustments are required to the model inputs. In addition, while the HCA Statements continue to use straight line depreciation to determine the annual depreciation charges against assets each year, as noted in paragraph 4.80, the Revised CAM uses a tilted annuity to annualise costs. Consequently, the application of the asset price index means the level of depreciation reported in the HCA Statements can differ from the equivalent annualised costs calculated in the Revised CAM.
- 5.69 As per ComReg Decision D15/14²¹⁷ a Weighted Average Cost of Capital ('WACC') of 8.18% is used in the Revised CAM. The WACC is applied to the projection of capital costs extracted from Eir's 2013/14 HCA Statements, with the exception of the active assets relating to line cards (which is calculated on a BU basis). As a result, based on the forward looking assumptions used, all things being equal, the derived SB-WLR price per year allows Eir to recover its efficiently incurred costs plus a reasonable return on its investment over the Price Control Period.

²¹⁶ 2014/15 HCAs, Annex 1, page 35.

²¹⁷ ComReg Document No 14/136: Cost of capital; 18 December 2014.

Overall impact of review

- 5.70 As a consequence of the review the projected level of TD operating costs in the Revised CAM is now lower than those used in the Consultation Document. These cost reductions primarily relate to the operating cost associated with the copper access line and have resulted in reductions to the prices of SB-WLR nationally and SABB services Outside the LEA from the prices consulted on. Please see Chapter 6 and Chapter 7 respectively.
- 5.71 ComReg's notes Vodafone's submission (see paragraph 5.24) where they request an understanding on how SLA requirements have been modelled and costed by ComReg. As set out in the Consultation Document (see paragraph 5.260), *"In reviewing the operating costs associated with SB WLR in Eircom's 2014 HCAs, ComReg noted approximately 8% related to Service Level Agreement ('SLA') penalties paid by Eircom to OAOs. ComReg considers that such penalties should not be included in the projection of actual efficient costs used to inform the SB WLR price. ComReg has based the projection of Eircom's future operating costs on the staffing levels that Eircom have identified in relation to the service assurance and development of its copper access network. Therefore, ComReg is of the view that the level of staff allowed for in the Revised CAM should be sufficient to enable Eircom to comply with its SLAs. In addition, setting targets and the enforcement of SLA penalties is intended to provide Eircom with incentives to improve the quality of service in its access network. ComReg considers that if it was to allow Eircom to recover the costs of SLA penalties it pays to OAOs from wholesale charges it levies on OAOs it would reduce these incentives"*. ComReg maintains that view.²¹⁸
- 5.72 In relation to Vodafone's views at paragraph 5.25 regarding the need for a comparison between the costing methodologies, results from the model and the outputs of Eir's regulatory accounts, ComReg would like to point out that as part of the update to the Revised CAM, and in particular in relation to the TD information in the model, ComReg has carried out a detailed comparison with the outputs of Eir's annual regulatory accounting information. However, our objective is also to provide the right incentives to invest and "build or buy" which means departing from Eir's actual costs. As such, the prices derived from the model will differ from the Eir HCA's for a number of reasons, including the fact that there is a different regulatory asset base applied in the model (consisting of both TD assets and BU assets) and given adjustments to costs and volumes to

²¹⁸ We also note the current dispute (http://www.comreg.ie/fileupload/publications/ComReg_15127.pdf) which centres on provisions within Eir's SLAs relating to the repair of faults in LLU services and SB-WLR services. Depending on the outcome of that dispute, it may have an impact on Eir's HCAs (which would be identifiable as part of Eir's annual review, see Chapter 12).

account for efficiencies and expected volumes movements. Please also see the annual review, as discussed in Chapter 12, paragraphs 12.17 - 12.21.

- 5.73 Having considered the submissions from respondents, the network dimensioning approach and network costing approach (steps 1 – 7 in Figure 4) in the Revised CAM remains appropriate for the reasons set out at paragraphs 5.26 to 5.70 above and in Chapter 5 of the Consultation Document, except for slight modifications. We have rebased the price trend data to reflect actual price evolutions between 2009 and 2013 in the tilted annuity (at step 4 in Figure 4) as discussed in paragraph 5.27. In addition, we have revised the payment terms (at step 6 in Figure 4) as discussed in paragraphs 5.32-5.34 as well as taking into account the error noted at paragraph 5.37 in relation to the depreciation formula and incorrect chamber prices at paragraph 5.39.
- 5.74 The network cost allocation phase, or Step 8 in Figure 4, is discussed in subsection 5.3 and 5.4 below.

5.2.4 ComReg's Final Position:

- 5.75 The network dimensioning approach and network costing approach (steps 1 – 7 in Figure 4) in the Revised CAM remain appropriate.
- 5.76 For payment terms (at step 4 in Figure 4) we have revised the average delay between investment expenditure and receipt of revenues from that investment from 0 months to 3 months for provision of services only.
- 5.77 For tilted annuity (at step 6 in Figure 4), the formula applied remains unchanged (as previously applied in 2010) except we have rebased the price trend data to reflect the actual price evolutions between the period of 2009 and 2013 rather than using forecasted data.

5.3 Network Cost Allocation – line volumes:

5.3.1 Overview:

- 5.78 In Chapter 5 of the Consultation Document we set out our preliminary views regarding the movement of line volumes over the price control period. We proposed that line volumes in the BU model approach should remain constant (stable) over the proposed price control period. With regard to SB-WLR and in line with the TD approach, we proposed that the projected future decreases in line volumes for SB-WLR over the price control period should be reflected in the Revised CAM.

5.3.2 Submissions to the Consultation Document:

- 5.79 ALTO agreed while Vodafone agreed in principle, regarding the assumptions for line volume movements over the price control period. Eir (and CEG) disagreed.

Assumptions on declining volume of lines:

- 5.80 ALTO agreed with ComReg's assumption that the volumes in the BU model should remain stable over the proposed price control period while the volumes in the TD model (for SB-WLR) should reflect projected volume decline.
- 5.81 While Vodafone agreed "in principle"²¹⁹ with ComReg's assumptions on volumes, Vodafone noted that "*the line basis used in the calculation of the wholesale services unit prices should take account of the most recent developments in the telecommunications markets, as well as the improving macro-economic conditions...*"²²⁰ Vodafone made particular reference to "*... the continuing growth in Standalone Broadband service, which would appear to be having the effect of, at the very least, stabilising the Access Line volumes.*"²²¹ It also stated that it would need to understand "*...how the line base and potential growth in the underlying Access Line based over the period in incorporated into the modelling of the SB-WLR proposed pricing.*"²²² In Vodafone's letter of 2 December 2015, it made reference to Eir's response to the Consultation Document with regard to volume loss of retail access lines and in particular that these losses are only being partly offset by increases in wholesale line numbers. Vodafone referenced Eir's most recent Quarterly presentation, and the Eir Separated Accounts for June 2015, where it reiterated its view that "*...it would appear as if the total local access line base (when including Standalone Broadband lines) is stabilising...[and] that the underlying access line base could in fact start to grow over the period of this pricing control in the light of the continuing demand and growth of Standalone Broadband services.*"²²³ Vodafone considered that "*... the ComReg approach of assuming a stable access line could actually be viewed as favourable to eir.*"²²⁴
- 5.82 Eir disagreed with ComReg's assumption that the volumes in the BU model should remain stable over the proposed Price Control Period while the volumes in the TD model (for SB-WLR) should reflect projected volume decline stating that "*...both the BU and TD elements of the cost model should reflect the likely structural decline in the volumes of services delivered over the Eir fixed access network...*"²²⁵

²¹⁹ Vodafone Response to Consultation 15/67, page 6.

²²⁰ Vodafone Response to Consultation 15/67, page 6.

²²¹ Vodafone Response to Consultation 15/67, page 6.

²²² Vodafone Response to Consultation 15/67, page 8.

²²³ Vodafone letter of 2 December 2015, page 9, at Annex 8.

²²⁴ Vodafone letter of 2 December 2015, page 9, at Annex 8.

²²⁵ Eir Response to Consultation 15/67, page 22

- 5.83 Eir stated that “...for a fixed access service the unit costs will increase as service volumes decline and the total volumes of services delivered over Eir’s fixed network are in structural decline...”²²⁶. The reasons noted by Eir to substantiate its view included “...the delivery of broadband and voice services over cable networks, the roll-out of the SIRO fibre network using ESB infrastructure, and the intention of the state intervention to fund NGA in areas where Eir delivers fixed voice and CGA broadband service...”²²⁷
- 5.84 Eir stated that “The Bottom-Up assumption is based on an incorrect understanding of the European Commission’s Recommendation on Costing Methodologies which clearly states that losses to rival network operators should be taken into account...”²²⁸
- 5.85 CEG also supported Eir’s point that “The Commission’s Recommendation states (recital 39) “Only traffic volume moving to other infrastructures (for example cable, mobile), which are not included in the cost model, will entail a rise in unit costs.”²²⁹ CEG stated that “...while the recommendation explicitly references cable and mobile networks, any loss of volumes to a rival network will limit an operator’s ability to recover its fixed and common costs and increase unit costs...”²³⁰ CEG considered that “Consistency with the Recommendation requires that ComReg develop a reasonable forecast of the likely loss in volumes from Eir’s network to rival network infrastructures...[and] One approach...is to consider overall demand for lines in Ireland and then potential loss to rival networks such as UPC and SIRO.”²³¹
- 5.86 In addition, Eir stated that line loss to rival networks “...is particularly likely in the LEA and this will result in SB-WLR being increasingly focused on the higher cost rural areas.”²³² As a result Eir considered that “ComReg needs to take this into account to ensure that the price for SB-WLR reflects the actual cost of service provision...”²³³
- 5.87 Eir stated that it “...has experienced a significant loss in retail lines that has only been partly offset by increases in wholesale line numbers...[and]...Eir would experience annual average line loss of \pounds over 2016 to 2018.”²³⁴

²²⁶ Eir Response to Consultation 15/67, page 22.

²²⁷ Eir Response to Consultation 15/67, page 22.

²²⁸ Eir Response to Consultation, page 4.

²²⁹ CEG Report, page 22.

²³⁰ CEG Report, page 22.

²³¹ CEG Report, page 23.

²³² Eir Response to Consultation 15/67, page 4.

²³³ Eir Response to Consultation 15/67, page 4.

²³⁴ Eir Response to Consultation 15/67, page 11.

- 5.88 In respect of the Revised CAM provided as part of the consultation process CEG's submission stated that "...we have used Eir's total number of lines at June 2015..."²³⁵ and then assumed two scenarios. In the first scenario "...the rate of line loss over the last year will continue in 2016, 2017 and 2018 but will be supplemented by additional lines loss to SIRO..."²³⁶ The second scenario "...uses the forecast line loss from Eir's Five Year Plan"²³⁷. CEG suggested that at a minimum ComReg should "...adopt the first scenario or give further consideration to impacts of higher rates of line loss as assumed in our second scenario."²³⁸
- 5.89 In the Eir/ CEG clarifications of 10 November 2015, CEG provided further details on the approach applied by CEG to estimate the likely loss of lines to SIRO. CEG explained that "The forecast loss in lines to SIRO was calculated by first identifying the total number of WLR lines provided in the exchange areas that SIRO has announced will form part of its initial roll-out to 2018." In addition, CEG assumed that "... % of WLR lines in these exchange areas will be transferred to SIRO over the period to 2018."²³⁹

Annual review:

- 5.90 CEG expressed concerns that "...the proposed annual reviews [of the TD model] would effectively turn the regulation into a revenue cap rather than price cap. This has the potential to cause unintended adverse consequences as a result of the perverse incentives that revenue cap regulation can create."²⁴⁰
- 5.91 CEG suggested that ComReg should "...set prices over the regulatory period on the basis of estimated annual costs that reflect the best forecasts of line numbers given available information...[and that]...a greater loss in lines than included in the draft model is warranted by the most recent information on line losses and market developments...."²⁴¹

5.3.3 ComReg's Position:

Assumptions on declining volume of lines:

- 5.92 In response to Vodafone's point at paragraph 5.81 where it refers to Eir's recent Quarterly presentation and states that it appears that Eir's line base is stabilising, including volumes of SABB lines, ComReg notes that in the Eir HCAs for the year ended June 2015 the volumes for copper access services is 1,355,938 for 2015²⁴² compared with 1,361,936 in 2014²⁴³. These volumes reflect the use of

²³⁵ CEG Report, page 24.

²³⁶ CEG Report, page 24.

²³⁷ CEG Report, page 25.

²³⁸ CEG Report, page 26.

²³⁹ See CEG Memorandum, page 5 in Annex 8.

²⁴⁰ CEG Report, page 4.

²⁴¹ CEG Report, page 29.

²⁴² Eir HCAs 2015, page 23.

²⁴³ Eir HCAs 2015, page 24.

the copper network by all services including SABB and indicate a year-on-year decline on average copper line volumes of less than 0.5%. Therefore, it is difficult to establish at this point whether volumes are stabilising or continuing a somewhat moderate decline.

- 5.93 Further to Eir's view, at paragraphs 5.82-5.83, that both the BU and TD models should reflect likely decline in volumes to other networks in order to be consistent with the 2013 Recommendation (as submitted by Eir and CEG at paragraphs 5.84-5.85), ComReg acknowledges that the European Commission impact assessment states that: "*In the proposed methodology, the model includes both copper and NGA lines, and therefore only traffic volumes moving to other infrastructures (e.g. **cable, mobile and alternative operators' fibre**) would entail an inflation of unit costs*"²⁴⁴ (**emphasis added**). Therefore, ComReg notes that volume losses to rival networks is consistent with the 2013 Recommendation. As such, ComReg has revised its preliminary view and line losses are now accounted for in the BU model as well as the TD model. See paragraphs 5.94-5.101.
- 5.94 In terms of volume loss to other infrastructures, ComReg considers that the impact of the NBP is only relevant for SB-WLR and not for LLU given the unlikely take-up of LLU in those areas. However, the impact of the NBP on SB-WLR volumes is beyond the current Price Control Period given that even if the network build commences during this period, building such a network takes time and once it is built, customers do not automatically switch. The impact of volume loss to the SIRO network is considered at paragraph 5.95.
- 5.95 ComReg notes Eir's submission, as set out in paragraph 5.87, that there should be an annual line loss of \times over the period of 2016 to 2018. For SB-WLR nationally and for SABB Outside the LEA, given that our pricing approach is reflective of Eir's TD costs, we remain of the view that the line volumes for these services should be reflective of Eir's actual customer base. Based on the up-to-date volume data provided by CEG / Eir as part of their submissions to the Consultation Document we have revised the annual line loss to \times for SB-WLR. This is based on the natural line loss of \times which is reflective of the line loss recorded by Eir / CEG to the year end June 2015 plus a further decrease of \times to take account of volume movements from Eir's network to the SIRO platform by the end of 2018. The key difference between the volume loss of \times suggested by Eir and the volume loss of \times by ComReg is the volume decline as a result of migration to the SIRO platform. This is discussed at paragraph 5.98.
- 5.96 For LLU, we proposed in the Consultation Document that given that the LLU price is modelled based on a BU approach that the line volumes should remain

²⁴⁴ http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2013/swd_2013_0329_en.pdf, page 44.

constant — the BU model is based on the costs and volumes of a hypothetical operator in the Irish market where the volumes are not expected to decline. While ComReg notes that this approach has its merits we consider that in light of the submissions to the Consultation Document that it may be more prudent to take account of volume base decline for LLU / SLU. This approach would be consistent with 2013 Recommendation, discussed at paragraph 5.93, as the 2013 Recommendation recognises that loss of volumes to other infrastructures (cable, mobile) should be taken into account and removed from the overall line base. Therefore, consistent with the annual volume base loss for SB-WLR, we consider that the BU model for LLU / SLU should take account of an annual line loss of \times . See paragraph 5.95.

- 5.97 Further to CEG's submission, at paragraph 5.88 where it updated the model for two scenarios (1) to take into account the fact that Eir's rate of line loss last year will continue for 2016 – 2018 and will be supplemented by the loss of volumes to SIRO and (2) the forecast line loss from Eir's 5 year plan, ComReg notes the following:
- 5.98 In relation to scenario 1, and further to the clarifications provided from CEG / Eir on 10 November 2015 that \times of WLR lines in the exchange areas that SIRO has announced will be transferred to SIRO over the period to 2018, ComReg considers that while the assumptions used by CEG appear in general to be reasonable (line loss of \times to June 2015 and migration of volumes to SIRO by 2018) it is unreasonable to assume customers will immediately migrate to the SIRO platform. SIRO's rollout of FTTH will involve a number of phases so even if a \times level of customer uptake is a reasonable assumption overall there will still be delays in the pace of customer migration. For example, if we take Eir's assumption in the CEG report that *"an average of 6 months time to build is likely to be somewhat conservative. In particular, eircom advises that when building into new housing developments they typically experience a 3 month lag before any of the premises are sold and the first customers take the service they expect a further nine months before all homes are purchased and all services are taken. Assuming a constant rate of connections between these dates would imply an average delay of 7.5 months between investment expenditure and receipt of revenues from that investment."*²⁴⁵ Therefore, we consider that on average the number of customers migrating each year to the SIRO platform during the Price Control Period will be less than that forecasted by Eir / CEG.²⁴⁶ This means that if the SIRO network is rolled-out in a given year and in a given area, then people will be migrated by around half way through the year. As such, even if the number of customers at the end of the year is \times of the SB-WLR number, considering the time for people to migrate and time needed to build the network, we assume

²⁴⁵ CEG Report, page 19.

²⁴⁶ \times

that the average number over the year is half of that calculated by CEG when the network is being constructed.

- 5.99 In relation to scenario 2, ComReg considers that the rate of forecasted decline based on Eir's 5 year forecast appears aggressive compared with the past evolution of line volumes. We believe that the assumptions under scenario 1 better align with recent trends apparent in publically available data (e.g., ComReg's and Eir's quarterly reports) and the expected market developments including the launch of SIRO, growth in broadband (including SABB (current and next generation)) and the potential for continued economic recovery.
- 5.100 With regards to Eir's submission, as set out in paragraph 5.86, that SB-WLR will become increasingly focussed on rural areas and therefore the price needs to take this into account, this is addressed in Chapter 6, paragraph 6.118 (iii).
- 5.101 Having considered the submissions from respondents, the approach for line volumes (step 8 in Figure 4) in the Revised CAM remains appropriate for the reasons set out at paragraphs 5.92 to 5.99 above and in Chapter 5 of the Consultation Document, paragraphs 5.271 to 5.275 except for modifications to the assumptions in the BU model where we now assume LLU / SLU line volume decline of \approx as discussed in paragraph 5.95.

Annual Review:

- 5.102 Further to CEG's views at paragraphs 5.90 that the proposed annual review [of the TD model] would effectively turn the regulation into a revenue cap, ComReg does not agree. ComReg considers that the annual review, as discussed in Chapter 12, paragraphs 12.17-12.21, is a high level review of key parameters to assess any potential impact of observed changes in terms of current and future prices. The Revised CAM would only be reopened where significant and sustainable changes are noted to key parameters i.e., TD data from Eir's HCAs or volume changes, during the Price Control Period. Please refer to Chapter 12, paragraph 12.17-12.21 for further details on the annual review.
- 5.103 In relation to CEG's point at paragraph 5.91 that the prices over the regulatory period should reflect the best forecasts of line numbers available and that a greater loss in lines is warranted, as noted in paragraph 5.92 line volumes appear to have stabilised somewhat between 2014 and 2015. However, we consider the potential for some line loss over the Price Control Period and have factored this into the Revised CAM as discussed at paragraphs 5.95 - 5.96.

5.3.4 ComReg's Final Position:

- 5.104 For the purpose of setting the LLU / SLU price, the line volumes are expected to decline by \times over the Price Control Period.
- 5.105 For the purposes of setting the SB-WLR price, the SB-WLR line volumes are expected to decline by \times over the Price Control Period.

5.4 Network cost allocation - determination of prices:

5.4.1 Overview:

- 5.106 In Chapter 5 of the Consultation Document, we also considered a number of options in terms of setting the price for each of the access service, including a price per year for each service (e.g., a consistent monthly or annual charge for each year of the Price Control Period), an average price for each service over the Price Control Period (e.g., a single monthly or annual charge over the entire Price Control Period) and a price based on a glide path.
- 5.107 In the Consultation Document we proposed that an average price for each service over the price control period was appropriate on the basis that it would avoid administrative costs and it was consistent with the way the wholesale rental prices were set in the past.
- 5.108 Determining the unit price is referred to as Step 8 in Figure 4.

5.4.2 Submissions to the Consultation Document:

- 5.109 There was general agreement from the majority of respondents that an average price per service over the price control period was appropriate. However, a number of points were raised by some respondents.
- 5.110 BT agreed with ComReg stating that an average price per service maintained "...a level of certainty in the market..."²⁴⁷ ALTO also agreed with ComReg but stated "...in circumstances where the other options available to ComReg appear to provide for more efficient and regular assessment as required and as chosen by ComReg at paragraphs 5.281 and 5.282."²⁴⁸
- 5.111 While Vodafone agreed in principle with ComReg it encouraged "...a more active review of pricing by ComReg in the context of developments in telecommunications markets, as well as the actual returns and investments level

²⁴⁷ BT Response to Consultation 15/67, page 6.

²⁴⁸ ALTO Response to Consultation 15/67, page 9.

being reported by Eircom.”²⁴⁹ It also believed that given the “... potential for increasing access line volume growth, we would expect that this has been incorporated into the calculation basis of the average service prices.”²⁵⁰

- 5.112 Enet also agreed that the average price per service was appropriate as it provides “...price stability and predictability”²⁵¹, “...operating and revenue stability to Eir”²⁵², “...continues to give the appropriate return on investment to Eir over the full period of the price control.”²⁵³ as well as eliminating “administrative overhead for the duration of the price control period.”²⁵⁴
- 5.113 Eir disagreed with the average price per service over the price control period stating that it had “serious concerns with ComReg’s proposal ...”²⁵⁵ Furthermore Eir stated that “The current proposals will require large price increases in the next regulatory period. Such price instability risks deterring investment and does not appear credible.”²⁵⁶
- 5.114 Eir considered that: “...the cost modelling to date has indicated that the unit costs for all services controlled by cost orientation will increase year-on-year both through and beyond the price control period... for three reasons; line volumes are in continuous and steady decline because of losses to other infrastructure providers; necessary re-investment in IT systems and civil infrastructure such as poles will ensure that recent reductions in capital charges will reverse; and the staff pay freeze since 2008 has ended and salary increases and performance management bonuses will raise operating costs.”²⁵⁷
- 5.115 Eir also noted that ComReg “...in 2009 set a controlled price for ULMP based on the simple average of the increasing modelled annual cost over a three year control...to apply until the next review.” However, Eir stated that “The next review is still not complete...[and]...on the basis of the 2009 model of costs, the ULMP service has been priced below cost since the end of 2012.”²⁵⁸

²⁴⁹ Vodafone Response to Consultation 15/67, page 6.

²⁵⁰ Vodafone Response to Consultation 15/67, page 6.

²⁵¹ Enet Response to Consultation 15/67, page 3.

²⁵² Enet Response to Consultation 15/67, page 3.

²⁵³ Enet Response to Consultation 15/67, page 3.

²⁵⁴ Enet Response to Consultation 15/67, page 3.

²⁵⁵ Eir Response to Consultation 15/67, page 13

²⁵⁶ Eir Response to Consultation 15/67, page 5.

²⁵⁷ Eir Response to Consultation 15/67, page 22.

²⁵⁸ Eir Response to Consultation 15/67, page 22/23

- 5.116 Furthermore, Eir stated that with regard to SB-WLR “... *Continuing to charge the controlled price will lead to a shortfall in Eir’s SB-WLR revenues below the modelled cost of more than 3% in that year.*”²⁵⁹ Eir suggested that “... *the only circumstance where the price should be set based on the average cost over a three year control period is one in which ComReg would at the same time publish ... the higher controlled price that will apply in the next three period should the review be delayed.*”²⁶⁰
- 5.117 CEG also raised concerns about holding prices constant stating that “*If prices are to be set such that revenue equal costs (as estimated by the CAM) over the control period, then holding prices constant will depart from the efficient path of prices that have been estimated by the CAM.*”²⁶¹ In particular, CEG highlighted that “... *constant prices over time will distort consumption, i.e. prices are inefficiently high in year 1 and inefficiently low in later years when costs are increasing over time.*”²⁶²
- 5.118 CEG also considered that “*ComReg’s proposed constant prices over time approach also directly undermines the purpose of employing a tilted annuity in the cost model.*”²⁶³
- 5.119 CEG considered that as the Revised CAM already estimates annual costs for each services “... *there is no practical difficulty for ComReg to apply charge controls based on the estimated annual costs.*”²⁶⁴ CEG stated that this “... *would better promote efficiency.*”²⁶⁵
- 5.120 CEG stated that “*Option 3 [glide path] would have particularly poor incentive effects, and should not be considered... [as it] would involve setting prices at cost in year 1, adjusting for inflation in years two and three, and then reconciling revenues and costs at the end of the period and if necessary making a correction to deal with the over or under-recovery of costs.*”²⁶⁶

²⁵⁹ Eir Response to Consultation 15/67, page 23.

²⁶⁰ Eir Response to Consultation 15/67, page 23.

²⁶¹ CEG Report, page 47.

²⁶² CEG Report, page 47.

²⁶³ CEG Report, page 47.

²⁶⁴ CEG Report, page 48.

²⁶⁵ CEG Report, page 48.

²⁶⁶ CEG Report, page 47.

5.121 CEG stated that “...*the interests of consumers of telecommunication services in Ireland would be better served by ComReg rejecting all three proposals and moving to a conventional CPI-X approach...*”²⁶⁷ CEG considered that CPI-X regulation “...*provides regulated businesses with protection against unexpected changes in inflation.*”²⁶⁸ CEG further added that ComReg’s Option 1 (price per year) and Option 2 (average price for each service) “... *provide no protection against inflation risks, while Option 3 would provide protection to the business, but at long run cost to consumers ...*”²⁶⁹

5.122 CEG suggested that the CPI-X approach would work as follows:

- “*Using the CAM to estimate the efficient costs of service provision in the final year of the next control period (2018).*”
- “*Calculating the discount factor - ‘X’ – needed to bring current prices to the efficient price level at the end of the control period.*”
- “*In each year monitoring that Eir meets the required change in prices so calculated, once the appropriate correction for inflation has been incorporated.*”²⁷⁰

5.123 Vodafone, in its letter of 2 December 2015, referred to Eir’s views in its response to the Consultation document regarding the determination of average prices and stated that it “...*would strongly disagree with eir’s assertion that stable pricing of this regulatory period would result in material discrepancy between the underlying cost and associated Revenues.*”²⁷¹ Vodafone highlighted “...*the significant improvement in returns in the Wholesale Access Markets that are now reported in eir’s Separated Accounts for the Year Ended 30 June 2015.*”²⁷²

5.124 Vodafone also stated that “...*we would strongly disagree with a move away from cost orientated pricing as suggested by eir (and CEG) through the use of a CPI+ regime...[as]...this would lead to even greater and ever increasing deviation between the underlying costs of regulated services, and the pricing of such services, to the detriment of the industry and consumers.*”²⁷³

²⁶⁷ CEG Report, page 48.

²⁶⁸ CEG Report, page 48.

²⁶⁹ CEG Report, page 48.

²⁷⁰ CEG Report, page 48.

²⁷¹ Vodafone letter of 2 December 2015, page 9, at Annex 8.

²⁷² Vodafone letter of 2 December 2015, page 9, at Annex 8.

²⁷³ Vodafone letter of 2 December 2015, page 9, at Annex 8.

5.4.3 ComReg's Position:

- 5.125 In relation to the concerns raised by Eir and CEG at paragraphs 5.113-5.119 regarding the use of an average price over the Price Control Period, ComReg considers that taking into account the reasons put forward by Eir and CEG in its submissions to ComReg, it may be more pragmatic to determine a price each year e.g., a consistent monthly or annual charge for each year of the Price Control Period.
- 5.126 ComReg's objective is to provide the appropriate price signals to operators, including Eir, over the Price Control Period. An average price e.g., a single monthly or annual charge over the entire Price Control Period may lead to a price spike at the start of the next regulatory period as the prices may need to be adjusted to reflect appropriate costs.
- 5.127 While we acknowledge the fact that BT, ALTO and E-net (see paragraphs 5.110 and 5.112) agreed with an average price on the basis that it provides certainty, price stability and predictability, we consider that determining a consistent monthly or annual charge for each year of the Price Control Period also achieves the objectives of price certainty, stability and predictability and therefore for reasons set out in paragraphs 5.125-5.126 it seems more pragmatic to determine a price for each year rather than an average price. See also paragraph 5.128.
- 5.128 Furthermore, the Revised CAM already estimates the annual costs for each service and therefore it is easy to determine a consistent monthly or annual charge for each year of the Price Control Period. ComReg also notes that determining a price each year is more consistent with the use of a tilted annuity, as discussed in Chapter 5, paragraphs 5.27 to 5.28. In addition, this approach should provide reasonable incentives for operators to migrate over time to NGA as the trend in prices for wholesale services is consistent with the trend in the underlying asset prices providing operators with efficient incentives to invest as appropriate.
- 5.129 With regard to Vodafone's point at paragraph 5.81 that unit prices should undertake a more active review of pricing in the context of developments in telecommunications markets, please see paragraph 5.92. In addition, the annual review discussed at paragraph 12.17 requires Eir to review the inputs and assumptions of the Revised CAM annually. However, we would only reopen the model where there are significant and sustainable changes noted. Furthermore, with respect to Vodafone's submission regarding actual returns and investments level being reported by Eir, ComReg refers to Annex 10, paragraph A 10.6 regarding differences between pricing cost models and Eir's HCAs.
- 5.130 In relation to Eir's view (see paragraph 5.115) that on the basis of the 2009 model of LLU costs, the LLU service has been priced below cost since the end of 2012,

ComReg does not agree. ComReg would like to point out that the methodology for determining the LLU price has been amended in this Decision Document to take account of the 2013 Recommendation. Therefore, there is no direct comparison between the previous LLU price of €9.91 and the price determined in this Decision. In any event, Eir had access to the model and could have proposed changes to the underlying assumptions, subject to ComReg approval, pursuant to the NGA Decision (D03/13).

- 5.131 Further to the points raised by CEG at paragraphs 5.121-5.122 regarding a move to a CPI-X approach, ComReg considers that a CPI-X approach could lead to more uncertainty and instability for other operators when compared with setting annual prices based on the outputs of the Revised CAM. In addition, as set out in Chapter 5, paragraph 5.284 of the Consultation Document, a CPI-X approach is more difficult to implement as a price adjustment may be required at the end of the price control period to account for any over / under recovery of costs over the price control period – prices are set by reference to costs adjusted by CPI rather than actual costs derived from the model. We also note Vodafone’s strong disagreement with a move to a CPI-X approach on the basis that “...*this would lead to even greater and ever increasing deviation between the underlying costs of regulated services, and the pricing of such services, to the detriment of the industry and consumers.*”²⁷⁴
- 5.132 Having considered the submissions from respondents, in particular the issues raised by Eir and CEG, ComReg has decided to specify a consistent monthly or annual charge for each year of the Price Control Period, in line with the annual costs in the Revised CAM. Please refer to Chapter 13 for the details of the annual prices for each of the wholesale access services.
- 5.133 Taking into account the submissions from Eir at paragraphs 5.113-5.116 regarding the price levels beyond the Price Control Period, ComReg considers that it seems prudent to include indicative prices for the first two years beyond the Price Control Period for transparency purposes. This should ensure that in the case where the next pricing review is not complete by the end of the current Price Control Period that prices in year 4 can continue to be informed by cost information extracted from the Revised CAM. This should also ensure that Eir can recover its efficient costs. Please refer to Chapter 13 for the details of the annual prices for each of the wholesale access services beyond the Price Control Period. For the avoidance of doubt, the obligation of cost orientation remains with Eir — consequently, should Eir wish to pre-notify a price change outside the Price Control Period, Eir would be required to demonstrate (to the satisfaction of ComReg) that those proposed prices are compliant with its obligations. See also Chapter 6.

²⁷⁴ Vodafone letter of 2 December 2015, page 9, at Annex 8.

5.134 In the Consultation Document, the prices for LLU and SLU were described as being a “maximum” and in the Draft WPNIA Decision Instrument as requiring inter alia that respective prices be “no more than”. In order to avoid any ambiguity and to provide clarity in terms of the pricing process for LLU and SLU we have removed reference to “maximum” and / or “no more than” with regard to the LLU and SLU prices. The pricing process for LLU and SLU is based on the fact that the Revised CAM currently determines the rental prices for LLU / SLU for each of the relevant years in the Price Control Period. In addition, Eir has the opportunity to reduce these prices subject to their cost orientation obligation (including justification of any changes by way of the Revised CAM) and subject to ComReg’s approval. Therefore, as the pricing process allows Eir to propose reductions to the LLU / SLU prices we consider that it is clearer to just refer to the LLU / SLU prices (i.e., therefore price points).²⁷⁵

5.4.4 ComReg’s Final Position:

5.135 The wholesale access services should be based on a consistent monthly or annual charge for each year of the Price Control Period in line with the annual costs in the Revised CAM. Please see Chapter 13.

²⁷⁵ This clarification is consistent with the process for updating LLU / SLU prices pursuant to the NGA Decision, where Eir must charge the lower of (i) a specified price; or (ii) a maximum price determined by the relevant model (i.e., a price point).

Chapter 6

6 Pricing approach: LLU, SLU, SB-WLR

6.1 Introduction

- 6.1 In this chapter we determine the approach for setting the prices for LLU, SLU and SB-WLR.
- 6.2 This chapter combines our decision on the appropriate costing methodologies (Chapter 4) and dimensioning the Revised CAM model (Chapter 5) to determine the output rental price(s) for LLU, SLU and SB-WLR.
- 6.3 In Chapter 6 of the Consultation Document we discussed market developments across the access markets and in particular in relation to developments in the LEA and Outside the LEA. Please refer to Chapter 6 of the Consultation Document and in particular paragraphs 6.6 – 6.37 for further details on market developments.
- 6.4 The respective discussion is considered under the following headings:
1. Determining the LLU price;
 2. Determining the SLU price;
 3. Determining the SB-WLR price; and
 4. Determining pricing principles for SB-WLR ISDN PRA/FRA prices.

6.2 Determining the LLU price

6.2.1 Overview:

- 6.5 In Chapter 6 of the Consultation Document ComReg proposed that the maximum national LLU monthly rental price should be €10.19 (or €11.15 including fault repair costs).²⁷⁶
- 6.6 ComReg was of the preliminary view that the monthly rental price for LLU should be based on a BU-LRAIC+ model for the LEA, whereby the BU-LRAIC+ approach should be applied to those assets that cannot be reused for NGA services (Non-reusable Assets) and Eir's TD data (or Eir's Indexed RAB for Reusable Assets) should be applied to those assets that can be reused for NGA services e.g., ducts and poles.

²⁷⁶ See paragraph 5.134.

- 6.7 We considered that our proposed approach for LLU should send the appropriate ‘build or buy’ signals as it relies on the assumption that only lines in urban areas are likely to be unbundled. Given the high cost of lines in rural areas, we considered that an LLU price based on national costs could raise the LLU price to a non-competitive level — in particular in those areas where LLU may be viable (i.e., in urban areas) — and we considered it not to be appropriate given the ‘build-or-buy’ signals are not relevant for private operators in rural areas.
- 6.8 Please refer to the Consultation Document, Chapter 6, paragraphs 6.49 – 6.88 for further details on the LLU pricing approach.
- 6.9 In Chapter 6 of the Consultation Document, we proposed that for the purposes of the draft decision that the current LEA Footprint should remain fixed at 252²⁷⁷ exchanges for the purposes of setting the LLU price for the price control period.
- 6.10 ComReg considered that the LLU price should not fluctuate with movements in the number of exchanges in the LEA during the price control period in order to provide certainty and price stability to operators in terms of infrastructure investment over the next few years.
- 6.11 The submissions to the Consultation Document and ComReg’s position are discussed under the following headings:
- LLU pricing methodology; and
 - LEA footprint.

6.2.2 Submissions to the Consultation Document:

LLU pricing methodology:

- 6.12 ALTO and BT agreed with ComReg’s proposed pricing approach for the LLU monthly rental price.
- 6.13 Vodafone agreed in principle, however it reiterated its concerns regarding “*the logic behind the uplift of costs, and prices, for “non-reusable” assets and would strongly encourage a revisit of this by ComReg.*”²⁷⁸
- 6.14 Eir stated that it has “*...serious concerns with a number of aspects of the cost modelling approach that underlies ComReg’s proposed prices for LLU.*”²⁷⁹
- 6.15 Eir noted the following:

²⁷⁷ Please note that in the Consultation Document 15/67 we used 248 exchanges (instead of 252) for price setting purposes given that there are 4 cabinets included in the 252 exchanges which overlap with exchanges / MDFs in the LEA.

²⁷⁸ Vodafone Response to Consultation 15/67, page 6.

²⁷⁹ Eir Response to Consultation, page 23.

- (i) *“The treatment of pole costs ignores the substantial need for pole replacement in the medium term;*
- (ii) *The model needs to include a reasonable delay, such as 6 months, between investment expenditure being incurred and revenues being received;*
- (iii) *The assumption in relation to volumes needs to reflect a reasonable forecast of volume loss to other networks;*
- (iv) *The NBV of the assets in the modelling is understated because it assumes more depreciation has been allowed to date than is the case;*
- (v) *The future path of LLU prices is not credible.”*²⁸⁰

- 6.16 Eir noted that *“... should there be take-up of LLU outside the LEA, then the price for LLU in those areas would need to reflect the cost of supply outside the LEA.”*²⁸¹
- 6.17 Sky stated that it: *“...is concerned that despite essentially maintaining a costing approach that has been in place for several years now (BU-LRAIC+) to set price ceilings for SLU and LLU, the results of the most recent assessment of the maximum monthly rental prices highlights a substantial difference in the relative prices of the two services.”*²⁸²
- 6.18 With regard to the proposed reduction to the SLU monthly rental charge Eir sought clarity on the mechanism to be used to determine consistency between the LLU price and the SLU price as *“...ComReg has not asked specifically for comments on the proposal that any reduction to the SLU monthly rental charge is consistently applied to the LLU monthly rental charge, where appropriate, using the Revised Copper Access Model.”*²⁸³
- 6.19 Eir also stated that *“...annual prices should be set based on a conventional “CPI-X” approach (consistent with the predicted cost trend) rather than on the ComReg’s proposal of averaging prices over years.”*²⁸⁴

²⁸⁰ Eir Response to Consultation 15/67, page 23.

²⁸¹ Eir Response to Consultation 15/67, page 23.

²⁸² Sky Response to Consultation 15/67, page 4.

²⁸³ Eir Response to Consultation 15/67, page 24.

²⁸⁴ Eir Response to Consultation 15/67, page 23.

6.20 Separately, in the Eir August Letter, Eir stated that there is a “...level of complexity added by the impact of EVDSL on ULMP and SLU pricing that has not been addressed in the current draft of the consultation paper.”²⁸⁵ Eir stated that “... exchange launched VDSL have led to the use of exchange launched loops for NGA purposes...” and that the “... useful limit of 1km loop length will apply to the ULMP full loop as it does to the sub loop in the case of cabinet launched VDSL.” Eir noted a number of possible approaches to settling LLU and SLU prices “...such as reducing the ULMP price to recover the cost of the shorter loops used to provide service from OAO EVDSL ports - only for those loops connected to EVDSL equipment, or allowing the OAO to order SLU at all LLU exchanges - but only for services connected to EVDSL equipment.”

LEA footprint:

- 6.21 Eir and ALTO agreed to lock in the LEA footprint for the purposes of setting the LLU monthly rental price, while Sky, Vodafone and BT raised some concerns.
- 6.22 Eir agreed with ComReg stating that “... solely for the purposes of setting prices for ULMP the relevant LEA should be locked-in at the set of MDFs where OAOs currently rent unbundled loops as this set is unlikely to grow.”²⁸⁶
- 6.23 Eir also stated that “...to the extent that the LEA is used to reflect the areas where network investment by rival operators has occurred, or is likely to occur, then the definition of the LEA should be based on a forward-looking assessment of the prospect for new investment...”²⁸⁷
- 6.24 Furthermore, Eir considered the LEA for the purpose of implementing the NRT in ComReg Decision D04/13 “...should continue to be amended where additional exchange areas meet the various criteria.”²⁸⁸
- 6.25 BT believed that ComReg should reconsider the 5km line length limit for LLU based on the 2010 CAM, stating that “...[for] ULMP carrying ADSL2+ ...we believe the average distance between the exchange and the cabinet will be about 3.5km leaving circa 1.5 usage range from the cabinet which is not that dissimilar to the VDSL modelled distance.”²⁸⁹
- 6.26 Sky aired its disappointment that “... that despite the problems with the current definition of Large Exchange Area’s (LEA’s) ComReg has at this juncture chosen not to amend the definition but rather appears to have deferred the opportunity to do so.”²⁹⁰

²⁸⁵ ComReg Document 15/67d: <http://www.comreg.ie/fileupload/publications/ComReg1567D.pdf>

²⁸⁶ Eir Response to Consultation 15/67, page 24.

²⁸⁷ Eir Response to Consultation 15/67, page 24.

²⁸⁸ Eir Response to Consultation 15/67, page 24.

²⁸⁹ BT Response to Consultation 15/67, page 6/7.

²⁹⁰ Sky Response to Consultation 15/67, page 1.

6.27 Vodafone disagreed “*that the launch of SIRO will act as a competitive constraint in the medium term.*”²⁹¹ Vodafone stated that SIRO will only be present in predefined urban areas as its “*...ambition is to pass 500,000 homes in the medium term which is only a quarter of the target set by Eir of 1.9ml homes.*”²⁹² Vodafone also noted that “*... following the SIRO announcements... Eir have increased their ambition in terms of homes passed for both FTTC and FTTH.*”²⁹³ Vodafone considered that “*There is a clear ambition of Eir in both LEA and non-LEA areas to reassert their dominant position.*”²⁹⁴

6.2.3 ComReg’s Position:

LLU pricing methodology:

6.28 ComReg notes that while there was general agreement from BT, ALTO and Vodafone regarding the pricing approach for LLU that Eir disagreed.

6.29 Further to Vodafone’s point at paragraph 6.13 regarding the approach for Non-reusable Assets, this point is addressed in Chapter 4, paragraphs 4.126 to 4.130.

6.30 With regards to the views raised by Eir at paragraph 6.15, ComReg considers that these points are addressed as follows:

- (i) In relation to the treatment of poles and pole replacement, please refer to Chapter 4, paragraphs 4.139 - 4.144;
- (ii) In relation to the time lag between investment and revenues received, please refer to Chapter 5, paragraphs 5.32 - 5.36;
- (iii) In relation to the volume decline, please refer to Chapter 5, paragraphs 5.93 - 5.101;
- (iv) In relation to the point that the NBV of the assets is understated, please refer to Chapter 4, paragraph 4.157; and
- (v) In relation to the future path of LLU prices, please refer to Chapter 5, paragraphs 5.125 - 5.133.

6.31 In relation to Eir’s point at paragraph 6.16 regarding the take-up of LLU Outside the LEA, ComReg considers that in the unlikely event that an exchange is proposed to be unbundled by an OAO which is Outside the Modified LEA the national LLU monthly rental would still apply. ComReg believes that it is unlikely that all the exchanges in the Modified LEA footprint would be unbundled even in the long-term, consequently, the proposed exchange to be unbundled should

²⁹¹ Vodafone Response to Consultation 15/67, page 7.

²⁹² Vodafone Response to Consultation 15/67, page 7.

²⁹³ Vodafone Response to Consultation 15/67, page 7.

²⁹⁴ Vodafone Response to Consultation 15/67, page 7.

have a close proxy of an exchange which is not currently unbundled but is within the Modified LEA footprint. As such, ComReg considers that the pricing signals of a national monthly price based on a specific geographic area is consistent with the existing regulatory framework as to how LLU is priced nationally and provides a practical and fair solution to LLU pricing that takes in to account the interests of Eir, industry and consumers. In any event, ComReg notes that Eir has access to the entire cost model (Revised CAM). In the unlikely event that there is take-up of LLU Outside the Modified LEA, Eir can assess the likely impact in terms of the LLU price which would be subject to ComReg's approval. Please refer to paragraph 5.29 (bullet 1) for further details.

- 6.32 In relation to Sky's point at paragraph 6.17 regarding the gap between the price for LLU and SLU, ComReg notes that the choice of pricing parameters / assumptions used to determine the LLU and SLU prices has an impact on the pricing relativity between both services. In the previous copper access model in 2010, SLU was calculated over a small number of cabinets with more than 300 lines and located in the major urban areas i.e., Dublin, Cork, Galway, Limerick and Waterford, on the basis that SLU was unlikely to be used outside those areas during the price control period. In addition, the SLU price in 2010 did not have any limit to the loop length. However, in the Consultation Document, the SLU price was calculated based on SLU lines less than 1km from the serving cabinet, which has since been amended to 1.5km as a result of further information obtained from BT as part of the consultation process, as discussed in paragraph 6.80.
- 6.33 In addition, the modelling of SLU costs in the Revised CAM is now more accurate given more extensive and detailed geo-marketing data as well as more advanced modelling tools (as the exact route from each home to each cabinet is determined in the model) which allows us to calculate precisely the cost of copper local loops shorter than 1.5km. The table below illustrates the different parameters / assumptions used to determine the price for LLU and SLU which should help explain the price gap between the two services.

Figure 5: Difference in parameters used to set the LLU and SLU prices

Description	LLU price	SLU price
Number of exchanges / cabinets	237 exchanges**	All exchanges
Loop Length	5km (see para 6.43)	1.5km (see para 6.80).

** Discussed at paragraphs 6.47 and 6.38 - 6.40.

- 6.34 Further to Eir's point at paragraph 6.18 relating to the proposed SLU price reduction and the mechanism to be used to determine consistency between the LLU price and the SLU price, it is important to note that this Decision Document does not amend the pricing structure set out in the NGA Decision except for an update to the SLU and LLU prices and an updated copper access model. See paragraphs 6.83-6.85.
- 6.35 In response to Eir's point at paragraph 6.19 relating to the CPI-X approach, this point is addressed at Chapter 5, paragraph 5.131.
- 6.36 With regard to Eir's point at paragraph 6.20 on the impact of EVDSL on ULMP and SLU prices, ComReg notes that in our letter correspondence²⁹⁵ with Eir in August 2015 we stated that we welcomed Eir's views on an appropriate alternative treatment in the context of EVDSL and in particular with regard to Eir's view that a limit of 1 kilometre should apply to full LLU. However, no further details or commentary have been provided by Eir in this regard. ComReg considers that the LLU price should not include the scope of EVDSL lines as the areas where EVDSL is deployed is not likely to have infrastructure based competition.²⁹⁶

LEA footprint:

- 6.37 ComReg notes that while there was general agreement from ALTO and Eir to lock in the LEA footprint for the purposes of setting the LLU price, the other three respondents raised points for further consideration by ComReg.
- 6.38 Since publication of the Consultation Document an additional 109 exchanges were added to the LEA footprint, ∞. This increase in the footprint of the LEA would have resulted in an increase in the LLU price of circa €0.75c.

²⁹⁵ ComReg letter of 13 August 2015 at http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

²⁹⁶ Please see ComReg Information Notice 15/85 for further details on how EVDSL exchanges are assessed for inclusion or otherwise in the LEA.

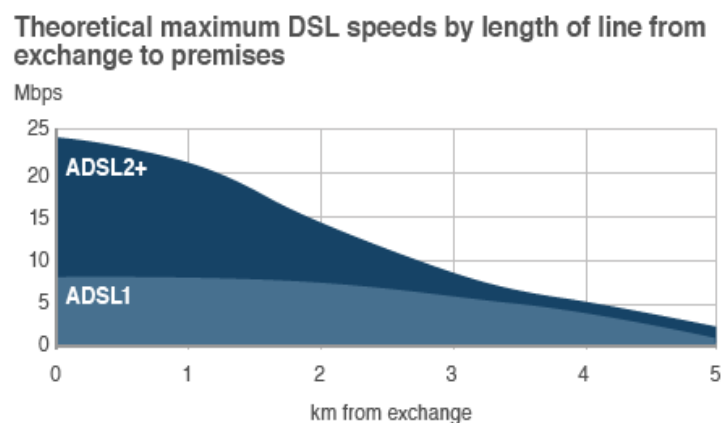
- 6.39 While ComReg considers that for the purposes of this Decision the LEA footprint should be the fixed / locked-in during the Price Control Period in order to provide certainty and price stability to operators in terms of infrastructure investment over the next few years, we have given further consideration to the appropriate footprint for build/buy signals. For the purposes of this Decision, we have also decided to exclude qualifying exchanges based on Criterion 5 from the LEA footprint, as defined in the Bundles Decision and in the WBA Pricing Decision, which we have termed the 'Modified LEA'. See also paragraph 1.9. The Bundles Decision identified Criterion 5 exchanges as exceptional exchanges which either: (a) is surrounded by a qualifying exchange; or (b) serves fewer than 500 residential premises and is located either adjacent to or in reasonable proximity to qualifying exchanges; or (c) is determined to the satisfaction of ComReg to have an economic affinity with adjacent qualifying exchanges. In the Bundles Decision we considered that the LEA may create 'islands' or 'pockets' of exchanges that do not meet any of the primary criteria (i.e., criteria 1-4) but are surrounded by exchanges and neighbouring communities that do. In the Bundles Decision, ComReg considered that to exclude such exchanges would be inconsistent with commercial dynamic outcomes of competitive markets where the same bundle / offering would not be available on equal terms in neighbouring exchanges. However, in the context of this Decision and setting appropriate price signals for wholesale fixed access services such as LLU, the same objectives are not relevant — in that we are not trying to encourage infrastructure-based competition in those specific types of exchanges covered by Criterion 5. See also paragraph 6.40.
- 6.40 Furthermore, those exchanges included in the LEA under Criterion 5 have on average fewer than c.650 homes. The relative addressable market of these exchanges may be too small to justify commercial infrastructural-based investments by OAOs. ComReg considers that these exchanges should be excluded on the basis that infrastructure-based competition and fibre roll-out are unlikely in these areas. As noted by Eir, the LEA should reflect "*...the areas where network investment by rival operators has occurred, or is likely to occur...*"²⁹⁷. By excluding those Criterion 5 exchanges the impact on the LLU price per line per month is a reduction of €0.47.
- 6.41 We note Eir's point at paragraph 6.23 that the LEA should be used to reflect the areas where network investment by rival operators has occurred, or is likely to occur. Firstly, ComReg considers that there are some areas in the Modified LEA where future infrastructure investment is unlikely to occur i.e., those Criterion 5 exchanges noted at paragraph 6.39. Secondly, there is also the unknown footprint where the likes of SIRO have made public announcements regarding indicative network rollout but this rollout may or may not materialise. Therefore,

²⁹⁷ Eir Response to Consultation 15/67, page 24.

in these two cases it is more prudent to exclude these areas from the Modified LEA as it may create inappropriate pricing signals to other operators.

- 6.42 ComReg acknowledges and agrees with Eir's point at paragraph 6.24 that in line with ComReg Decision D04/13 that the LEA should continue to be amended where additional exchanges meet the various criteria. For an exchange to be included in the LEA, it must meet one of the criteria specified in the ComReg Decision D04/13 and be approved for inclusion by ComReg.
- 6.43 In relation to BT's point at paragraph 6.25 that ComReg should reconsider the 5km line length limit for LLU, ComReg has considered the data provided by BT in this regard. Based on data provided by BT. Consequently, we are of the view that the 5km line length limit from the exchange should be reinstated, consistent with the approach in the 2010 LLU Pricing Decision. This means that the cost of lines longer than 5km are excluded from the LLU price calculation on the basis that these lines are unlikely to be technically capable of carrying broadband as OAOs who use LLU to deliver broadband are only likely to use lines that are less than 5km from the exchange to the premises. In addition, as illustrated in the graph below in theory at 5kms from the exchange to the premises, speeds are likely to be less than 1Mbps.

Figure 6: DSL speeds by length of line



Source: Ofcom

- 6.44 With regard to Sky's point at paragraph 6.26 that ComReg has chosen not to amend the definition of the LEA, ComReg notes Sky's comments but would like to clarify that the current consultation process is a review of the costing methodologies and prices for key current generation wholesale access services and not a review of the criterion used to establish likely exchanges for inclusion in the LEA with respect to the pricing flexibility allowed therein pursuant to the Bundles Decision. Separately, ComReg are in the process of consulting on Market 3a and 3b which includes an assessment of overall market conditions in

terms of competition. Consequently, the appropriateness of the LEA definition for Bundles pricing purposes will be assessed as part of that review.

- 6.45 In relation to Vodafone's views at paragraph 6.27 where it disagreed that the launch of SIRO will act as a competitive constraint in the medium term and that Eir has a clear ambition in both the LEA and non-LEA areas to re-assert its dominant position, ComReg refers to Annex 7, paragraph 18. As part of ComReg's ongoing review of Markets 3a and 3b, ComReg expects to publish a consultation in Q2 2016 which, amongst other things will consider the relevance and competitive impact of SIRO's product offering. Without prejudice to this analysis, given the scale, coverage and timing of SIRO's network roll-out, in the short to medium term ComReg considers that Eir will continue to be the predominant WPNIA provider.
- 6.46 Having considered the submissions from respondents, the pricing approach for determining the LLU monthly rental price remains appropriate for the reasons set out at paragraphs 6.28 to 6.45 above and for the reasons set out in Chapter 6 of the Consultation Document, at paragraphs 6.47 to 6.84. However, we have modified the loop line length as discussed at paragraph 6.43; we have decided to exclude Criterion 5 exchanges from the LEA footprint (i.e., the Modified LEA), as discussed at paragraphs 6.39 - 6.41 and we have adjusted the assumptions on volume to reflect volume decline of \times as set out in paragraphs 5.92-5.100.
- 6.47 The list of 237 exchanges (which make up the Modified LEA footprint) used to determine the LLU price in the context of this Decision is set out at Annex 14.

6.48 Figure 7 shows the changes to the LLU price since the consultation (15/67).

Figure 7: LLU price

Description	Para ref	€
LLU average price per 15/67		€10.19*
<u>Adjustments following Consultation 15/67:</u>		
5km line length restriction	6.43	(1.20)
Volume loss	5.96	0.40
Modified LEA footprint: <i>Addition of 109 exchanges + 0.75</i> <i>Exclusion of Crit. 5 exchanges (0.47)</i>	6.38 - 6.40	0.28
Payment term change	5.32 - 5.35	0.21
Price trend change	5.27	
Depreciation formula corrected	5.37	
Mistake in chamber prices	5.39	
Recategorisation of Dublin exchanges	8.69	
LLU average price per Decision		9.88*

*Excluding fault repair and provisioning costs

6.50 The LLU monthly rental prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 17.

6.2.4 ComReg's Final Position:

6.51 For LLU, the monthly rental charge should be derived based on the BU-LRAIC+ methodology for Non-reusable Assets and Eir's Indexed RAB for Reusable Assets in the Modified LEA.

- 6.52 The cost of LLU lines longer than 5km should be excluded from the LLU monthly rental price.
- 6.53 The Modified LEA footprint for the purposes of setting the LLU price over the Price Control Period should be set at 237²⁹⁸ exchanges.
- 6.54 For the national LLU monthly rental charge, Eir should charge the lower of:
- (a) The national LLU monthly rental price based on the average cost of providing LLU in the Modified LEA as determined by the Revised CAM in ComReg Decision D[XX/YY]; or
 - (b) The LLU monthly rental charge as amended by changes made by Eir to the main parameters of the Revised Copper Access Model under ComReg Decision D[XX/YY] and subject to prior approval by ComReg.
- 6.55 Eir should ensure that any reduction to the SLU monthly rental charge (as a result of the margin squeeze between SLU and VUA) is consistently applied to the LLU monthly rental charge, where appropriate, using the Revised Copper Access Model.
- 6.56 The LLU monthly rental prices for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 17.

6.3 Determining the SLU price

6.3.1 Overview:

- 6.57 In Chapter 6 of the Consultation Document ComReg proposed that the maximum national SLU monthly rental price should be €5.88 (including fault repair costs).²⁹⁹
- 6.58 ComReg was of the preliminary view that the monthly national rental price should be based on a national BU-LRAIC+ model whereby the BU-LRAIC+ approach should be applied to those assets that cannot be reused for NGA services (Non-reusable Assets) and Eir's TD data (or Eir's Indexed RAB for Reusable Assets) is applied to those assets that can be reused for NGA services (e.g., ducts and poles).

²⁹⁸ Please note that we use 237 exchanges (instead of 243 exchanges) for price setting purposes given that there are some cabinets included in the 243 exchanges which overlap with exchanges / MDFs in the LEA.

²⁹⁹ See paragraph 5.134.

- 6.59 In addition, we proposed that the SLU costs should be adjusted to reflect the fact that lines greater than 1km are unlikely to be technically capable of supporting the required standard of broadband services. Therefore, we proposed that the cost of SLU lines longer than 1km should be excluded from the SLU price calculation.
- 6.60 We considered that our proposed approach for SLU should send the appropriate 'build or buy' signals as it relies on the assumption that there could be a demand for SLU lines nationally — including in the less economic exchanges (i.e., in rural areas). The demand for SLU may emerge in rural areas where private operators may require SLU to deliver broadband services as part of the NBP. In addition, we considered that a national SLU price is appropriate given that SLU is a direct input into Eir's regulated VUA price (which is relevant for urban areas).
- 6.61 Please refer to the Consultation Document, Chapter 6, paragraphs 6.92 – 6.124 for further details on the SLU pricing approach.

6.3.2 Submissions to the Consultation Document:

- 6.62 There was general agreement from the majority of respondents regarding the proposed pricing approach for setting the monthly rental price for SLU. However, there was some points raised by respondents and these are set out below under the relevant headings.

Impact of VDSL:

- 6.63 Eir agreed “...in principle that national prices may be acceptable where the deaveraged prices differ to a very small extent.”³⁰⁰
- 6.64 However, Eir explained that “The current SLU service and pricing approach are predicated on an alternative operator connecting to the Eir copper access network at a street cabinet and using their own electronics to launch VDSL services to customers served via that street cabinet.”³⁰¹ However, Eir further added that since “...VDSL services can be launched from Eir MDF sites operators locating electronics at such MDFs can launch VDSL services from MDFs as well as from street cabinets.”³⁰² Eir considered that this raises the issue as to whether the service that the operator uses in serving such customers “...is ULMP or exchange launched SLU.”³⁰³ and therefore Eir considered that ComReg need to resolve the definition of LLU services before the price for SLU and LLU can be reviewed.

³⁰⁰ Eir Response to Consultation 15/67, page 25.

³⁰¹ Eir Response to Consultation 15/67, page 24.

³⁰² Eir Response to Consultation 15/67, page 24.

³⁰³ Eir Response to Consultation 15/67, page 24.

- 6.65 While BT “...generally agree...”³⁰⁴ with the approach for SLU, for exchange launched VDSL, BT considered that *the model needs to be updated to consider EVDSL as ... this technology will address a significant part of the market (circa at least x premises)...* ³⁰⁵
- 6.66 In addition, BT considered that for D-Side Distances “...the cabinet downstream bitrate is still over 36Mbit/s at 1km and circa 30Mbit/s at 1.2km.”³⁰⁶ BT referred to the Government’s minimum target rate for the National Broadband Plan is 30Mbit/s and that our model should at least consider this distance. BT also referred to the TNO report³⁰⁷, published by ComReg, where “...the graph [Figure 9] suggests a broadband service at 18 to 20mbit/s is still commercially viable at 1.5km ...”³⁰⁸ BT suggested that as “eir Group are offering lower speed VDSL profiles ...at least change 1km to 1.2km and consider whether the workable distance should be 1.5km” ³⁰⁹

Price gap between SLU and LLU:

- 6.67 Sky raised concerns around the price gap between LLU and SLU compared to the previous gap under ComReg Decision D01/10 stating that “The newly proposed price ceilings for the services will create a permissible gap of €4.31...[with]...LLU prices being 73% higher than SLU by comparison to an existing permissible premium of just 17%.”³¹⁰ Sky considered that “... this magnitude of change requires a comprehensive explanation from ComReg.”³¹¹
- 6.68 Sky stated that “...the proposed price reduction for SLU (at this late stage) is unlikely to deliver any material benefits from a competitive perspective at the wholesale level through infrastructure investment.”³¹²
- 6.69 Furthermore, Sky stated that “The only practical impact of the newly proposed SLU price ceiling will be with respect to how it affects relevant margin squeeze tests.”³¹³ Sky further added that “The newly proposed ceilings means that products/bundles derived from LLU/LS could now be at a relative disadvantage (from a pricing perspective) to Eir’s NGA SABB by virtue of the widening of the gap between the ceilings.”³¹⁴ Sky stated that under the new pricing proposal “Eir retail can reduce its NGA SABB by an extra €2.43 (€4.31 less €1.88) per month relative to the price of a LLU bundle it is competing with...the impact of the

³⁰⁴ BT Response to Consultation 15/67, page 6.

³⁰⁵ BT Response to Consultation, page 6.

³⁰⁶ BT Response to Consultation 15/67, page 6.

³⁰⁷ Impact Analysis of VDSL2 from the local exchange (EVDSL) on VDSL2 from the cabinet (CVDSL) For the Irish access network. TNO report 2015 R10267. See figure 9.

³⁰⁸ BT Response to Consultation 15/67, page 7.

³⁰⁹ BT Response to Consultation 15/67, page 7.

³¹⁰ Sky Response to Consultation 15/67, page 4.

³¹¹ Sky Response to Consultation 15/67, page 4.

³¹² Sky Response to Consultation 15/67, page 5.

³¹³ Sky Response to Consultation 15/67, page 5.

³¹⁴ Sky Response to Consultation 15/67, page 5.

proposal therefore at best, ignores or at worst, totally undermines ComReg's Decision in D03/13."³¹⁵

- 6.70 BT stated that *"they are disappointed with the ComReg proposal to reduce the SLU price which hands eir Group a new lever to reduce Wholesale and Retail NGA services at a time and to a level of its choice (within a pricing window)"*³¹⁶
- 6.71 ALTO also noted the gap between the SLU and LLU prices and queried *"... what if anything has changed?"*³¹⁷ ALTO added that *"the costing methodology being proposed for both SLU and LLU is exactly the same...thus...why is there such a discrepancy between old and new pricing..."*³¹⁸
- 6.72 ALTO stated that *"The implications of the significant drop in SLU pricing has all come too late for competition...The only implication of this new ceiling therefore that we see is that it effectively relaxes the margin squeeze test on eircom for NGA SABB...[and]... ALTO members find this position problematic."*³¹⁹

Methodology for Reusable Assets and Non-reusable Assets:

- 6.73 Vodafone *"accept in principle"* the approach adopted by ComReg but reiterated that they *"...strongly question the approach in using a BU-LRAIC+ methodology for Non-reusable Assets..."*³²⁰
- 6.74 Vodafone also reiterated its point that *"...ComReg has already taken in consideration Eir's investment in Duct and Poles for the period 2015 to 2018 and as this period corresponds to when remaining NGA investments are to be made, we again question the logic of the stated percentages for Poles and Duct replacements."*³²¹
- 6.75 In its letter of 2 December 2015, Vodafone reiterated its strong disagreement *"...with an unsubstantiated use of uplifts of 8% on Poles and 5% for Ducts (non-reusable elements) and the argument from eir that this is not enough."*³²²
- 6.76 Vodafone added that *"...this is reflective of both an underinvestment by eir in the past, as well as a reflection that the replacement cycle for Poles and Ducts is longer than the regulated asset lives."*³²³ and *"If some element of additional replacement were to be used then more realistic asset lives will have to be used in the Pricing models."*³²⁴ Vodafone called on ComReg *"...to commence such a*

³¹⁵ Sky Response to Consultation 15/67, page 5.

³¹⁶ BT Response to Consultation 15/67, page 1.

³¹⁷ Alto Response to Consultation 15/67, page 3.

³¹⁸ Alto Response to Consultation 15/67, page 3/4.

³¹⁹ Alto Response to Consultation 15/67, page 4.

³²⁰ Vodafone Response to Consultation, page 8.

³²¹ Vodafone Response to Consultation, page 8.

³²² Vodafone letter of 2 December 2015, page 9, at Annex 8.

³²³ Vodafone letter of 2 December 2015, page 9, at Annex 8.

³²⁴ Vodafone letter of 2 December 2015, page 9, at Annex 8.

review as soon as possible, but note this review should not delay the implementation of revised wholesale access pricing with the move to cost orientation but that the prices are adjusted once this review is completed.”³²⁵

6.3.3 ComReg’s Position:

6.77 ComReg notes that there was general agreement among respondents regarding the pricing approach for the SLU monthly rental price. ComReg’s position with regard to the points raised by respondents are addressed under the relevant headings below.

Impact of VDSL:

6.78 Further to Eir’s point at paragraph 6.64 that in light of the launch of VDSL that the definition of LLU needs to be resolved before LLU and SLU prices can be set, ComReg considers that the definitions of LLU and SLU are such that there is no confusion in terms of delivery of service and therefore no changes are deemed to be required.

6.79 In relation to BT’s point at paragraph 6.65 that the model needs to be updated to consider EVDSL, ComReg considers that EVDSL does not impact the access network, as the network continues to be based on the copper loop from the exchange, therefore no changes are required to the Revised CAM.

6.80 In response to BT’s proposal at paragraph 6.68 that the line length from the cabinet for SLU should be limited to 1.5km (as opposed to 1km in the Consultation Document), ComReg has considered the data provided by BT and we are of the view that the line length limit should reflect BT’s proposal of 1.5km.

Price gap between SLU and LLU:

6.81 In relation to Sky’s point at paragraph 6.67 and ALTO’s point at paragraph 6.71, regarding the gap between the price of LLU and SLU, ComReg has discussed the cost modelling choices for setting the SLU and LLU prices at paragraphs 6.32 - 6.33.

6.82 The price gap between LLU and SLU is to cover the costs from the home to the cabinet. As previously set out in the NGA Decision, the link between copper and fibre is established where the SLU cost oriented price (Market 4 product) is the key cost input to the cost stack for VUA (Market 5 product) in the margin squeeze model, given that it reflects the cost from the home to the cabinet. This approach ensures that copper and fibre based services are priced consistently relative to their cost of provision.

6.83 In relation to Sky’s point at paragraph 6.68 that the proposed SLU price reduction is unlikely to deliver any material benefit from a competitive perspective,

³²⁵ Vodafone letter of 2 December 2015, page 9, at Annex 8.

ComReg considers that the demand for SLU may emerge in rural areas where private operators may require SLU to deliver broadband services as part of the NBP. Please also see paragraphs 3.32 - 3.34.

- 6.84 With regard to Sky's point at paragraph 6.69, BT's point at paragraph 6.70 and ALTO's views at paragraph 6.72 that the price reduction to SLU will allow Eir to reduce the price of its NGA services, ComReg would like to clarify that NGA services (VUA and NGA Bitstream) are subject to a margin squeeze regime. Therefore, a change in the current anchor prices for SLU does not necessarily lead to a change in the price for VUA and NGA Bitstream (i.e., the relative economic space may simply increase between VUA and SLU which would not result in a required price change to NGA products/services). Furthermore, an increase in the gap between LLU and SLU should facilitate the migration by OAOs from LLU to VUA.
- 6.85 However, price consistency between SLU and LLU is relevant where the SLU price is reduced as a result of the margin squeeze test between SLU and VUA. In the NGA Decision ComReg imposed a margin squeeze test between the VUA service in Market 5 and the SLU service in Market 4. This should ensure that VUA is not priced so low that it would dis-incentivise investment by alternative infrastructure operators during the transition to NGA services. If a reduction to the SLU price is required under the VUA to SLU margin squeeze test so also would a reduction be required to the LLU price, as appropriate, using the relevant parameters of the Revised CAM. Eir must continue to respect the link that is already established between the price of SLU and VUA as set out in the NGA Decision. The key point is the link between LLU and VUA in order to ensure that there is no inappropriate discrimination between users using the same asset, as both products share similar infrastructure inputs.

Methodology for Reusable Assets and Non-reusable Assets:

- 6.86 Further to Vodafone's point at paragraph 6.73 regarding the use of BU-LRAIC+ approach, this is addressed in Chapter 4, paragraphs 4.126-4.130.
- 6.87 In response to Vodafone's point at paragraphs 6.74 that ComReg has already taken into consideration Eir's investment in Duct and Poles for the period 2015 to 2018, this is addressed in Chapter 4, paragraphs 4.139 to 4.144.
- 6.88 With regard to Vodafone's point at paragraph 6.75 in relation to its disagreement of the replacement rate incorporated for ducts and poles, this is addressed in Chapter 4, paragraphs 4.139 to 4.144.
- 6.89 In relation to Vodafone's point at paragraph 6.76 about the review of asset lives, this is addressed in Chapter 4, paragraph 4.154.

- 6.90 Having considered the submissions from respondents, the pricing approach for determining the SLU monthly rental price remains appropriate for the reasons set out at paragraphs 6.77 to 6.89 above and for the reasons set out in Chapter 6 of the Consultation Document, at paragraphs 6.89 to 6.121 except for the modification to the sub-loop line length as discussed at paragraph 6.80.
- 6.91 Figure 8 shows the changes to the SLU price since the consultation (15/67).

Figure 8: SLU price

Description	Para ref	€
SLU average price per 15/67		€5.88*
<u>Adjustments following Consultation 15/67:</u>		
Line restriction at 1.5km (rather than 1km)	6.80	0.30
Reallocation of fixed and common costs due to line restriction	Annex 11	(0.85)
Volume loss	5.96	0.17
Payment term change	5.32-5.35	0.10
Price trend change	5.27	
Depreciation formula corrected	5.37	
Mistake in chamber prices	5.39	
Recategorisation of Dublin exchanges	8.69	
SLU average price as per Decision		€5.60*

*Includes fault repair costs

- 6.92 The SLU monthly rental prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 18.

6.3.4 ComReg's Final Position:

- 6.93 The monthly rental charge for SLU should be derived based on the BU-LRAIC+ methodology for Non-reusable Assets and Eir's Indexed RAB for Reusable Assets nationally.
- 6.94 The cost of SLU lines longer than 1.5km should be excluded from the SLU price.
- 6.95 For the national SLU monthly rental charge Eir should charge the lowest of:
- (a) The national SLU monthly rental charge based on the average cost of providing SLU nationally as determined by the Revised CAM in ComReg Decision D[XX/YY];
 - (b) The SLU monthly rental charge as amended by changes made by Eir to the main parameters of the Revised Copper Access Model under ComReg Decision D[XX/YY] and subject to prior approval by ComReg; or
 - (c) A revised SLU monthly rental charges based on the margin squeeze test between SLU and VUA (per ComReg Decision D03/13) and subject to prior approval by ComReg.
- 6.96 The SLU monthly rental prices for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 18.

6.4 Determining the SB-WLR price

6.4.1 Overview:

6.97 In Chapter 6 of the Consultation Document ComReg proposed that the SB-WLR monthly price should be set based on the higher of:

- (i) Eir's TD costs adjusted for efficiencies associated with the provision of SB-WLR nationally, resulting in a monthly SB-WLR price of €16.72; or
- (ii) A combination of the BU-LRAIC+ costs and Eir's TD costs for the provision of SB-WLR in the LEA, resulting in a monthly SB-WLR charge of €12.51.

6.98 ComReg considered that the proposed approach achieves a balance of allowing Eir to recover its national efficiently incurred costs while at the same time ensuring that there are appropriate investment incentives in urban areas. This balance is achieved by the fact that the SB-WLR price is always the higher of (i) or (ii) at paragraph 6.97.

6.99 Please refer to the Consultation Document, Chapter 6, paragraphs 6.130 – 6.168 for further details on the SB-WLR pricing approach.

6.4.2 Submissions to the Consultation Document:

6.100 The majority of respondents generally agreed that the monthly rental price for SB-WLR should be based on the higher of Eir's actual top down costs (adjusted for efficiencies) for the provision of SB-WLR nationally or the BU-LRAIC+ costs for Non-reusable Assets and active assets with Eir's Indexed RAB applied to Reusable Assets for the provision of SB-WLR in the LEA.

6.101 Sky "*...agrees with ComReg's proposal that WLR should be priced nationally (€16.72) rather than on a de-averaged basis inside and outside the LEA...*"³²⁶

6.102 Furthermore Sky stated that it "*...favours a nationally averaged WLR pricing approach that includes the cost of provisioning and repair as proposed by ComReg*"³²⁷ and that "*...the proposal should be introduced no later than 1 January, 2016.*"³²⁸ Sky also considered that "*... based on ComReg's assessment of the true cost of WLR (€16.72) nationally against what eircom has been charging nationally for the service since 2007 (€18.02)...explain[s] why Eir chose not to increase WLR charges in line with allowances under the Retail Price Cap*

³²⁶ Sky Response to Consultation 15/67, page 3.

³²⁷ Sky Response to Consultation 15/67, page 1.

³²⁸ Sky Response to Consultation 15/67, page 1.

for several years and why ultimately it could afford to discount WLR pricing (in May 2013) within the LEA as part of its NGA roll-out strategy.”³²⁹

- 6.103 BT considered that the proposed option for SB-WLR pricing would appear to be a “...workable compromise.”³³⁰
- 6.104 ALTO “agrees with ComReg.” and added that it “...agrees with ComReg’s analysis that the eircom’s Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally (with active equipment based on BU-LRAIC+ costs) or BU-LRAIC+ costs for Non-reusable Assets and active equipment with eircom’s Indexed RAB applied to Reusable Assets for the provision of SB-WLR in the LEA.”³³¹
- 6.105 While Vodafone “...agrees with the approach adopted by ComReg in the pricing of SB-WLR...”³³² it considered that “SB-WLR should be significantly lower”.³³³
- 6.106 Vodafone in its letter of 2 December 2015, made reference to the points noted by Eir in its response to the Consultation Document stating that “...the use of its own Separated Accounts costing inputs (adjusted for efficiencies) when pricing of SB-WLR, and SABB outside of LEA understates the true economic value of these assets, and Vodafone has some sympathy and understanding for this...”³³⁴
- 6.107 Vodafone further highlighted in its letter that Eir notes that “ a significant element of the SB-WLR line card assets are heavily depreciated and that to price on this basis would not reflect their ‘economic value’, and could if priced at such levels provide a dis-incentive to investment.”³³⁵ Vodafone suggest that “The most obvious solution is to reallocate NBV and depreciation costs from eir’s next generation cost base, in particular, from eir’s Broadband cost base.”³³⁶ Vodafone explained that “This would reflect the reality that eir funded its next generation investments and rollout from the profits made in current generation products and services, for example from SB-WLR.”³³⁷
- 6.108 Eir noted a number of changes which it considered would be required to the underlying costing approach for SB-WLR, as follows:

³²⁹ Sky Response to Consultation 15/67, page 4.

³³⁰ BT Response to Consultation 16/67, page 7.

³³¹ ALTO Response to Consultation 15/67, page 10.

³³² Vodafone Response to Consultation 15/67, page 8.

³³³ Vodafone Response to Consultation 15/67, page 9.

³³⁴ Vodafone letter of 2 December 2015, page 10, at Annex 8.

³³⁵ Vodafone letter of 2 December 2015, page 10, at Annex 8.

³³⁶ Vodafone letter of 2 December 2015, page 10, at Annex 8.

³³⁷ Vodafone letter of 2 December 2015, page 10, at Annex 8.

- (i) *“pole costs should be recovered using Infrastructure Renewals Accounting that takes into account a long-term forecast for pole replacement*
- (ii) *the definition of the LEA for the Bottom-Up modelling should reflect a longer term view of the areas where rival networks are likely to be rolled out*
- (iii) *the national cost for SB-WLR should reflect the actual mix of the provision of SB-WLR as between the LEA and outside the LEA*
- (iv) *the tilted annuity should be replaced with the use of a flat annuity so as to provide for a more stable and credible future path of prices; and*
- (v) *volumes in the Bottom-Up and Top-Down modelling should reflect a reasonable forecast of the loss in volumes to rival networks.”*³³⁸

6.109 Eir further added that by using “...*Eir’s actual costs adjusted for efficiencies there is an issue with the alignment of the approach to using the reported Eir costs in recent financial years to the actual SB-WLR service that will be delivered during the price control period.*”³³⁹ Eir stated that they have “...*already engaged industry stakeholders around a number of service enhancements...*”³⁴⁰ with regard to “...*enhanced provisioning and a streamlined repair process.*”³⁴¹ Eir stated that “*The additional costs of these enhancements have not been recognised in modelling to date and will not be recovered from the price level proposed for SB-WLR monthly rental at Figure 44.*”³⁴²

6.110 CEG stated that the “...*proposed price does not reflect the current geographic take-up of SB-WLR (which is skewed towards the significantly higher cost rural areas) nor does it reflect how developing competition in the LEA will result in further falls in the use of SB-WLR in the LEA.*”³⁴³

6.111 CEG stated that “...*in not reflecting the actual geographic split of demand for SB-WLR, the proposed price will require Eir to supply SB-WLR below cost.*”³⁴⁴ CEG further added that “*Eir would be faced with intensifying infrastructure-based competition in the LEA and a requirement to supply SB-WLR significantly below costs to service providers outside the LEA.*”³⁴⁵

³³⁸ Eir Response to Consultation 15/67, page 26.

³³⁹ Eir Response to Consultation 15/67, page 26.

³⁴⁰ Eir Response to Consultation 15/67, page 26.

³⁴¹ Eir Response to Consultation 15/67, page 26.

³⁴² Eir Response to Consultation 15/67, page 26.

³⁴³ CEG report, page 10.

³⁴⁴ CEG report, page 11.

³⁴⁵ CEG report, page 11.

- 6.112 CEG also considered that “... *ComReg should reflect an updated definition of its LEA in its regulation to reflect SIRO’s likely rollout not only to the end of 2018 but into its second phase.*”³⁴⁶ CEG stated that by “*Ensuring that the definition of the LEA is based on a forward-looking assessment of likely network roll-out will help to avoid undermining investment incentives...*”³⁴⁷
- 6.113 In addition, CEG considered that “*As the purpose of BU-LRAIC+ methodology is to protect investment incentives it is precisely those areas where there is the potential for new investment for which the BU-LRAIC+ methodology is crucial. Accordingly, ComReg should ensure that its application of bottom-up modelling estimates the bottom-up cost for the area of the LEA defined to include the areas where SIRO will be likely to be rolled out to as further information becomes available.*”³⁴⁸

6.4.3 ComReg’s Position:

- 6.114 We note that the majority of respondents generally agreed with the pricing approach for SB-WLR.
- 6.115 Further to Sky’s point at paragraph 6.102 that the revised SB-WLR price should be introduced no later than 1 January 2016, we recognise that the completion of the Revised CAM is an important matter and have endeavoured to complete the process in an efficient manner.
- 6.116 While Vodafone considered at paragraph 6.105 that SB-WLR should be significantly lower, ComReg notes that it has considered all of the key issues raised by respondents in the relevant chapters throughout the Decision Document. In addition, please see paragraphs 5.43 to 5.70 in Chapter 5 where we have outlined how we have revised the level of operating costs in the Revised CAM to take account of variations between Eir’s HCAs for 2013/14 and 2014/15 and how this has been reflected in the context of SB-WLR costs in the model. Please also see Figure 9 and Figure 10 below for changes to the SB-WLR price since the Consultation Document.

³⁴⁶ CEG report, page 11.

³⁴⁷ CEG report, page 11.

³⁴⁸ CEG report, page 11.

6.117 Further to Vodafone's views at paragraph 6.106 - 6.107 that a significant element of the SB-WLR line card assets are heavily depreciated and that to price on this basis would not reflect their 'economic value', ComReg would like to clarify that active assets i.e., line card, is based on the BU-LRAIC+ costs and not based on TD costs. The BU-LRAIC+ approach for active assets i.e., line cards should provide the correct pricing signals for replacement of such assets given that line cards have a short lifetime and must be replaced more often than cables and civil engineering assets. Please see Chapter 6, subsection 6.6.3 of the Consultation Document. With regards to Vodafone's point on economic value of assets, this is addressed in Chapter 4, paragraph 4.154.

6.118 In response to Eir's view at paragraph 6.108 regarding a number of changes which it considered would be required to the underlying costing approach for SB-WLR, ComReg notes the following:

- (i) With regards to pole costs, in particular the IRE approach, this point is addressed in Chapter 4, paragraph 4.145. It is important to note that the SB-WLR price based on the TD costs or Eir's Actual Costs Adjusted for Efficiencies nationally (with BU-LRAIC+ costs applied to the active equipment) would not include the provision for replacement of Non-reusable Assets i.e., it does not include an additional 8% replacement of the \times pole base or additional 5% replacement of ducts.

Instead the SB-WLR price based on Eir's Actual Costs Adjusted for Efficiencies nationally would only reflect Eir's projected "business as usual" reinvestment in poles of \times each year over the three year Price Control Period. However, if it were the case that Eir invested significantly more in its copper access network, this investment should flow through its HCAs. Therefore, our approach should allow Eir to recover any money invested in maintaining or upgrading its copper access network on the basis that Eir will have the assurance that what it spends can be recovered via the prices it can charge for SB WLR services by means of reconciliation to Eir's HCAs.

- (ii) With regards to Eir's point at paragraph 6.108 and CEG's views at paragraphs 6.112 and 6.113 on the definition of the LEA, and in particular that the LEA for the BU model should reflect forward looking investment, this is addressed in paragraph 6.41.
- (iii) With regards to Eir's view at paragraph 6.108 and CEG's views at paragraphs 6.110 and 6.111 that the national cost for SB-WLR should reflect the actual mix of provision of SB-WLR between the LEA and Outside the LEA, ComReg considers that SB-WLR is a national product with a significant amount of self-supply and as such the national approach adopted by ComReg is appropriate.

Eir is subject to the obligation of non-discrimination and when Eir Retail sells line rental it has to purchase the SB-WLR line from Open Eir (Wholesale). As a consequence, the geographic mix used by ComReg is the mix of SB-WLR as a whole (retail and wholesale lines).

- (iv) With regards to the the tilted annuity formula, and in particular Eir's view that the formula should be replaced by a flat annuity, this is addressed in Chapter 5, paragraphs 5.27 to 5.29.
- (v) With regards to volume forecasts, and in particular Eir's view that volumes should reflect reasonable volume loss to rival networks, please see Chapter 5, paragraphs 5.92 to 5.100.
- 6.119 Further to Eir's submission at paragraph 6.109 that the additional costs of the service enhancements have not been recognised in the SB-WLR modelling to date, this point is addressed in Chapter 4, paragraph 4.65.
- 6.120 Having considered the submissions from respondents, the pricing approach for determining the SB-WLR monthly rental price remains appropriate for the reasons set out at paragraphs 6.114 to 6.119 above and for the reasons set out in Chapter 6 of the Consultation Document, at paragraphs 6.125 to 6.166.
- 6.121 Figure 9 and Figure 10 shows the changes to the SB-WLR monthly average price since the consultation (15/67).

Figure 9: SB-WLR price – TD national

Description	Para ref	€ National
SB-WLR average price per 15/67		€16.72*
<u>Adjustments following Consultation 15/67:</u>		
Revised volume loss	5.95	(0.03)
Depreciation formula corrected	5.37	
OPEX	5.43-5.70	(0.51)
SB-WLR <u>average</u> national price per Decision		16.18*

*Includes fault repair and provisioning costs

Figure 10: SB-WLR price – BU costs based on Modified LEA

Description	Para ref	€ LEA
SB-WLR average price per 15/67		€12.51*
<u>Adjustments following Consultation 15/67:</u>		
Volume decline	5.95	0.49
Modified LEA footprint: <i>Addition of 109 exchanges</i> <i>Exclusion of Crit. 5 exchanges</i>	6.38-6.40	0.43
Payment term change	5.32-5.35	
Price trend change	5.27	
Depreciation formula corrected	5.37	
Mistake in chamber prices	5.39	
Recategorisation of Dublin exchanges	8.69	
SB-WLR <u>average</u> Modified LEA price per Decision		€13.43*

*Includes fault repair and provisioning costs

6.122 The SB-WLR monthly prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 20.

6.4.4 ComReg's Final Position:

6.123 For SB-WLR the monthly rental charge should be derived based on the higher of:

- (i) Eir's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally with the BU-LRAIC+ costs applied to the active equipment; or

- (ii) BU-LRAIC+ costs for Non-reusable Assets and active equipment and Eir's Indexed RAB for Reusable Assets for the provision of SB-WLR in the Modified LEA.³⁴⁹

6.124 In each year of the Price Control Period, Eir should charge a monthly rental for SB-WLR which is the higher of the National or Modified LEA price for that given year, per Figure 11.

Figure 11: Monthly price for SB-WLR – National and Modified LEA price

Total Monthly SB-WLR Charge	€ National	€ Modified LEA
[1 July] 2016 – 30 June 2017	15.91*	12.90*
1 July 2017 – 30 June 2018	16.20*	13.44*
1 July 2018 – 30 June 2019	16.41*	13.95*
1 July 2019 – 30 June 2020	16.59*	14.47*
1 July 2020 – 30 June 2021	16.82*	15.07*

* Includes rental costs, fault repair costs and connection / provisioning costs

6.125 Please see Chapter 13, Figure 20 for the SB-WLR monthly national price for the years covered by the Price Control Period and the indicative prices for 2019/20 and 2020/21.

³⁴⁹ Please see paragraphs 6.47 and 6.38 - 6.40 for details on Modified LEA footprint used to set the SB-WLR price.

6.5 Determining pricing principles for SB-WLR ISDN BRA, PRA / FRA

6.5.1 Overview:

6.126 In Chapter 6 of the Consultation Document we considered the pricing principles that should apply with regard the delivery of SB-WLR by ISDN via primary rate access ('PRA') and fractional rate access ('FRA'). We acknowledged that while the costs related to SB-WLR ISDN PRA and FRA were not captured to date in the model we proposed that the pricing principles established in relation to the SB-WLR PSTN service (at subsection 6.4 above) should also apply in the context of SB-WLR ISDN PRA and FRA services. Therefore, we proposed that Eir should be required to charge the higher of:

- Eir's TD costs adjusted for efficiencies for the provision of SB-WLR ISDN nationally; or
- A combination of the BU-LRAIC+ costs and Eir's TD costs for the provision of SB-WLR ISDN FRA and PRA services in the LEA.

6.127 Chapter 6 of the Consultation Document also set out that the ISDN BRA pricing principles should be consistent with SB-WLR.

6.5.2 Submissions to the Consultation Document:

6.128 ALTO agreed that the SB-WLR ISDN PRA and FRA services should follow the same pricing principles as that of SB-WLR PSTN services while BT and Eir disagreed.

6.129 ALTO agreed with ComReg stating that "*...for SB-WLR ISDN FRA and PRA the same solution should be adopted.*"³⁵⁰

6.130 BT stated that "*The FRA and PRA services fall within the business market and in many ways are akin to leased line infrastructure rather than the consumer services that are largely addressed by this price control consultation.*"³⁵¹

6.131 BT considered that "*...it [is] reasonable to assume that FRA and PRA services will be increasingly replaced by new IP based solution such as SIP Trunking to the benefit of end customers.*"³⁵² As a result, BT suggested that "*...regulatory intervention at this time will be counterproductive by undermining investment plans to deliver innovative substitute services.*"³⁵³ and it did not agree that

³⁵⁰ Alto Response to Consultation 15/67, page 11.

³⁵¹ BT Response to Consultation 15/67, page 7.

³⁵² BT Response to Consultation 15/67, page 7.

³⁵³ BT Response to Consultation 15/67, page 7.

“...ComReg should propose price reductions to FRA and PRA services as it will create uncertainty and potentially undermine new investment.”³⁵⁴

- 6.132 Eir disagreed with our approach on the basis that *“.... almost all of the assets specific to the Eir ISDN services have been fully depreciated and setting the price on the basis of the “actual” costs sends the wrong price signal to other operators self-providing ISDN services.”³⁵⁵* Furthermore, Eir stated that *“...deep reductions in the Eir SB-WLR prices for ISDN BRA, FRA, and PRA will favour other operators who chose not to invest and self-provide as the market price for retail ISDN services will fall towards the new SB-WLR rates. This will, in effect, strand the investments made by operators that built out access networks to business customers and invested in the core network capabilities to offer ISDN services to those customers.”³⁵⁶*
- 6.133 Eir suggested that *“...regulation of SB-WLR for PSTN and ISDN services provides an opportunity for ComReg to utilise a tariff basket approach to promote efficiency and increase overall consumer benefits. By applying a single cap to a basket of PSTN and ISDN services, ComReg can ensure that for a given forecast output level Eir’s total implied revenues would be the same as they would be under two separate caps.”³⁵⁷*
- 6.134 Eir added that *“If ComReg was minded not to allow such flexibility then it could achieve some of the consumer welfare benefits of a tariff basket by applying a different cost allocation to PSTN and ISDN services that reflects the higher value placed on the latter.”³⁵⁸* Eir suggested that previously *“...ODTR/ComReg used the gradient in retail prices by time of day to determine the structure of wholesale interconnect prices by time of day.”³⁵⁹*
- 6.135 Separately, in the Eir August Letter, Eir referred to the 'Copper Access Model - Main Model - July 2015' stating that *“...the results worksheet shows an output for ISDN BRA monthly rental based on the treatment that each service uses two copper pairs. In reality all ISDN BRA services are delivered over a single copper pair. ISDN FRA and PRA services are generally delivered over two copper pairs using HDSL technology to deliver a 2 Mbps bearer - but many use alternative fibre, co-axial cable, or radio, access to deliver the same bearer capability.”³⁶⁰*
- 6.136 In the Eir / CEG clarifications of 10 November 2015, Eir provided details of the business SIP³⁶¹ trunking services which will be used for the future provision /

³⁵⁴ BT Response to Consultation 15/67, page 7.

³⁵⁵ Eir Response to Consultation 15/67, page 27.

³⁵⁶ Eir Response to Consultation 15/67, page 27.

³⁵⁷ Eir Response to Consultation 15/67, page 27.

³⁵⁸ Eir Response to Consultation 15/67, page 28.

³⁵⁹ Eir Response to Consultation 15/67, page 28.

³⁶⁰ ComReg Document No 15/67d <http://www.comreg.ie/fileupload/publications/ComReg1567D.pdf>

³⁶¹ Session Initiation Protocol.

delivery of ISDN PRA and FRA services. Please see Annex 8 for the product sheet provided by Eir containing the details of the SIP trunking service. Eir stated that *“Given that replacement of ISDN by SIP Trunking – and the equivalent Business VoIP services offered by other Operators – is at such an early stage that a reduction in ISDN wholesale prices could damage the take up of the new services.”*³⁶² Eir considered that *“This would be particularly unfortunate as the ISDN platform is approaching end-of-life when equipment suppliers will no longer provide support or spares.”*³⁶³

- 6.137 ComReg sought clarification from Eir on whether it had a migration plan from ISDN PRA/FRA services to SIP trunking services and, if so, to provide ComReg with the details. ComReg also asked Eir to confirm if the SIP trunking service can be replicated by an alternative operator either using LLU or Bitstream.
- 6.138 In the Eir clarifications of 24 November 2015, Eir confirmed that *“...there is no current plan to retire the ISDN BRA, FRA, or PRA services.”*³⁶⁴
- 6.139 In addition, and in terms of replicability of the SIP trunking service by other operators, Eir confirmed that *“In general the larger (by voice channel) implementations use symmetrical Ethernet access. This can be replicated by an operator using the open eir WSEA service. There are also instances of small site implementation where eir Business uses a Broadband access. In this context an Operator with their own VoIP platform, such as IMS, could replicate SIP trunking using either Bitstream or unbundled loops to access customers connected to the eir copper network.”*

6.5.3 ComReg’s Position:

- 6.140 ComReg notes that ALTO agreed that the SB-WLR ISDN PRA and FRA services should follow the same pricing principles as that of SB-WLR PSTN services while BT and Eir disagreed.
- 6.141 Further to the concerns raised by BT and Eir at paragraphs 6.131 and 6.132-6.134 that ComReg’s approach for ISDN PRA and FRA services could undermine new investment while sending the wrong price signals to operators, ComReg notes that its proposal in the Consultation Document for setting the wholesale prices for ISDN PRA and FRA services was to base the costs of active assets on BU-LRAIC+ costs rather than on TD costs. This was to ensure that the costs relating to these assets transmit the correct build-or-buy signals so that OAOs are encouraged to climb the ladder of investment. ComReg acknowledges the fact that the reported costs for these services are declining as the assets

³⁶² Eir covering note “Additional Information from meeting of 22nd October”, page 2, Annex 8.

³⁶³ Eir covering note “Additional Information from meeting of 22nd October”, page 3, Annex 8.

³⁶⁴ Eir note “Additional Information from meeting of 22nd October and mail from 17th November”, page 2, Annex 8.

specific to the provision of ISDN PRA and FRA services are reaching the end of their regulatory asset lives. Given that, in the case of SB-WLR ISDN PRA and FRA services, investments in active assets would have represented a significant proportion of the overall cost base the level of returns reported in the HCA accounts appear higher than would be the case if the BU-LRAIC+ costs of active assets are considered.

- 6.142 ComReg also notes BT's reference at paragraph 6.130 to FRA and PRA services falling within the business market and we are aware that these services are increasingly being provided over business access fibres. While this Decision Document is primarily concerned with copper access services, any determination of cost oriented charges for ISDN PRA and FRA services would have to consider the extent that fibre delivery is also used for such provision.
- 6.143 We also note that there are issues concerning the current cost of the active equipment. ComReg is aware that FRA and PRA are declining products and Eir has informed ComReg that "*the ISDN platform is approaching end-of-life when equipment suppliers will no longer provide support or spares*"³⁶⁵. This appears to be similar to the situation in the UK where BT has indicated to Ofcom "*that the main capital assets used in the provision of wholesale ISDN30 (i.e. line cards and concentrators) are no longer in manufacture and that to serve new demand it is currently re-using its existing stock*"³⁶⁶. One consequence of this trend is that determining the current cost of replacing the existing equipment for the purposes of informing build / buy decisions becomes more subjective as it is no longer possible to reference existing supplier contracts.
- 6.144 ComReg also notes BT's point at paragraph 6.131 that it might be "*reasonable to assume that FRA and PRA services will be increasingly replaced by new IP based solution such as SIP Trunking to the benefit of end customers*"³⁶⁷. However, the take-up of such services to date remains low and ComReg is of the view that it would be premature to conclude that these possible alternatives could serve as a Modern Equivalent Asset ("**MEA**") for the purposes of deriving the current cost to Eir of providing current generation ISDN PRA and FRA services.

³⁶⁵ Eir covering note "Additional Information from meeting of 22nd October", page 3, Annex 8.

³⁶⁶ Ofcom: Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30; Volume 1; Section 17.13

³⁶⁷ BT Response, page 8.

- 6.145 Therefore, ComReg considers that there are reasons why a rigorous assessment of the current cost of providing ISDN PRA and FRA services is problematic at this time. There is also a risk that setting wholesale prices that undervalue the active assets would discourage migration from a declining wholesale FRA and PRA service to newer and more efficient replacements (e.g., IP-based solutions). Setting prices below the efficient level of costs may also undermine investment incentives in newer technologies that are capable of providing similar services. This risk is compounded if the resulting prices are so low that they result in the stranded investments by other wholesale operators trying to compete with Eir in this market.
- 6.146 Given the fact that supplies of replacement equipment are no longer readily available there is also a chance that significantly lower charges may result in an increase in the demand for current generation ISDN PRA/FRA services and Eir may not be in a position to source the necessary equipment to meet that level of demand at a cost that would be sufficiently covered by the lower price levels. Similar concerns are relevant for the ISDN BRA service in so far as ISDN BRA is also supported on a legacy technology and has a relatively small and declining customer base (see paragraph 6.148). Therefore, for now we consider Eir should charge no more than the current rental prices for SB-WLR ISDN BRA, PRA and FRA and Eir should continue to keep these under review in line with its pricing obligations.
- 6.147 In relation to Eir's submission at paragraph 6.133 regarding the proposed tariff basket approach, ComReg acknowledges that a tariff basket approach could be relevant for products of a similar nature. However, SB-WLR PSTN, SB-WLR ISDN BRA and SB-WLR ISDN FRA/PRA address different types of consumers i.e., residential consumers are predominately associated with PSTN services while small to medium enterprises ('SME') are associated with ISDN BRA services and larger businesses are linked to ISDN FRA and PRA services. This is also recognised in the RFVA Decision where ISDN FRA / PRA services fall into a separate product market – high level voice access ('HLVA') market. Consequently a tariff basket approach could facilitate cross subsidies between groups of customers. As noted in Eir's submission that "*there is no reason that residential customers should be required to pay more so as to limit prices paid by business customers*" this suggests that Eir could use the basket approach to price differentiate between different types of customers. However, while a basket approach can potentially have some benefits it could also distort competition by introducing greater uncertainty for OAOs regarding wholesale price levels. Therefore, ComReg considers that the approach described at paragraphs 6.141 - 6.146 is more appropriate.
- 6.148 In response to Eir's view at paragraph 6.134 that if ComReg did not accept the tariff basket approach then ComReg could use gradient pricing similar to the

approach for interconnect prices, ComReg accepts that a gradient approach would be different from a price basket approach as the relative price differentials would be known and set in advance. However, this would still provide some level of price uncertainty for operators if the absolute level of prices was not also determined. In addition, a gradient approach makes most sense when the volume of services within the basket are broadly comparable. However, this is not the case with regard SB-WLR services. Based on the “Wholesale Fixed Narrowband Access” statement in Eir’s 2015 HCAs there are 1.2m SB-WLR PSTN lines, 64k SB-WLR ISDN BRA lines and 7k ISDN FRA/PRA lines³⁶⁸. As the volumes of ISDN BRA services are so low compared to PSTN services, an increase of €1 to ISDN BRA services is required to generate a decrease of €0.05 cents to SB-WLR PSTN services.

- 6.149 Furthermore, applying a gradient to interconnect voice services was justified on the basis that it resulted in a more efficient use of network resources as it was designed to discourage calls at peak times and promote greater utilisation at off-peak times when there was spare capacity on the network. There is no such obvious rationale to justify the introduction of a gradient between PSTN and ISDN services. For these reasons ComReg consider that a gradient does not appear to be an appropriate mechanism to set the prices for these services.
- 6.150 In relation to Eir’s clarifications at paragraphs 6.137 to 6.139 regarding the SIP trunking service, ComReg considers that Eir should continue to keep this under review. When it migrates the current ISDN PRA and FRA services over to the SIP trunking platform, Eir should ensure that it complies with its pricing obligations.
- 6.151 With regard to Eir’s point at paragraph 6.135 that the Revised CAM shows an output for ISDN BRA monthly rental based on the treatment that each service uses two copper pairs instead of a single copper pair, ComReg would like to point out that the final Revised CAM is no longer used to determine the prices for ISDN given our views at paragraphs 6.141 - 6.146.
- 6.152 Having considered the submissions from respondents, we have decided that Eir should charge no more than the current rental prices for SB-WLR ISDN BRA, PRA and FRA services for the reasons set out at paragraphs 6.141 to 6.149 above. In addition, Eir should continue to keep these charges under review.

³⁶⁸ Eir HCAs 2015, page 13.

6.5.4 ComReg's Final Position:

6.153 Eir should not charge in excess of the current SB-WLR ISDN BRA, PRA and FRA rental prices. Eir should keep these charges under review in line with its pricing obligations.

Chapter 7

7 Pricing approach for SABB Outside the LEA

7.1 Introduction

- 7.1 In this chapter we determine the approach for setting the price for current generation SABB Outside the LEA.
- 7.2 This chapter combines our decision on the appropriate costing methodologies (Chapter 4) and dimensioning the Revised CAM model (Chapter 5) to determine the output price for SABB Outside the LEA.
- 7.3 In ComReg Decision D11/14³⁶⁹ (**‘WBA Pricing Decision’**) ComReg imposed the obligation of cost orientation with regard to the provision of SABB Outside the LEA. ComReg considered that Outside the LEA, Eir may price excessively for SABB services, given that there is little or no alternative infrastructure competition in this area. Therefore, ComReg’s objective is to protect those operators and, ultimately, consumers in rural areas from excessive prices where they decide to purchase a broadband only service from Eir.
- 7.4 In this Decision Document we are further specifying the obligation of cost orientation (pursuant to the WBA Pricing Decision) with regard to the provision of **current generation SABB Outside the LEA only**.

7.2 Determining the price for SABB Outside the LEA

7.2.1 Overview

- 7.5 In Chapter 7 of the Consultation Document ComReg proposed that the maximum monthly rental price for SABB Outside the LEA should be €22.16 (including fault repair and provisioning costs and excluding usage costs).
- 7.6 ComReg was of the preliminary view that the monthly price for SABB, Outside the LEA, should be based on Eir’s TD costs (adjusted for efficiencies) associated with the provision of SABB Outside the LEA.

³⁶⁹ ComReg Document 14/73R: Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream; dated 9 July 2014.

- 7.7 We considered that the monthly SABB price Outside the LEA should ensure that there is no over or under recovery of costs by Eir. We also considered that the build or buy signals were less relevant in this area given the objective is not to stimulate alternative operator investment where it is clear no commercial operator might invest. In addition, the BU-LRAIC+ approach could lead to over-recovery of costs and could give rise to significant increases in prices Outside the LEA.
- 7.8 Please refer to the Consultation Document, Chapter 7, paragraphs 7.20 – 7.43 for further details on the pricing approach for SABB Outside the LEA.

7.2.2 Submissions to the Consultation Document:

- 7.9 There was general agreement among respondents regarding the pricing approach for determining the monthly rental price for SABB Outside the LEA.
- 7.10 Eir agreed with “...*the principle that the use of the actual network cost outside the LEA is the correct basis for a price ceiling for current generation SABB.*”³⁷⁰ However, Eir reiterated its point about the “...*short-term view of Eir’s “actual” costs...*”³⁷¹ Eir further added that it understands ComReg’s reasoning for the proposed use of Eir’s actual costs rather than to price SABB at the full BU-LRAIC+ costs but Eir requested ComReg to ensure that the definition of the LEA “...*correctly reflects the best information on the likely rollout of rival networks including SIRO’s plans.*”³⁷²
- 7.11 Eir noted a number of adjustments that it considered were required in relation to the estimation of Eir’s costs, as follows:
- (i) *“the forecast loss in volumes needs to be updated to reflect the higher recent rate of line loss and likely market developments;*
 - (ii) *pole costs should be recovered using Infrastructure Renewals Accounting that takes into account a long-term forecast for pole replacement;*
 - (iii) *the tilted annuity should be replaced with the use of a flat annuity so as to provide for a more stable and credible future path of prices; and*
 - (iv) *prices should be set over the regulatory period using a CPI-X approach.*”³⁷³

³⁷⁰ Eir Response to Consultation 15/67, page 29.

³⁷¹ Eir Response to Consultation 15/67, page 29.

³⁷² Eir Response to Consultation 15/67, page 29.

³⁷³ Eir Response to Consultation 15/67, page 29.

- 7.12 BT *“generally agree with ComReg’s preliminary view that the monthly rental price for SABB Outside the LEA should be based on Eir Group’s Actual Costs Adjusted for Efficiencies with the active equipment based on the BU-LRAIC+ methodology for the provision of SABB Outside the LEA”*³⁷⁴ assuming that this is for *“...current generation SABB.”*³⁷⁵
- 7.13 However, BT stated that *“...ComReg need to consider the input cost elements ... on ULMP”*. In this regard BT suggested that *“...ComReg need to re-consider the D-Side working distances of ADSL2+...[to]...allow reduced prices for both current and next generation services based on the Unbundled Local Metallic Loop.”*³⁷⁶
- 7.14 ALTO disagreed with ComReg’s proposed alternative option of using BU-LRAIC+ costs and Eir’s Indexed RAB for the provision of SABB Outside the LEA. ALTO considered that as *“...this service will not use the Voice card in the exchange hence the most accurate comparison is the price of ULMP plus the port charge of BMB.”*³⁷⁷ ALTO requested ComReg to consider this point carefully.
- 7.15 Vodafone agreed in principle but questioned *“...the need for a BU-LRAIC+ element to the pricing of this service.”*³⁷⁸ Vodafone reiterated text from Section 4.105 of the Consultation Document which stated that *“The BU-LRAIC+ methodology is appropriate where the asset(s) concerned are replicable and where the objective is to encourage the deployment of alternative infrastructure.”*³⁷⁹ Vodafone stated that this concept *“...would appear not to be the case for SABB Active Assets in Non LEA areas.”*³⁸⁰ Vodafone believed that this would lead to prices *“...being set with the expectation that alternative providers would be able to purchase (elements of) LLU in these areas and invest in Broadband equipment.”*³⁸¹ However, Vodafone stated that this is not the case and *“With the advent of SABB, the natural replacement for LLU in the NGA environment is VUA[and] it is to be expected that the same pricing principles would apply...”*³⁸² Vodafone requested ComReg to revisit this pricing approach.

³⁷⁴ BT Response to Consultation 15/67, page 8.

³⁷⁵ BT Response to Consultation 15/67, page 8.

³⁷⁶ BT Response to Consultation 15/67, page 8.

³⁷⁷ ALTO Response to Consultation, page 11.

³⁷⁸ Vodafone Response to Consultation 15/67, page 9.

³⁷⁹ Vodafone Response to Consultation 15/67, page 9.

³⁸⁰ Vodafone Response to Consultation 15/67, page 9.

³⁸¹ Vodafone Response to Consultation 15/67, page 9.

³⁸² Vodafone Response to Consultation 15/67, page 9.

7.2.3 ComReg's Position:

- 7.16 ComReg notes that there was general agreement among the majority of respondents regarding the pricing approach to determine the maximum monthly rental price for SABB Outside the LEA.
- 7.17 In response to Eir's submission, at paragraph 7.10, regarding the scope of the LEA and the fact that it should include the likely rollout of rival networks, this point is addressed in Chapter 6, paragraph 6.41.
- 7.18 Further to Eir's other points raised at paragraph 7.11, this has already addressed these points as follows:
- (i) The forecast line loss is addressed in Chapter 5, paragraphs 5.93 to 5.99.
 - (ii) The pole costs and the IRE approach have been addressed in Chapter 4, paragraphs 4.139 to 4.144 and paragraph 4.145, respectively.
 - (iii) The tilted annuity is addressed in Chapter 5, paragraphs 5.27 to 5.29.
 - (iv) The CPI-X approach is addressed in Chapter 5, paragraph 5.131.
- 7.19 At paragraph 7.12 BT sought confirmation that the pricing approach for SABB Outside the LEA relates to current generation only. ComReg confirms that this is correct.
- 7.20 In relation to BT's submission at paragraph 7.13 that we should reconsider the D-side working distances for LLU, this point is addressed in Chapter 6, paragraph 6.43 .
- 7.21 In response to ALTO's point at paragraph 7.14 relating to the alternative option of using BU-LRAIC+ for the provision of SABB Outside the LEA, ComReg notes that ALTO appears to have misinterpreted the text of paragraph 7.40 of the Consultation Document. ComReg agrees with ALTO that the costs of SABB comprises the costs of the local loop and the BMB related costs (including port charges). ComReg also agrees that the active equipment for SABB does not include the line card which is only required for SB-WLR. As set out in the Consultation Document (see paragraph 7.40 of the Consultation Document) it is not that the SABB price should recover the cost of the line card but that basing the SABB price Outside the LEA on the BU-LRAIC+ methodology for Non-reusable Assets and active equipment (i.e., DSLAMs and BRAS for SABB) and using Eir's Indexed RAB for Reusable Assets would result in a higher price than the combination of a national SB-WLR price plus BMB. Consequently, we agree with ALTO that there would be no incentive for operators to migrate from using a combination of SB-WLR and BMB to using a SABB service Outside the LEA.

Consequently, ComReg's preliminary view in the Consultation Document was that the price of SABB Outside the LEA should be based on Eir's Actual Costs Adjusted for Efficiencies and with the BU-LRAIC+ methodology for the active equipment required for the provision of SABB Outside the LEA as this will allow Eir recover its costs while incentivising OAOs to migrate from SB-WLR and BMB to SABB when it is efficient to do so.

- 7.22 With regard to ALTO's point at paragraph 7.14, ComReg considers that using the price of ULMP plus the port charge of BMB to inform the SABB Outside the LEA price is not appropriate. The ULMP price is based on the costs of providing copper loops in the Modified LEA, while the SABB Outside the LEA price needs to recover the costs of providing copper loops outside the LEA. Please also see paragraph 7.21.
- 7.23 Further to the point raised by Vodafone at paragraph 7.15 regarding the need for a BU-LRAIC+ element to the pricing of the SABB service Outside the LEA, ComReg notes that as set out in Chapter 7, paragraph 7.21 of the Consultation Document, the only element that is priced on BU-LRAIC+ costs is the active equipment. All other assets relating to the provision of SABB Outside the LEA are based on TD costs. For the area Outside the LEA a BU-LRAIC+ approach for active assets ensures that Eir can replace these assets and invest in these assets, as appropriate. Please also see paragraphs 7.21-7.22.
- 7.24 In relation to Vodafone's submission at paragraph 7.15 regarding their view that the same pricing principles should apply for LLU and VUA, this point is addressed in Chapter 4, paragraph 4.135.
- 7.25 Having considered the submissions from respondents, the pricing approach for determining the SABB monthly rental price Outside the LEA remains appropriate for the reasons set out at paragraphs 7.16 to 7.24 above and for the reasons set out in Chapter 7 of the Consultation Document, at paragraphs 7.21 to 7.31.
- 7.26 Figure 12 shows the changes to the SABB price Outside the LEA since the consultation (15/67).

Figure 12: SABB price Outside the LEA

Description	Para Ref	€
SABB average price OLEA per 15/67		22.16*
<u>Adjustments following Consultation 15/67:</u>		
National line loss	5.95	0.06
Reduction in number of exchanges Outside the LEA	6.38-6.40	0.43
Changes in TD operating costs per HCAs	5.43-5.70	(0.56)
SABB average price OLEA as per Decision		22.09*

*Includes fault repair and provisioning costs

7.27 The SABB monthly prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 21.

7.2.4 ComReg's Final Position:

7.28 For SABB Outside the LEA, the maximum monthly rental charge should be derived based on Eir's Actual Costs Adjusted for Efficiencies and with the BU-LRAIC+ methodology for active equipment for the provision of SABB Outside the LEA.

7.29 The maximum SABB monthly prices for Outside the LEA for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 21.

Chapter 8

8 Pricing approach for Civil Engineering Infrastructure and Dark Fibre

8.1 Introduction

- 8.1 In this chapter we determine the approach for setting the prices for CEI (duct access and pole access) and dark fibre.
- 8.2 This chapter combines our decision on the appropriate costing methodologies (Chapter 4) and dimensioning the Revised CAM model (Chapter 5) to determine the output prices for duct and pole access and dark fibre.
- 8.3 The respective discussion is considered under the following headings:
- Determining the price for pole access;
 - Determining the price for duct access; and
 - Determining the price for dark fibre.

8.2 Determining the price for pole access

8.2.1 Overview:

- 8.4 In Chapter 8 of the Consultation Document ComReg proposed a national annual price per pole of €9.87 (based on 2 cables per pole) or €19.74 where one cable is present. We proposed that the annual price for pole access should be based on the assumption that there are two cables per pole.
- 8.5 While in the Consultation Document ComReg proposed an average price over the Price Control Period, for comparative purposes the year-on-year national price would have been €18.82; €19.74 and €20.66 for 2016, 2017 and 2018 respectively.
- 8.6 ComReg was of the preliminary view that the proposed pole price should be based on a blend of Eir's TD costs for those poles that can be reused for NGA (and including Eir's forecasted capital spend on poles over the next 3 years) and the long run view (or BU-LRAIC+ costs) of replacement of poles for the provision of NGA services.

- 8.7 In the Consultation Document we proposed that the pole access price should be derived on the assumption of 92% reutilisation of the existing pole base where, 92% of poles are valued on TD costs and 8% are valued on a BU basis.
- 8.8 We also considered that as poles may be required in the LEA and Outside the LEA that in order to send the appropriate investment signals to each area that the proposed price per pole should reflect the cost per pole in the LEA and Outside the LEA.
- 8.9 Please refer to the Consultation Document, Chapter 8, paragraphs 8.14 – 8.38 for further details on the proposed pricing approach for pole access.

8.2.2 Submissions to the Consultation Document

- 8.10 While a number of respondents agreed with the approach for setting the price per pole a number of concerns were raised mainly around the replacement factor.

Replacement factor:

- 8.11 Vodafone questioned “...the need for a ‘non-reusable / replacement’ % to be applied when developing the Poles pricing...”³⁸³
- 8.12 Enet disagreed with the replacement rate of 8% for deployment of NGA and provided the following reasons to support its view:
1. *“Normal, efficient pole replacement and renewal is covered in the application of the RAB / BU-LRAIC+ pricing model.*
 2. *This additional 8% provision is not reconcilable with an appropriate normal maintenance and assurance programme delivering a stable and safe pole population.*
 3. *ComReg D03/09 sets the asset life of a pole at 30 years. This, with no other influence (growth, plant alteration, damage to plant etc), would drive a replacement rate of 3.3% per year. The proposed adjustment of 8% in similar circumstances drives an additional 2.7% per year. The resulting rate in effect unwinds D03/09 by determining the asset life as being 17.5 years.*
 4. *Typically, on a 12 year test cycle, an operator will encounter pole failure rates on the tested segment of the order of 15%. This drives an effective annual replacement rate of 1.2% of the total pole population. It is not tenable that the deployment of fibre cables on poles will drive a 325% increase in the rate of pole failure on the existing stock driving the encountered fail rate from 1.2% to 3.9%*

³⁸³ Vodafone Response to Consultation 15/67, page 10.

5. *There should be no provision for any additional pole failure attributable to fibre cable deployment. Additional pole requirements are dealt with adequately under 4.143 and 8.32.*³⁸⁴

8.13 Eir reiterated its views that the proposed approach “...ignores the need for substantial pole replacement in the medium term”.³⁸⁵ Eir suggested that “Infrastructure Renewals Accounting would better promote long-term price stability and support efficient investment while ensuring strict cost recovery by eircom...”³⁸⁶

8.14 Eir also reiterated its views that “...the use of a tilted annuity implies future price increases that are not credible.”³⁸⁷

8.15 In addition, Eir repeated its views that “A CPI-X approach would better achieve price stability over the longer term and better support efficiency.”³⁸⁸

Determination of the price per pole:

8.16 ALTO agreed with ComReg’s general approach, stating that Option 2 “...is straightforward and most appropriate³⁸⁹”. ALTO also noted that “...members experiences with Eir continually attempting to set cost orientated duct access prices has been frustrating, and gives the market no confidence that the prices Eir were offering were cost orientated.”³⁹⁰

8.17 Vodafone “supports this approach...”³⁹¹ but raised concerns around the need for a replacement factor.

8.18 Enet agreed with the approach for setting the price per pole. Enet further added that the proposed methodology was “...flexible and adaptable ... simple to apply for both Eir and an OLO [Other Licenced Operators].”³⁹² Enet further added that their “...assumption is the division and allocation of costs is linear across users, and the number of cables they can deploy will not be restricted otherwise than by engineering limits.”³⁹³ Enet also stated that “At a simple level a standard deployed pole at present is an 8.5m pole inserted 1.5m in the ground. The required height clearance to the lowermost cable is 6m leaving 1m typically for cable carrying. With 300mm clearance between cables this leaves room for six

³⁸⁴ Enet Response to Consultation 15/67, page 4.

³⁸⁵ Eir Response to Consultation 15/67, page 30.

³⁸⁶ Eir Response to Consultation 15/67, page 30.

³⁸⁷ Eir Response to Consultation 15/67, page 30.

³⁸⁸ Eir Response to Consultation 15/67, page 30.

³⁸⁹ ALTO Response to Consultation 15/67, page 12.

³⁹⁰ ALTO Response to Consultation, page 11/12.

³⁹¹ Vodafone Response to Consultation 15/67, page 10.

³⁹² Enet Response to Consultation 15/67, page 4.

³⁹³ Enet Response to Consultation 15/67, page 4.

cables using front and back of the pole without resorting to any extension brackets.”³⁹⁴

- 8.19 Eir stated that it “...agrees with ComReg’s proposals to set a per pole price (rather than price per meter of cable) and to set de-averaged prices in the LEA and outside the LEA.”³⁹⁵ However, it also raised some points, as set out below.
- 8.20 Eir stated that “...the discussion of the range of options for pricing pole access in the context of use by several operators is extremely limited by comparison with the consultation on the very similar issue of pricing Line Share services in ComReg 08/106.”³⁹⁶
- 8.21 Eir referred to paragraph 8.30 of the Consultation Document, which states that “If the existing network deploys 2 cables then the pole is considered at full capacity so pole access is not available”. Eir considered that “While this might have been the case for certain pole routes for the deployment of copper cable, it is not the case for the pole access product recently launched by Eir...”³⁹⁷
- 8.22 Eir stated that the prices in Figure 40 of the Consultation Document seem to contemplate only those situations where there are one or two cables on the pole. Eir stated that “Depending on the history of the access network demand in a particular area, eircom may have deployed one, two, or three cables of different sizes (in terms of copper pairs).”³⁹⁸
- 8.23 Furthermore, Eir considered that “...Figure 40 seems to imply that an operator hanging a 48 fibre optic cable on an eircom pole route that currently carries two 20 pair copper cables will pay less than on a similar route that carries a single 50 pair cable.”³⁹⁹
- 8.24 Eir also stated that the pricing structure “...implies that when eircom subsequently adds a fibre optic cable to the same route the operator will find their rental charge falling – and indeed when eircom retires the copper network the operator charge will rise.”⁴⁰⁰
- 8.25 Separately, in the Eir August Letter, Eir stated “...there is no clear discussion as to how the implementation of the 50:50 allocation rules will affect pole access charges applied to operators when the original Eir cable is removed from the pole route as may be the case in the intervention area for the NBP.”⁴⁰¹

³⁹⁴ Enet Response to Consultation 15/67, page 4.

³⁹⁵ Eir Response to Consultation 15/67, page 30.

³⁹⁶ Eir Response to Consultation 15/67, page 29.

³⁹⁷ Eir Response to Consultation 15/67, page 29.

³⁹⁸ Eir Response to Consultation 15/67, page 30.

³⁹⁹ Eir Response to Consultation 15/67, page 30.

⁴⁰⁰ Eir Response to Consultation 15/67, page 30.

⁴⁰¹ ComReg Document No 15/67d - http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

8.2.3 ComReg's Position:

Replacement factor:

- 8.26 The issues raised by Vodafone and E-net, at paragraphs 8.11 and 8.12 regarding the replacement rate for poles at 8%, are addressed by ComReg in Chapter 4, paragraphs 4.139-4.144.
- 8.27 ComReg notes Eir's views at paragraph 8.13 regarding the proposed alternative IRE approach for determining pole access prices. This is addressed in Chapter 4, paragraph 4.145.
- 8.28 In relation to Eir's submission, at paragraph 8.14 regarding the use of a tilted annuity and Eir's point, at paragraph 8.15, regarding the use of a CPI – X approach, ComReg considers that these have been addressed in Chapter 5, paragraphs 5.27-5.29 and paragraph 5.131, respectively.

Determination of the price per pole:

- 8.29 In relation to Eir's views, at paragraph 8.20, that ComReg's discussion on the range of options for pricing pole access is limited compared to similar issues discussed in the context of line share in ComReg Document 08/106, ComReg does not agree. For Line Share our consideration was how to allocate costs between two services (voice and broadband), which could both share a copper pair without affecting the capacity of the copper pair to support either service. In such a situation a standard capacity based approach is not relevant and so other factors need to be considered. On the other hand, a variant of the capacity based approach remains relevant in the context of pole access as it is possible to allocate the pole costs based on some measure of relative capacity such as the number of cables or the number of operators sharing the pole. Therefore, the economic issues related to the pole access price are significantly less complex compared with Line Share.
- 8.30 Furthermore, we note that there was general agreement from ALTO, Vodafone, E-net and Eir (at paragraphs 8.16 - 8.19) regarding the approach for setting the price per pole based on an average of 2 cables per pole. In light of Eir's submission as set out at paragraphs 8.21 to 8.25 and E-net's views at paragraph 8.18, regarding the capacity of cables per pole, we have given further consideration to how the capacity based allocation should be derived, i.e. per cable or per operator.
- 8.31 Taking into account the issues raised by Eir in determining the price per pole ComReg sees some merit in adopting a price 'per operator' accessing the pole rather than a price 'per cable' deployed on the pole. A price 'per cable' deployed is warranted in situations where deploying an additional cable is considered to be a significant cost driver with regard to the overall cost of poles. In such cases

a price 'per cable' helps incentivise operators to avoid deploying too many small cables on a pole thereby promoting more efficient use of the pole.

- 8.32 Although ComReg still considers that an average of two cables per pole is an appropriate approach for the Revised CAM, the responses of both Eir and Enet suggest that additional fibre cables can be accommodated on an existing pole without significantly impacting on the overall costs of poles. Eir notes that it has recently introduced a pole access product that *"...is designed specifically to support the deployment of new fibre optic cables on pole routes previously built for distribution of copper cables. In this context new brackets are added at the top of the pole and the fibre optic cable is deployed above the existing copper cable(s). This configuration will require minimal re-arrangement of the copper cables – and so whatever copper cables have been previously hung on the pole route it is unlikely to be "full"*⁴⁰²
- 8.33 In addition, Enet stated that a standard pole *"...leaves room for six cables using front and back of the pole without resorting to any extension brackets."*⁴⁰³ Therefore, the responses from these operators indicate that the deployment of additional cables does not appear to be as significant a cost driver for poles as ComReg previously assumed. ComReg is also aware that OAOs will already be incentivised, for overall network efficiency reasons, to seek to minimise the number of fibre cables they deploy. Both these considerations reduce the need to adopt a price per cable.
- 8.34 The legacy of cable deployment on poles by Eir would also suggest that a price 'per operator' might be preferable. Pricing on a 'per cable' basis could see Eir being penalised now for having to deploy multiple cables on poles in the past due to the iterative nature of network expansion and given that the pole cost to Eir was not significantly dependent on the number of cables it deployed at each stage of the network build.
- 8.35 There also appears to be some merit in the argument that pricing on a 'per cable' basis would lead to more significant changes in the charges faced by operators over time as prices would need to respond to each change in the number of cables deployed on each pole. For example, if Eir and an OAO shared access to a pole the price paid by each would change if Eir were to retire one of its existing copper cables or deploy an additional fibre cable. Charging on a 'per operator' basis ensures that, all things being equal, that the price paid per operator would only change in two scenarios. Firstly, when another operator first gains access to that pole, and/or, secondly, when an operator ceases access to that pole.

⁴⁰² Eir Response to Consultation 15/67, pages 29 and 30.

⁴⁰³ Enet Response to Consultation 15/67, page 4.

- 8.36 Charging per operator should also be easier to administer as it only requires knowledge of the number of operators seeking access to the pole and not the number of cables deployed by each operator at a particular moment in time. It would also avoid debates as to what constitutes a cable, for example would a drop wire be considered as being equivalent to a cable for pricing purposes.
- 8.37 Consequently, ComReg considers that a charge per operator may be more appropriate for determining pole access prices. This is on the basis that there is significant engineering flexibility regarding how many cables can be accommodated on a pole, that a charge 'per operator' would lead to more stable prices over time and a charge 'per operator' would reduce the administrative burden of setting pole prices when compared with a charge 'per cable' regime.
- 8.38 For the avoidance of doubt the average pole prices in Figure 13 and the annual price prices set out in Figure 22 (in Chapter 13) reflect the rental costs only associated with the pole.⁴⁰⁴
- 8.39 Figure 13 shows the changes to the price per pole since the consultation (15/67). As noted above, the annual rental price per operator will vary depending on the number of operators on the pole to which the OAO is seeking access (including Eir itself).

⁴⁰⁴ For any one-off additional services associated with the pole access product, e.g., surveys or additions of pole furniture, Eir should charge no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of such incremental services.

Figure 13: Price per pole per annum

Description	Para Ref	€ National	€ Modified LEA	€ Outside the Modified LEA
Price per pole (average) per 15/67		19.74	23.16	19.06
<u>Adjustments following Consultation 15/67:</u>				
Modified LEA footprint	6.38-6.40	-		
<i>Addition of 109 exchanges</i>			(0.21)	(0.09)
<i>Exclusion of Crit. 5 exchanges</i>				
Price trend change	5.27	0.76	0.90	0.70
Depreciation formula correction	5.37	0.32	0.45	0.33
Price per pole (average) per Decision		20.82	24.30	20.00

8.40 The pole access prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 22.

8.2.4 ComReg's Final Position:

8.41 The price per pole is appropriate for setting pole access prices.

8.42 The price per pole should reflect the cost per pole depending on whether the pole is in the Modified LEA or Outside the Modified LEA.

8.43 The maximum pole access prices for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13, Figure 22.

8.44 The annual rental price per pole charged/offered by Eir to OAOs (and to Eir itself) will change linearly as the number of operators (including Eir) with access to those specific pole changes.

8.3 Determining the price for duct access

8.3.1 Overview:

- 8.45 In Chapter 8 of the Consultation Document ComReg proposed that the price per meter of sub-duct should be used to set the duct access prices.
- 8.46 ComReg was of the preliminary view that the proposed duct access price should be based on a blend of Eir's TD costs for those ducts that can be reused for NGA and the long run view (or BU-LRAIC+ costs) of replacement of ducts for the provision of NGA services.
- 8.47 In the Consultation Document we proposed that the duct access price should be derived on the assumption of 95% reutilisation of the existing duct base where, 95% of ducts are valued on TD costs and 5% are valued on a BU basis.
- 8.48 In addition, we proposed that the annual price per metre of sub duct is differentiated between duct access in Dublin exchanges and duct access in provincial exchanges.
- 8.49 Please refer to the Consultation Document, Chapter 8, paragraphs 8.39 – 8.65 for further details on the proposed pricing approach for duct access.

8.3.2 Submissions to the Consultation Document:

- 8.50 There was general agreement from respondents regarding the proposed price per meter of sub-duct for setting duct access prices.

Replacement factor:

- 8.51 Vodafone supported ComReg's view but questioned "...*the need for a 'non-reusable / replacement' % to be applied...*"⁴⁰⁵
- 8.52 Enet did not agree that "...*an adjustment of 5% to the RAB for underground civil infrastructure... is necessary.*"⁴⁰⁶

Determination of the price for duct:

- 8.53 Enet agreed with ComReg's approach for setting duct access prices. Enet considered that the approach "...*drives efficient use of available duct space*"⁴⁰⁷.

⁴⁰⁵ Vodafone Response to Consultation 15/67, page 10.

⁴⁰⁶ Enet Response to Consultation 15/67, page 5.

⁴⁰⁷ Enet Response to Consultation 15/67, page 5.

- 8.54 Eir considered that if “...*question 15 should more correctly read that the cost per metre of sub-duct should be used to inform the setting of duct access prices..*”⁴⁰⁸ then “...*eircom agrees...*”⁴⁰⁹.
- 8.55 Separately, in the Eir August Letter Eir stated that “...*there is ambiguity and inconsistency between the uses of the terms 'cost' and 'price' and between the treatments of nationally averaged costs to set prices for duct sharing and dark fibre access.*”⁴¹⁰
- 8.56 ALTO considered that “...*the sub-duct approach appears plausible...*”⁴¹¹ but it stated that ComReg had not dealt with usage. ALTO stated that ComReg must “...*assess the duct pricing on a fractional basis e.g. 1/4th, 1/7th of sub duct depending on the nature of the services being taken up for pricing.*”⁴¹²

Dublin and Provincial pricing:

- 8.57 There was agreement from respondents regarding the proposal to reflect cost differences between Dublin and provincial areas in the duct access prices.
- 8.58 Eir agreed with ComReg and recognised that “...*the alternative is to charge a single price that reflects the nationally averaged cost and such a price would send the wrong economic signal to operators as to when to build their own duct and when to rent eircom sub-duct.*”⁴¹³ Eir questioned whether the proposed approach to the treatment of duct costs “...*will underestimate costs, particularly because of the use of a tilted annuity.*”⁴¹⁴ Eir also stated that “...*annual prices should be set using a CPI-X approach.*”⁴¹⁵
- 8.59 While ALTO agreed with ComReg it suggested that “...*ComReg should assess the charging and pricing principles applied more widely by querying pricing from regional sub-contractors.*”⁴¹⁶

8.3.3 ComReg’s Position:

Replacement factor:

- 8.60 The views of Vodafone at paragraph 8.51 and E-net at paragraph 8.52 regarding the need for a replacement factor are addressed this in Chapter 4, paragraphs 4.139-4.144.

⁴⁰⁸ Eir Response to Consultation 15/67, page 30.

⁴⁰⁹ Eir Response to Consultation 15/67, page 30.

⁴¹⁰ ComReg Document No 15/67d - http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

⁴¹¹ ALTO Response to Consultation 15/67, page 12.

⁴¹² ALTO Response to Consultation 15/67, page 12.

⁴¹³ Eir Response to Consultation 15/67, page 31.

⁴¹⁴ Eir Response to Consultation 15/67, page 31.

⁴¹⁵ Eir Response to Consultation 15/67, page 31.

⁴¹⁶ ALTO Response to Consultation 15/67, page 12.

Price per metre of sub duct:

- 8.61 ComReg notes that there was general agreement from respondents regarding the price per meter of sub-duct for setting duct access prices.
- 8.62 With regard to Eir's points, at paragraph 8.55, where Eir stated that there is ambiguity and inconsistency between the uses of the terms 'cost' and 'price' for duct sharing and dark fibre. ComReg notes that in its letter to Eir on 13 August it requested Eir to provide the bases for its opinion in its response to the consultation and we would consider it at that point. No further views were provided by Eir on this point as part of its submission to the Consultation Document.
- 8.63 In response to ALTO's point at paragraph 8.56 that duct access pricing should be assessed on a fractional basis, ComReg wish to highlight that the per metre price already takes capacity into consideration as it has been derived by dividing the total cost relating to access duct infrastructure by the total length of underground sub-duct (when available) or by cables to derive a cost per metre⁴¹⁷. Duct access provides access seekers with the opportunity to have their fibre cable carried within a sub-duct installed in Eir's duct infrastructure and the access seeker will be charged on the basis of the length of sub-duct accessed regardless of how it subsequently uses that sub-duct.
- 8.64 This is considered appropriate as the cost of trenches is sensitive to the size of the trench, which in turn is driven by the capacity of ducts occupied by sub-ducts (when available) or by cables. Pricing on the basis of access to a dedicated sub-duct is consistent with cost causation as it recognises the capacity of duct trenches to carry both sub-ducts and cables.
- 8.65 Having considered the submissions from respondents we remain of the view that duct access charges should be based on a price per metre of sub-duct, for the reasons set out at paragraphs 8.61 to 8.64 above and for the reasons set out in Chapter 8 paragraphs 8.47 to 8.50 of the Consultation Document.

Dublin and Provincial pricing:

- 8.66 ComReg notes that there was general agreement from respondents regarding the price differential between Dublin and Provincial areas.
- 8.67 ComReg notes Eir's submission at paragraph 8.58 that that the proposed approach to the treatment of duct costs will underestimate costs, particularly because of the use of a tilted annuity and that the annual prices should be set using a CPI-X approach. ComReg considers that these are addressed in Chapter 5, paragraphs 5.27-5.29 and paragraph 5.131, respectively.

⁴¹⁷ See paragraphs 8.47 to 8.50 of the Consultation paper.

- 8.68 Further to ALTO's views at paragraph 8.59 that ComReg should query pricing from regional subcontractors, the duct access prices reflect the cost differences between Dublin and Provincial areas based on sub-contractor rates.
- 8.69 Furthermore, during the consultation process we realigned the Dublin and Provincial exchanges in the Revised CAM. This is to reflect the fact that there are 140 exchanges (see Annex 15) subject to "Dublin" subcontractor rates for ducting work whereas the Revised CAM for the Consultation Document only considered the 55 exchanges in the Dublin metropolitan area when deriving the Dublin/Provincial split. However, the higher Dublin contractor rates should also apply to the additional 85 exchanges even though they are outside the Dublin metropolitan area in order to be consistent with rates charged by Eir's contractors in these areas. Charging the higher contractor rates results in increases in the average costs for these exchanges but their inclusion as part of the revised Dublin calculation reduces the average costs in the revised "Dublin" area as the added exchanges have smaller trenches than the Dublin metropolitan area. This has resulted in a decrease to duct access prices per metre in "Dublin" exchanges, as highlighted in Figure 14.
- 8.70 Having considered the submissions from respondents we remain of the view that the charges for duct access should reflect the cost differences between Dublin and provincial areas, for the reasons set out at paragraphs 8.66 to 8.68 above and for the reasons set out in Chapter 8 paragraphs 8.59 to 8.63 of the Consultation Document.
- 8.71 Figure 14 and Figure 15 show the changes to the duct access price per metre for Dublin and Provincial since the consultation (15/67).

Figure 14: Duct access price per metre per annum - Dublin:

Description	Para Ref	€ Carriageway	€ Footway	€ Verge
Duct access price per metre per 15/67		2.78	2.13	1.30
<u>Adjustments following Consultation 15/67:</u>				
Realignment of Dublin and Provincial exchanges	8.69	(0.46)	(0.32)	(0.14)
Price trend change	5.27			
Depreciation formula correction	5.37	0.32	0.19	0.02
Mistake in chamber price	5.39			
Duct access (average) price per metre per Decision		2.64	2.00	1.18

Figure 15: Duct access price per metre per annum - Provincial:

Description	Para Ref	€ Carriageway	€ Footway	€ Verge
Duct access price per metre per 15/67		1.55	1.25	0.93
<u>Adjustments following Consultation 15/67:</u>				
Realignment of Dublin and Provincial exchanges	8.69	0.16	0.11	0.05
Price trend change	5.27	0.12	0.05	-
Depreciation formula correction	5.37			
Mistake in chamber prices	5.39			
Duct access (average) price per metre per Decision		1.83	1.41	0.98

8.72 The maximum duct access prices for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13 at Figure 23 and Figure 24.

8.3.4 ComReg's Final Position:

8.73 The price per metre of sub-duct should be used to set duct access prices.

8.74 The duct access prices should reflect the cost differences between Dublin and provincial areas.

8.75 The maximum duct access prices for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13 at Figure 23 and Figure 24.

8.4 Determining the price for dark fibre

8.4.1 Overview:

- 8.76 In Chapter 8 of the Consultation Document ComReg proposed that the price per meter of fibre is appropriate for setting dark fibre prices where the annual price per meter should be no more than €0.19 nationally.
- 8.77 ComReg was of the preliminary view that the proposed dark fibre price should be based on a blend of Eir's TD costs for those assets that can be reused for NGA and the BU-LRAIC+ costs for those assets that cannot be reused for NGA services.
- 8.78 In the Consultation Document ComReg clarified that the proposed price for dark fibre only applies in those circumstances where access to civil engineering infrastructure (ducts and poles) is not available for economic, technical or capacity reasons and where dark fibre is available.
- 8.79 Please refer to the Consultation Document, Chapter 8, paragraphs 8.66 – 8.82 for further details on the proposed pricing approach for dark fibre.

8.4.2 Submissions to the Consultation Document:

- 8.80 While ALTO and Vodafone generally agreed with ComReg's national price per metre for setting dark fibre prices, Eir raised a number of points.

Dark fibre regulatory obligations:

- 8.81 Eir considered that "...dark fibre is not a regulated product but, in the case where dark fibre is provided in lieu of duct or pole access, then the price should be as per D03/13"⁴¹⁸. Eir highlighted the text in paragraph 2.47 of the Consultation Document which states that "*The proposed price for dark fibre only applies in those circumstances where access to civil engineering infrastructure (ducts and poles) is not available for economic, technical or capacity reasons and as such where dark fibre is available*". Eir stated that "*At face value, the statement above might suggest that the first access seeker intending to deploy fibre in competition with eircom and using eircom's CEI in a particular location would be required to take CEI access if that is available at the relevant CEI access price, and would not be able to demand fibre access simply because the dark fibre price would be a cheaper option for that access seeker.*"⁴¹⁹

⁴¹⁸ Eir Response to Consultation 15/67, page 6.

⁴¹⁹ Eir Response to Consultation 15/67, page 34.

- 8.82 Eir believed that the proposed methodology for pricing dark fibre “...is not currently fit for purpose...[as]...the regulatory policy objective of offering dark fibre is to act as a fall back option to CEI access where CEI access is not available” Eir stated that “...no serious consideration has been given by ComReg to when dark fibre might actually be required to be provided, and what incentives are created by the proposed dark fibre price in those scenarios.”⁴²⁰
- 8.83 Eir’s view is that ComReg’s proposal on dark fibre “...should be withdrawn in favour of the previous proposals put forward in ComReg Decision D03/13 (NGA Remedies).”⁴²¹ In addition, Eir suggested that “...ComReg should confirm that dark fibre access is a fall-back option that will only be required to be provided where:
- i. the OAO must first seek access to duct or pole capacity;
 - ii. access to ducts and poles cannot reasonably be provided for technical or capacity reasons; and
 - iii. there is sufficient dark fibre capacity available after taking into account eircom’s own future capacity requirements.”⁴²²
- 8.84 Eir also called on ComReg to confirm its statement from ComReg consultation document number 12/27⁴²³ “...that access to dark fibre is not required to be provided where the available capacity is required for eircom’s own future capacity requirements.”⁴²⁴
- 8.85 Furthermore, Eir considered that the proposal regarding dark fibre “...is a significant departure from the proposal put forward in ComReg Decision D03/13 (...NGA Remedies), where it was proposed that ComReg would not insist on the publication of reference prices for civil engineering access[but] Where dark fibre is provided in lieu of duct or pole access, it was proposed that ComReg would allow eircom three months to agree a price with an access seeker which would enable it to reflect local costs.”⁴²⁵
- 8.86 Eir considered there is a number of reasons why it does not agree with our proposed approach but “The most important reason is that eircom’s deployment of fibre optic cable in the access network has been very limited, and the cost currently calculated from the revised CAM reflects this limited deployment...”⁴²⁶

⁴²⁰ Eir Response to Consultation 15/67, page 36.

⁴²¹ Eir Response to Consultation 15/67, page 36.

⁴²² Eir Response to Consultation 15/67, page 36.

⁴²³ http://www.comreg.ie/_fileupload/publications/ComReg1227.pdf

⁴²⁴ Eir Response to Consultation 15/67, page 34.

⁴²⁵ Eir Response to Consultation 15/67, page 32.

⁴²⁶ Eir Response to Consultation 15/67, page 32.

- 8.87 In the Eir August Letter Eir stated that “...*Eircom has announced a wider FTTH deployment - the costs modelled to date in the CAM relate exclusively to FTTC deployments between Eircom MDFs and street cabinets.*”⁴²⁷
- 8.88 Eir also considered that “*The cost for these fibre links is probably grouped closely around a national average – and if the dark fibre service is to be limited to paths between MDFs and street cabinets (i.e. as a potential backhaul service for operators considering deploying VDSL and SLU) then the nationally averaged cost may be an appropriate basis for the price.*”⁴²⁸
- 8.89 Eir stated that “*In the future eircom will deploy fibre optic cable more deeply into the access network to provide FttH services to customer premises...[which]... will give rise to substantially different unit costs as between FttH for urban infill on the one hand, and FttH to reach premises beyond the reach of EVDSL in rural areas on the other.*”⁴²⁹ For these reasons, Eir “...*has serious concerns that market participants may be misled by ComReg’s current proposals suggesting that the price for eircom dark fibre will be a single national rate reflecting the low unit cost of bringing fibre optic cable through only the most densely used part of the access network.*”⁴³⁰
- 8.90 Eir stated that “*It is unclear at this point exactly where in the network dark fibre might be required and under what circumstances eircom might be required to meet a ‘reasonable request’...[and]...Without a clear idea of where and when dark fibre access might be required, it is not possible to calculate an appropriate access price.*”⁴³¹
- 8.91 Eir considered that the proposed price for dark fibre is too low “... *in the context of the claimed policy objective – that is, that the dark fibre access option should be available as an alternative to duct and pole access in cases where duct or pole access cannot be supplied...*”⁴³²
- 8.92 Eir believed that “...*the current proposal falls far short of providing the stable and predictable access prices that are necessary in order to provide certainty and good incentives for investment.*”⁴³³
- 8.93 Eir also noted that “*The Consultation states that the proposed fibre cost is derived from an average of the eircom access network....The question this aggregate approach raises is whether the average calculated using this method represents*

⁴²⁷ ComReg Document No 15/67d - http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

⁴²⁸ Eir Response to Consultation 15/67, page 32.

⁴²⁹ Eir Response to Consultation 15/67, page 32.

⁴³⁰ Eir Response to Consultation 15/67, page 32.

⁴³¹ Eir Response to Consultation 15/67, page 32.

⁴³² Eir Response to Consultation 15/67, page 32.

⁴³³ Eir Response to Consultation 15/67, page 33.

*the likely average that will be applicable to NGA fibre links...*⁴³⁴ Furthermore, Eir believed that *“It is not at all clear that the density of fibre installed in commercial locations where there is significant demand for leased lines is relevant to estimating the number of fibres likely to be needed when providing an NGA fibre link.”*⁴³⁵ Eir stated that *“If the actual number of fibres used connecting cabinets to ODFs is below the average for the network as a whole, then the calculated fibre access price will be too low.”*⁴³⁶

- 8.94 Furthermore, Eir considered that the current proposed approach for dark fibre uses the costs from the Revised CAM combined with assumptions on the average number of fibres per cable and the average utilisation rate of the fibres in the cables but it stated that *“The access price derived in this way will not be stable over time.”*⁴³⁷ and *“The number of cables and fibres will change over time as will the utilisation rate of those fibres...[which] will result in changing access prices over time...”*⁴³⁸

Price consistency between dark fibre and CEI access prices:

- 8.95 In the Eir August Letter Eir stated that: *“There is also an inconsistency between the geographically deaveraged approach proposed for duct access pricing and the nationally averaged approach proposed for dark fibre - a service that uses many of the same input costs.”*⁴³⁹
- 8.96 Eir considered that *“...the current proposal would result in dark fibre access potentially being priced at a level that would be much cheaper than duct or pole access.”*⁴⁴⁰ Eir stated that this could have perverse outcomes *“...such as discouraging OAOs from being the first access seeker in an area, and providing incentives to enter in areas where another entrant has already entered (because dark fibre is then available at very low cost) rather than in areas where competition is still lacking.”*⁴⁴¹
- 8.97 Eir stated that *“It is not clear what might then happen if that access seeker or other access seekers request access to additional duct or pole capacity.”*⁴⁴² Eir highlighted an example that *“...if there were only two sub-ducts in the relevant location that were both now occupied, but eircom had spare fibre in its sub-duct, would eircom then be required to offer dark fibre?”* In addition, Eir questioned

⁴³⁴ Eir Response to Consultation 15/67, page 33.

⁴³⁵ Eir Response to Consultation 15/67, page 33.

⁴³⁶ Eir Response to Consultation 15/67, page 33.

⁴³⁷ Eir Response to Consultation 15/67, page 35

⁴³⁸ Eir Response to Consultation 15/67, page 35

⁴³⁹ ComReg Document No 15/67d - http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

⁴⁴⁰ Eir Response to Consultation 15/67, page 34.

⁴⁴¹ Eir Response to Consultation 15/67, page 34.

⁴⁴² Eir Response to Consultation 15/67, page 34.

whether “...the answer depend upon whether parallel competing infrastructure (e.g. UPC) existed in the area?”⁴⁴³

- 8.98 Eir stated that “...dark fibre should normally be more expensive than duct or pole access, at realistic levels of fibre utilisation.”⁴⁴⁴ If that is not the case Eir stated that “...an access seeker will be better off with dark fibre and it will not be a close substitute for duct/pole access, but rather will be a preferred method of network deployment.”⁴⁴⁵
- 8.99 Eir compared the proposed annual price per meter for dark fibre of €0.19 nationally with the proposed duct access prices that range between €0.93 and €2.78 per meter depending upon the location and surface type. Eir considered that “...these figures suggest that an access seeker would need to light between five (€0.93/€0.19) and fifteen fibres (€2.78/€0.19) in a rented duct (depending upon location) in order to achieve a similar access price per fibre to that available using the currently proposed dark fibre price.”⁴⁴⁶ Eir believed that this analysis shows that access seekers “will potentially have a very strong incentive to seek dark fibre access.”⁴⁴⁷

8.4.3 ComReg’s Position:

Dark fibre regulatory obligations:

- 8.100 In response to Eir’s point at paragraph 8.81 that dark fibre is not a regulated product, ComReg does not agree. As set out in the NGA Decision, Eir has an obligation to provide and grant access to OAOs “Where Civil Engineering Infrastructure is not available, Dark Fibre where reasonably available”.⁴⁴⁸ Therefore, the obligation to provide access to dark fibre is only in circumstances where there is no available capacity for an OAO to access civil engineering infrastructure (‘CEI’) i.e., duct or poles, on a particular route, and Dark Fibre is reasonably available.
- 8.101 ComReg notes Eir’s views at paragraph 8.82-8.83 that the proposed methodology for dark fibre is not fit for purpose as the objective of dark fibre is a fall back option and that we should reinstate our NGA Decision on dark fibre. Separately, we note Eir’s request (see paragraph 8.84) to clarify a statement in ComReg Document 12/27 regarding future available capacity. ComReg remains of the view, as set out in the NGA Decision, that where access to civil engineering

⁴⁴³ Eir Response to Consultation 15/67, page 34.

⁴⁴⁴ Eir Response to Consultation 15/67, page 34.

⁴⁴⁵ Eir Response to Consultation 15/67, page 34.

⁴⁴⁶ Eir Response to Consultation 15/67, page 35.

⁴⁴⁷ Eir Response to Consultation 15/67, page 34.

⁴⁴⁸ Page 350 of the NGA Decision.

(duct and poles) is not available for economic, technical or capacity reasons, Eir should be obliged to provide access to dark fibre, where it is available.

- 8.102 Therefore, where access to civil engineering infrastructure cannot be met for economic or technical reasons, requests may be met by the provision of available dark fibre. ComReg considers that dark fibre must be made available only where reasonable and where dark fibre is available.
- 8.103 In this regard ComReg considers that dark fibre is only considered to be available when there are fibres in excess of spare capacity legitimately reserved by Eir to cater for its future network developments or as required for resilience purposes.
- 8.104 Therefore, a request for dark fibre access is only considered reasonable where the requesting operator has first sought access to spare duct or pole capacity but access to ducts and poles cannot reasonably be provided for technical or capacity reasons.
- 8.105 At paragraph 8.85 Eir considers that the proposal for dark fibre is a significant departure from the NGA Decision (D03/13) regarding publication of prices and the negotiation process between Eir and the access seeker. In ComReg D03/13 access to dark fibre was a two-stage process. The first is that the both parties negotiate in good faith regarding the availability of CEI. This first stage remains unchanged by this Decision Document. The second stage was that the price of dark fibre would be negotiated in good-faith by both parties. The pricing approach for dark fibre set out in this Decision Document replaces this negotiation process only. ComReg considers that the approach set in this Decision Document for dark fibre provides more pricing transparency to the market and provides a level of price certainty to OAOs in the event that access to civil engineering infrastructure (ducts and poles) is not available for economic, technical or capacity reasons and where dark fibre is reasonably available.
- 8.106 ComReg notes Eir's concerns at paragraphs 8.86 to 8.94 that the proposed price for dark fibre access is based on its limited deployment of fibre in the access network to date, it takes no account of the costs associated with deploying fibre optic cable more deeply into the access network to provide FTTH services to customer premises and the current prices fall short of providing stable and predictable access prices. ComReg considers that as the obligation to provide dark fibre access only applies where there is no available capacity for an OAO to access CEI (duct or poles), the fibre cables that Eir are proposing to deploy in the D-side of the access network for FTTH are unlikely to be relevant to the dark fibre access product as duct and pole access should be available in those areas.
- 8.107 For example, the submissions from Eir and Enet as set out in paragraphs 8.32 and 8.33 noted that there is significant capacity available on poles to accommodate additional fibre optic cables, therefore ComReg considers the

issue of dark fibre access may be unlikely to arise with regard to the overhead fibre cables that would be deployed extensively in the D-side of the access network to support FTTH. In addition, the valuation of the duct network in the Revised CAM allows for the replacement of 5% (see paragraph 4.139) of Eir's existing duct network to enable NGA roll-out. Consequently, it can be expected that, as Eir extends its NGA network and has to replace and augment the ducts in the D-side of the access network, this duct capacity will not only allow Eir to deploy its own fibre optic cables but should also facilitate duct access by OAOs.

- 8.108 Therefore, even if, as Eir have noted in paragraph 8.94, "*The number of cables and fibres will change over time as will the utilisation rate of those fibres*", the key issue with regards to dark fibre prices is the the unit costs of fibre cables in those parts of the network where dark fibre is likely to be required for economic, technical and capacity reasons. As these areas are likely to correspond to the "*most densely used parts of the access network*" (see paragraph 8.89) it is reasonable to conclude that any deployment of FTTH by Eir during the Price Control Period has limited, if any, relevance to the dark fibre product offering.
- 8.109 ComReg notes Eir's views at paragraph 8.89 that there will be "*substantially different unit costs as between FttH for urban infill on the one hand, and FttH to reach premises beyond the reach of EVDSL in rural areas on the other.*" As set out at paragraph 8.101, the obligation to provide dark fibre access only arises where access to civil engineering infrastructure cannot be met for economic or technical reasons, requests may be met by the provision of available dark fibre. This indicates that if dark fibre access is required it will be in those areas where significant capacity restrictions exist for economic or technical reasons and it is therefore reasonable to anticipate that these areas will be confined to the congested urban duct access network – this should not arise in rural areas particularly as access to alternative wholesale products, such as duct and poles, should be available.
- 8.110 On this basis the price for dark fibre access does not have to reflect "*the likely average that will be applicable to NGA fibre links*", as suggested by Eir at paragraph 8.94, but only those access fibre cables that are required for the dark fibre access product. Therefore, if, as expected, dark fibre is limited to certain congested urban areas the unit costs should be consistent with the costs of the fibre paths that share those economic and technical characteristics. In addition, while the cost analysis in the Revised CAM is primarily concerned with Eir's deployment of fibre cables in the access network, it would appear to be relevant to the dark fibre access product, as it considers the relevant parts of the network, in particular, the fibre cables deployed in the Exchange side ('E-side') of the access network between the MDF and street cabinet, and in the distribution side ('D-Side') access to offices in urban areas, where the possible need for dark fibre access may arise.

8.111 Eir acknowledged at paragraph 8.88 that “...if the dark fibre service is to be limited to paths between MDFs and street cabinets (i.e. as a potential backhaul service for operators considering deploying VDSL and SLU) then the nationally averaged cost may be an appropriate basis for the price”⁴⁴⁹. In light of the fact that dark fibre is only available as an alternative to duct and pole access in those cases where pole and access cannot be supplied for economic or technical reasons, ComReg considers that the cost analysis in the Revised CAM is appropriate for the purposes of setting dark fibre access prices despite the proposed extensions to access fibre cable deployment planned by Eir.

Price consistency between dark fibre and CEI access prices:

8.112 ComReg notes the views of Eir at paragraphs 8.96 and 8.98- 8.99 that the current proposal would result in dark fibre access potentially being priced at a level that would be much cheaper than duct or pole access and this could have perverse outcomes. ComReg considers that the dark fibre price is intended to be a cost oriented price reflecting the average cost of deploying fibre cables in those parts of the access network exhibiting the technical, economic and capacity characteristics consistent with the dark fibre product. The costs that inform the dark fibre price are set with reference to the cost of access fibre optic cables deployed mainly in urban areas and include a share of the duct and pole access that is used to support the deployment of those fibre cables based on the relative capacity of that infrastructure (mainly ducts) occupied by the fibre cables. The cost analysis also includes a return on capital employed and a contribution to fixed and common costs. Therefore, the dark fibre price is set with reference to the modelled costs of duct and poles which also informs the duct and pole access prices.

8.113 Furthermore, incentivising an operator to provide additional services by allowing access to dark fibre at a price that enables Eir recover its average costs does not, in ComReg’s view, appear to be a “perverse outcome” as suggested by Eir at paragraph 8.96. Rather, charging a cost oriented price to access fibres that would otherwise remain unused should be considered an efficient way of increasing economic welfare for consumers. Imposing a higher price for dark fibre might result in the spare fibre in Eir’s access network remaining unused and could even encourage other operators to invest in additional fibre cables, ducts and poles when it is not efficient to do so. Given the high costs associated with civil infrastructure investment ComReg does not consider it is appropriate for such investment to be incentivised at the cost of overall network efficiency.

⁴⁴⁹ Eir Response to Consultation 15/67, page 32.

- 8.114 Eir's concern at paragraphs 8.96- 8.97 that operators could be incentivised to try and 'game' the situation by delaying the provision of a service to customers until it can be sure it can do so using dark fibre rather than having to take duct or pole access, does not seem to be valid. ComReg considers that if the OAO decides to delay its service offering until all available ducts have been filled by other operators (such that it could avail of dark fibre – if available) then it runs a real risk of losing its intended customers to its competitors.
- 8.115 With regard to Eir's views at paragraph 8.95 that the cost of CEI (duct and pole access) accounts for most of the cost of dark fibre and the price of dark fibre should be structured in a similar way to that of CEI, ComReg agrees in part.
- 8.116 While ComReg considers that it is reasonable to derive a separate price for Dublin and provincial areas, deriving a cost oriented price by surface type is not feasible for dark fibre as it requires precise information on the given surface type a fibre uses over its route length. Although the Revised CAM does use information on surface type to determine the current costs of duct infrastructure it does not produce this information in a manner that facilitates charging each cable a different duct cost based on its specific deployment within each surface type. This is further complicated by the fact that the majority of the TD costs for duct are derived from Eir's TD HCAs, which only retain information on the duct costs in an exchange area but not on the cost by surface type in each area. Consequently, only a cost oriented Dublin/provincial price differential would appear to be feasible for dark fibre prices.
- 8.117 Having considered the submissions from respondents, the price per metre of fibre remains appropriate for setting dark fibre prices for the reasons set out at paragraphs 8.100 to 8.116 above and in Chapter 8 of the Consultation, paragraphs 8.71 to 8.80 except for modifications to the geographic area where we now consider that dark fibre price should be differentiated between Dublin and Provincial as discussed in paragraph 8.116.
- 8.118 Figure 16 shows the changes to the dark fibre price per metre since the consultation (15/67). Please note that as outlined at paragraph 8.116 the dark fibre price is now based on the geographic split of Dublin and Provincial. In order to do a like for like comparison with the Dublin and Provincial dark fibre prices in this Decision Document we have also set out what the prices for dark fibre would have been in the Consultation Document if the Dublin and Provincial split was used.

8.119 The dark fibre price calculated in Figure 16 is for one single (strand of) fibre. In the case where an access seeker requires 2 fibres then the price in Figure 16 will be multiplied by 2 and so forth. The dark fibre price includes the cost of access to fibre optic cables deployed mainly in urban areas and includes a share of the duct and pole access that is used to support the deployment of those fibre cables based on the relative capacity of that infrastructure (mainly ducts) occupied by the fibre cables. The cost analysis also includes a return on capital employed and a contribution to fixed and common costs. Please note as set out in paragraph 8.100, the price for dark fibre only applies in circumstances where there is no available capacity for an OAO to access duct or poles, on a particular route, and where dark fibre is reasonably available.

Figure 16: Dark fibre price per metre per annum:

Description	Para Ref	€ Dublin	€ Provincial
Dark fibre average price per metre per 15/67		0.24	0.16
<u>Adjustments following Consultation 15/67:</u>			
Realignment to Dublin / Provincial	8.69	0.01	(0.03)
Payment term change	5.32-5.35		
Price trend change	5.27		
Depreciation formula correction	5.37		
Mistake in chamber prices	5.39		
Dark fibre average price per metre per Decision		0.25	0.13

8.120 The annual price per metre for dark fibre for each year of the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13 at Figure 25.

8.4.4 ComReg's Final Position:

8.121 Access to dark fibre only applies in those circumstances where access to civil engineering infrastructure (ducts and poles) is not available for economic, technical or capacity reasons and as such where sufficient dark fibre is available.

8.122 The price per metre of fibre is appropriate for setting dark fibre prices.

8.123 Dark fibre prices should reflect the costs associated with the provision of the service in Dublin and Provincial areas.

8.124 The maximum annual price per metre for dark fibre for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13 at Figure 25.

Chapter 9

9 Pricing approach for Line Share

9.1 Introduction

9.1 In this chapter we determine the appropriate monthly rental charge for Line Share.

9.2 The Line Share price is based on the incremental cost (excluding fault clearance) of supporting broadband services on a line that is also used to support narrowband services. Therefore, the charge of €0.77 for Line Share does not include the costs of the local loop as this cost is already reflected in retail and wholesale narrowband prices.

9.2 Determining the price for Line Share

9.2.1 Overview:

9.3 In Chapter 9 of the Consultation Document ComReg proposed to continue to charge the maximum monthly rental price for Line Share of €0.77 based on the incremental costs relevant to the ongoing day to day running of the Line Share service.

9.4 As 100% of the costs of the local loop are already recovered through the price charged for retail and wholesale narrowband access, the incremental cost approach for Line Share ensures that Eir does not over recover its costs with regard to the Line Share monthly rental price.

9.5 The incremental costing methodology solely considered those costs relevant to the ongoing day-to-day running of the Line Share service. These incremental costs include the following:

- Remedial costs associated with pair gain removal; and
- Carrier administration and billing costs.

9.6 Please refer to the Consultation Document, Chapter 9, paragraphs 9.4 – 9.14 for further details on the pricing approach for Line Share.

9.2.2 Submissions to the Consultation Document:

9.7 There was general agreement among respondents that the incremental costing methodology should remain in place for determining the rental price for line share.

- 9.8 Vodafone stated that it “...*supports this approach.*”⁴⁵⁰
- 9.9 Eir considered that “...*the methodology for setting the monthly rental for Line Share was determined after ComReg 08/106 and that it is not appropriate to review it at this time as any change would have implications for the pricing of a number of other access services – as well as for operators that have invested in this service on the basis of the result of the previous consultation.*”⁴⁵¹
- 9.10 BT agreed with ComReg stating that “*The incremental pricing policy for Line Share has existed for several years in Ireland and other jurisdictions and reflects that SB-WLR recovers the line costs.*”⁴⁵²
- 9.11 While ALTO agreed with the proposal to continue with the incremental costing approach for line share, it considered that “...*the incremental costs should actually be falling and the price should consequently reduce.*”⁴⁵³

9.2.3 ComReg’s Position:

- 9.12 We note the general agreement among respondents regarding the pricing approach for determining the line share monthly rental price.
- 9.13 With regard to Eir’s submission at paragraph 9.9 that it is not appropriate to review line share at this time as changes would have implications for other access services, ComReg considers that it is important to review the monthly rental for Line Share in order to ensure consistency with prices of other access services and across the ladder of investments. In any case, the price remains at €0.77 and the methodology remains the same.
- 9.14 In response to ALTO’s point at paragraph 9.11 that Line Share costs should be falling, ComReg would like to point out that as set out in Chapter 9, paragraphs 9.10 and 9.11 of the Consultation Document, ComReg received cost projections from Eir for the relevant categories of costs together with the projected broadband volumes. The outcome of our review indicated that although costs have fallen as a result of increased efficiencies and a lower WACC, volumes have also fallen with the result that the monthly charge of €0.77 remains appropriate. However, it should be noted that Eir are obliged to ensure compliance with their cost orientation obligation and the onus resides with Eir to keep these charges under review.

⁴⁵⁰ Vodafone Response to Consultation 15/67, page 10.

⁴⁵¹ Eir Response to Consultation 15/67, page 37.

⁴⁵² BT Response to Consultation 15/67, page 8.

⁴⁵³ ALTO Response to Consultation 15/67, page 13.

- 9.15 Having considered the submissions from respondents, the pricing approach for determining the line share monthly rental price remains appropriate for the reasons set out at paragraphs 9.12 to 9.14 above and for the reasons set out in Chapter 9 of the Consultation Document, at paragraphs 9.4 to 9.12.
- 9.16 The maximum monthly rental charge for Line Share for the Price Control Period (2016-2019) and the indicative prices for 2019/20 and 2020/21 are set out in Chapter 13 at Figure 19.

9.2.4 ComReg's Final Position:

- 9.17 The maximum monthly rental charge for Line Share should be based on the incremental cost methodology.

Chapter 10

10 Margin squeeze tests

10.1 Introduction

- 10.1 In this chapter we further specify the obligation not to cause a margin squeeze pursuant to the FACO Decision.
- 10.2 In this Decision Document we further specify the margin squeeze between WLR and retail line rental. In addition, we further specify the margin squeeze obligation such that an appropriate economic space is maintained between the price of POTS based VUA against the price for standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs).
- 10.3 The respective discussion is considered under the following headings:
- Retail margin squeeze test between SB-WLR and retail line rental;
 - Retail price notification and compliance procedures: and
 - Wholesale margin squeeze test – POTS based VUA.

10.2 Retail margin squeeze test between SB-WLR and retail line rental

10.2.1 Overview:

- 10.4 In Chapter 10 of the Consultation Document ComReg proposed a margin squeeze test between the price of retail line rental and the price of SB-WLR pursuant to the FACO Decision.
- 10.5 ComReg proposed in the Consultation Document that the following principles should apply with regard to the retail margin squeeze test:
- *Retail costs*: the retail costs in the retail margin squeeze test should include product management costs, marketing and sales, billing costs, fault reporting costs and connection costs (where appropriate).
 - *Operator cost base*: the EEO cost standard should be applied to the retail costs in the retail margin squeeze test between retail line rental and SB-WLR.
 - *Appropriate cost standard*: the retail margin squeeze test between retail line rental and SB-WLR should be based on the ATC costs of Eir.

- *National or regional assessment*: the retail margin squeeze test should be based on a national basis where Eir should recover the ATC costs for line rental nationally.

10.6 Please refer to the Consultation Document, Chapter 10, paragraphs 10.14 – 10.38 for further details on the proposed approach for the margin squeeze test between the retail price for retail line rental and the wholesale price for SB-WLR.

10.2.2 Submissions to the Consultation Document:

10.7 Vodafone, Sky and BT agreed with a retail margin squeeze for line rental, while Eir (and its consultants, CEG, Compass Lexecon and Michael Rhodes) disagreed for a number of reasons as detailed below. ALTO considered that further specification of the underlying principles of the test was required.

10.8 BT stated that “*Absent functional separation, EOI and given past margin squeeze concerns in Ireland we consider there is a need to continue margin squeeze tests.*”⁴⁵⁴

10.9 In its letter of 2 December 2015, Vodafone highlighted the need for both cost oriented pricing at the wholesale level, and retail controls, such as a Retail Margin Squeeze, on Eir to protect the continued development of competition. Please refer to paragraph 10.26. Vodafone also stated that “*the continued use of a Retail Margin Squeeze enables the wider industry to have some reassurance that eir will have reduced ability to use (short term) retail pricing movement to manipulate the retail market.*”⁴⁵⁵

10.10 Sky in its letter of 27 November 2015, noted that Eir in mid-November put a heavily publicised offer into the market “*...that highlights the need and urgency for both a cost oriented WLR rate and a more stringent margin squeeze test (MST).*”⁴⁵⁶ Sky considered that “*it is imperative that a cost oriented obligation on WLR and NGA broadband access (where Eir face less competition than on CGA broadband) are implemented imminently and that this initiative is complimented by a more stringent MST that accounts for the issues outlined above.*”⁴⁵⁷

10.11 Eir disagreed with the need for a retail margin squeeze test for line rental and its view was supported by its consultants, CEG, as well as reports submitted from Compass Lexecon and Michael Rhodes, which are discussed in turn under the following headings:

1. Requirement for margin squeeze test; and

⁴⁵⁴ BT Response to Consultation, page 8.

⁴⁵⁵ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁴⁵⁶ Sky letter of 27 November 2015, page 2, at Annex 8.

⁴⁵⁷ Sky letter of 27 November 2015, page 3, at Annex 8.

2. Principles of the margin squeeze test.

Requirement for margin squeeze test:

- 10.12 Eir considered that once the price for wholesale line rental has been set at cost “... *there is no economic basis for the margin squeeze test between retail and wholesale line rental... because setting the wholesale price at cost ensures that if eircom sells the retail service at a price that would fail such a test the entire service is sold at a loss to eircom.*”⁴⁵⁸ Eir considered that retail minus regulation “... *would enable ComReg to set the margin directly while a cost orientation obligation would mean that a margin squeeze could only be implemented by eircom incurring losses.*”⁴⁵⁹ Eir added that it “...*would have no scope to recover these losses given the intense prospective competition from UPC, SIRO, mobile broadband and the LLU-based operators.*”⁴⁶⁰
- 10.13 CEG also made similar points to Eir, stating that if “...*a SB-WLR price is set based on cost, eircom could only apply a margin squeeze to an operator as efficient as eircom by setting its retail price for line rental or a bundle containing line rental below the total costs of supplying that service or bundle.*”⁴⁶¹ CEG considered that “...*a margin squeeze test would require eircom to incur losses. Incurring losses would only be a profitable behaviour for eircom if it could expect to sustain above competitive prices in the longer term.*”⁴⁶²
- 10.14 The Compass Lexecon report, submitted as part of the Eir response, focused on whether concurrent application of cost orientation and margin squeeze is proportionate to support competition in a market downstream from the regulated product. The analysis of the report is particularly focussed on the concurrent obligations of cost orientation and margin squeeze in the context of wholesale broadband access.
- 10.15 Compass Lexecon stated that “...*cost orientation obligations significantly reduce the ability and incentive of vertically integrated operators to impose a margin squeeze between upstream markets in which they hold market power and competitive downstream markets.*”⁴⁶³ Compass Lexecon stated that “*Adding an MST obligation may provide further assurance against margin squeeze but only at the cost of limiting eircom’s incentive and ability to compete and eircom’s rivals’ incentive to climb the ladder of investment*”⁴⁶⁴

⁴⁵⁸ Eir Response to Consultation 15/67, page 37.

⁴⁵⁹ Eir Response to Consultation 15/67, page 4.

⁴⁶⁰ Eir Response to Consultation 15/67, page 4.

⁴⁶¹ CEG report, page 34.

⁴⁶² CEG report, page 34.

⁴⁶³ Compass Lexecon Report, page 23.

⁴⁶⁴ Compass Lexecon Report, page 23.

- 10.16 Furthermore, Compass Lexecon stated that “*Such modest potential incremental benefits and significant costs suggest that adding an MST to a cost orientation obligation is not proportionate.*”⁴⁶⁵ Compass Lexecon noted that “*This applies equally to broadband and fixed line services currently subject to such concurrent regulatory obligations...*”⁴⁶⁶.
- 10.17 The Michael Rhodes report, also submitted as part of the Eir Response, is based upon the views and analysis conducted by Compass Lexecon. The Michael Rhodes report concluded that “*...ComReg should withdraw these MSTs from services where it has subjected eircom’s wholesale prices to a cost-orientation obligation*”⁴⁶⁷ for the following reasons:
- (i) “*The national markets for both broadband access and line rental at the retail level in Ireland are competitive;*
 - (ii) “*The arguments put forward by ComReg for retaining an MST despite subjecting eircom’s WBA prices to a cost-orientation obligation (and for proposing to retain an MST even after eircom’s WLR prices are subjected to a cost-orientation obligation) are unsound;*
 - (iii) “*The retention of these MSTs in these circumstances is not only unnecessary and disproportionate, it also limits pro-competitive pricing and competitive entry;*
 - (iv) “*These MSTs do not meet the Three Criteria Test*”⁴⁶⁸; and
 - (v) “*The retention of these MSTs in these circumstances is inconsistent with the approach of the European Commission and National Regulatory Authorities in other EU Member States.*”⁴⁶⁹
- 10.18 Eir stated that “*The margin squeeze test would be regulating margins to address a problem that does not exist, nor will exist.*”⁴⁷⁰ and that the margin squeeze test would “*...forestall the development of greater competition by constraining eircom’s ability to launch competitive offers.*”⁴⁷¹
- 10.19 CEG considered that “*Consumers would gain from lower retail prices in the short-term and prices would be constrained to competitive levels in the longer term*

⁴⁶⁵ Compass Lexecon Report, page 23.

⁴⁶⁶ Compass Lexecon Report, page 23.

⁴⁶⁷ Michael Rhodes report, page 10.

⁴⁶⁸ This point is further expanded in page 8 of Michael Rhodes report where it states that “*...the retail markets for broadband access and line rental in Ireland would not meet the Three Criteria Test as those national markets are already manifestly subject to effective retail competition.*”

⁴⁶⁹ Michael Rhodes report, page 10.

⁴⁷⁰ Eir Response to Consultation 15/67, page 4.

⁴⁷¹ Eir Response to Consultation 15/67, page 4.

- because of the presence of rival networks and access-based operators.*⁴⁷² CEG added that *“A margin squeeze test would also be ineffective as a vehicle to assist new entrants/small players as they would need to be competitive with eircom’s larger rivals.”*⁴⁷³
- 10.20 Eir considered that *“...competition law rather than ex ante approval mechanisms would allow for greater pricing flexibility in the interests of consumers, while still safeguarding against prices that could cause harm to competition.”*⁴⁷⁴
- 10.21 Similarly, CEG also considered that *“An ex ante margin squeeze test (compared with the ex post application of competition law) prevents certain pricing without that pricing being shown to be likely to cause competitive harm.”*⁴⁷⁵ CEG gave an example of where *“...a margin squeeze assessment may prevent price discounting that grows volumes to the benefit of consumers, particularly if the test adopts a flawed short-term analysis.”*⁴⁷⁶
- 10.22 Eir also considered that *“ComReg’s own pricing evidence shows that eircom has not engaged in a margin squeeze in fixed voice - eircom’s prices are significantly undercut by rivals.”*⁴⁷⁷ Furthermore, in this regard, CEG referred to ComReg’s data in ComReg Document 15/102 stating that *“...Figure 1^[478] shows, eircom’s prices are already undercut by its competitors.”*⁴⁷⁹ and that *“The market evidence demonstrates that eircom is not engaging in a margin squeeze and to impose the margin squeeze test would constrain eircom from competitively responding to its competitors and thereby deny consumers the benefit of lower prices.”*⁴⁸⁰ CEG stated that *“Given that absence of a margin squeeze to date, ComReg needs to substantiate why it believes a margin squeeze would occur in the future.”*⁴⁸¹
- 10.23 CEG stated that given the proposal to impose an obligation of cost orientation on SB-WLR, then *“the imposition of the line rental margin squeeze test would effectively amount to the regulation of eircom’s retail line rental charges.”*⁴⁸² CEG stated that this *“...is despite the European Commission’s general expectation that retail regulation should not be required.”*⁴⁸³

⁴⁷² CEG report, page 35/36.

⁴⁷³ CEG report, page 35/36.

⁴⁷⁴ Eir Response to Consultation 15/67, page 6.

⁴⁷⁵ CEG report, page 37.

⁴⁷⁶ CEG report, page 37.

⁴⁷⁷ Eir Response to Consultation 15/67, page 4.

⁴⁷⁸ ComReg Document No 15/102, Figure 2.51

⁴⁷⁹ CEG report, page 36.

⁴⁸⁰ CEG report, page 36.

⁴⁸¹ CEG report, page 36.

⁴⁸² CEG Report, page 39.

⁴⁸³ CEG Report, page 39.

- 10.24 CEG also noted that "*...the Commission has called for ComReg to review regulations affecting the retail access market without delay and to streamline the multiple layers of regulation.*" ⁴⁸⁴
- 10.25 CEG also considered that "*The proposed restrictions on eircom's retail prices are also inconsistent with the Commission's recognition that eircom has a relatively moderate share of the market.*" ⁴⁸⁵
- 10.26 In its letter of 2 December 2015, Vodafone stated that it "*...would strongly refute the claims of eir that ex-post regulation is appropriate in this market...*"⁴⁸⁶ on the basis that "*...eir's recent price changes strongly indicate a need for both cost orientated pricing at the Wholesale level, and retail controls, such as a Retail Margin Squeeze, on eir to protect the continued development of competition.*"⁴⁸⁷
- 10.27 Vodafone noted that Eir "*...focus extensively on current Retail Market Shares, and appear to avoid the more relevant arguments, as articulated by ComReg (in Section 3.8 of ComReg 15/67), that it is possible for eir to 'Leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets'*".⁴⁸⁸
- 10.28 In addition, Vodafone also referred to "*Recital 47 of the EC Directive 2009/140/EC [where] it was clearly stated that 'For the purposes of ensuring that there is no distortion or restriction of competition in the electronic communications markets, national regulatory authorities should be able to impose remedies aimed at preventing leverage of significant market power from one market to another closely related market.'*" ⁴⁸⁹ Vodafone added that "*NRAs, including ComReg, are working within their powers to prevent distortions in competition in Retail markets where incumbents, such as eir, have SMP in directly related wholesale markets.*" ⁴⁹⁰ Vodafone considered that "*eir's claim that the use of Margin Squeeze along with the use of cost orientated price is 'unusual', which has not backed up with specific facts is far from 'unusual'. We are aware of a number of other EU countries where such an approach is regarded as the norm.*"
⁴⁹¹

Principles of the margin squeeze test:

- 10.29 CEG suggested that the test should require prices to "*...only cover ongoing costs, i.e. average avoidable costs.*" CEG considered that "*The use of average*

⁴⁸⁴ CEG Report, page 39.

⁴⁸⁵ CEG Report, page 39/40.

⁴⁸⁶ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁴⁸⁷ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁴⁸⁸ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁴⁸⁹ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁴⁹⁰ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁴⁹¹ Vodafone letter of 2 December 2015, page 2, at Annex 8.

*avoidable costs is appropriate to protect the existing competitors ... which have well-known brands and existing billing systems (including UPC, Vodafone, BT and Sky)."*⁴⁹² CEG also stated that *"Average avoidable costs would recognise that competitive pricing can lead to prices that do not recover sunk costs such as in relation to brand, IT and billing systems and provide flexibility as to how common costs are recovered across services."*⁴⁹³

- 10.30 CEG referred to paragraph 10.31 of the Consultation Document and noted that ComReg seems to believe that the test should be used to assist further entry rather than to protect current competition. However, CEG considered that *"...the use of ATC would be ineffective at supporting new entrants as any entrant would have to be competitive with eircom's rivals in any event."* Furthermore, CEG stated that *"...the use of Average Total Costs would competitively disadvantage eircom to the detriment of efficiency and competition while providing no offsetting competitive benefits."* CEG also stated that the existence of *"...significant rivals to eircom also supports ComReg's use of an EEO standard."*⁴⁹⁴
- 10.31 CEG also referred to ComReg's proposal that the test should be applied on a national basis to allow for some efficient price discrimination. However, CEG noted that *"...ComReg has not considered the extent to which the test itself would prevent further efficient price discrimination."*⁴⁹⁵
- 10.32 Vodafone considered that *"Eircom continue to benefit from improved returns both at wholesale and retail levels yet access seekers struggle to make a return on the wholesale access products available."*⁴⁹⁶ Vodafone stated that the retail margin squeeze model *"...is not fit for purpose in the assumptions it uses to define an efficient operator..."* Furthermore, Vodafone believed that *"With the current pricing and costs incurred by access seekers like Vodafone, it is our estimation that SB-WLR for example should be €5-€6 lower to ensure there is sufficient margin at the prevalent retail prices. The reductions proposed are welcome but will not bring about a situation where access seekers can see a long term viable business plan. Costs such as acquisition costs, provisioning and care costs need to be reviewed in the model to ensure it is a[s] close to an accurate reflection on the margin available"*⁴⁹⁷ In particular Vodafone stated that *"The use of EEO...would seem to be at odds with the 2013 EC recommendations in two parts."*⁴⁹⁸ Vodafone stated that *"Firstly, these costs are replicated by OAO's and therefore should be based on a Bottom Up basis as against the ComReg proposal to use Eircom's costs; and secondly other Wholesale/Retailing margin*

⁴⁹² CEG report, page 40.

⁴⁹³ CEG report, page 40.

⁴⁹⁴ CEG report, page 41.

⁴⁹⁵ CEG report, page 41.

⁴⁹⁶ Vodafone Response to Consultation 15/67, page 11.

⁴⁹⁷ Vodafone Response to Consultation 15/67, page 11.

⁴⁹⁸ Vodafone Response to Consultation 15/67, page 12.

squeeze determinations use the REO (Reasonably Efficient Operator) principle.”

⁴⁹⁹

- 10.33 Vodafone also questioned why SLA costs are not included in the retail cost stack for margin squeeze purposes. Vodafone considered that *“This would ensure that the additional Retailing costs required of Vodafone due to Eircom not meeting required SLAs are in some way recognised as also a cost to Eircom’s Retail arm and would also provide additional encouragement to Eircom to meet its SLA and KPI targets.”*⁵⁰⁰ Furthermore, Vodafone stated that *“These additional costs, such as SLA penalties, should be based on the implied fines an “REO/SEO” would pay in relation to its particular service volumes.”*⁵⁰¹
- 10.34 BT considered that the *“...ComReg proposal needs further specification as it does not define whether ComReg is taking a product by product approach or a basket approach.”*⁵⁰² BT also referred to the *“...considerable work of OXERA as part of previous ComReg consultations”*⁵⁰³ and that the *“outcomes and resulting processes”*⁵⁰⁴ of such work should be considered by ComReg.
- 10.35 ALTO stated that *“...the ComReg proposal regarding the retail Margin Squeeze Test – MST, needs further specification...it does not define whether ComReg is taking a product-by-product approach or a basket approach...”*⁵⁰⁵ ALTO also stated that it *“...seeks more detail on the implementation of the MST before it could agree whether it is fit for purpose.”*⁵⁰⁶
- 10.36 In the Eir August Letter, Eir highlighted that *“In the Retail Line Rental Margin Squeeze Model there is a simple calculation for the monthly cost per retail PSTN service derived from the Eircom FY13 and FY14 separated regulatory accounts. This monthly cost has been ✕ in both versions of the test by the error of dividing the total retail cost of PSTN line rental by ✕ volume of PSTN services. When this is corrected the average monthly retail cost ✕”*⁵⁰⁷
- 10.37 Eir in its submission to the Consultation Document suggested that if ComReg proceeds with the proposed cost orientation and margin squeeze test for SB-WLR rental charges *“...we draw ComReg attention to the service enhancements...[which]...have the effect of reducing the downstream costs faced by the re-seller of SB-WLR.”*

⁴⁹⁹ Vodafone Response to Consultation 15/67, page 12.

⁵⁰⁰ Vodafone Response to Consultation 15/67, page 12.

⁵⁰¹ Vodafone Response to Consultation 15/67, page 12.

⁵⁰² BT Response to Consultation 15/67, page 8.

⁵⁰³ BT Response to Consultation 15/67, page 8.

⁵⁰⁴ BT Response to Consultation 15/67, page 8.

⁵⁰⁵ ALTO Response to Consultation 15/67, page 13.

⁵⁰⁶ ALTO Response to Consultation 15/67, page 13.

⁵⁰⁷ ComReg Document No 15/67d - <http://www.comreg.ie/fileupload/publications/ComReg1567D.pdf>

- 10.38 CEG considered that it is unclear whether the proposed test is to address a concern with line rental offered as part of “*bundles or on a stand-alone basis...*”⁵⁰⁸ CEG believed that “*In either case, the regulation of SB-WLR would remove the scope for a margin squeeze...*”⁵⁰⁹ Furthermore, CEG stated that “*There would appear to be no economic rationale to supplement the Net Revenue Test with a test applied to line rental on its own.*”⁵¹⁰
- 10.39 CEG also stated that “*eircom could be particularly constrained in offering innovative bundles as margin squeeze tests instead focus on elements that can be perfectly replicated whereas consumer gains are likely to be greater where operators have freedom to introduce bundles with new elements.*”⁵¹¹
- 10.40 CEG also noted that “*The forthcoming intensity of competition will provide no scope for eircom to charge above competitive retail prices in the future. Any margin squeeze attempted today in relation to fixed bundles will simply lead to lower prices at a loss to eircom and to the benefit of consumers*”⁵¹².
- 10.41 Sky, in its letter of 27 November 2015, noted that ComReg currently assumes a 42 month customer life in assessing Eir’s MSTs but “*in reality once a contract has expired (be it for 12, 18 or 24 months) these customers will often be offered a further discount in order to renew the contract at the relevant time.*”⁵¹³ Sky considered that in these circumstances and assuming a €92 monthly price point would apply for the subsequent 30 months after the 12 month offer expires will result in an “*over estimate [of] revenue generated by the bundle in current MSTs.*” Sky stated that “*Eir can rely on this disconnect between the MST assumptions and reality to inform a pricing strategy that effectively allows it to circumvent what the MST is designed to capture.*”⁵¹⁴ adding that “*Eir can run extremely aggressive “front loaded” retail offers because it knows the ComReg MST will assume large offsetting revenues (that may never be realised) further out in the analysis.*”⁵¹⁵
- 10.42 Sky illustrated in its letter of 27 November how not taking account of further discounts offered by Eir to customers when these 24 month contracts are renewed, “*...could result in the standard MST being passed whereas in reality competitors would not be able to replicate the 42 month scenario without incurring losses.*”⁵¹⁶

⁵⁰⁸ CEG report, page 34/35.

⁵⁰⁹ CEG report, page 34/35.

⁵¹⁰ CEG report, page 34/35.

⁵¹¹ CEG report, page 37.

⁵¹² CEG report, page 34.

⁵¹³ Sky letter of 27 November 2015, page 2, at Annex 8.

⁵¹⁴ Sky letter of 27 November 2015, page 2, at Annex 8.

⁵¹⁵ Sky letter of 27 November 2015, page 2, at Annex 8.

⁵¹⁶ Sky letter of 27 November 2015, page 2, at Annex 8.

10.2.3 ComReg's Position:

10.43 ComReg notes that the majority of respondents agreed that a retail margin squeeze test between retail line rental and SB-WLR was appropriate with the exception of Eir and its consultants. ComReg's position with regard to the points raised by respondents are addressed under the relevant headings below.

Requirement for a margin squeeze test:

10.44 With respect to the views of Eir, CEG, Compass Lexecon and Michael Rhodes at paragraphs 10.12, 10.13 and 10.14-10.17 that once the price for wholesale line rental has been set at cost that there is no economic basis for the margin squeeze test, ComReg does not agree. In the RFVA Decision, ComReg notes that absent regulation Eir would have close to 100% share of the standalone lower level voice access ('LLVA') market and around 80% of the high level voice access ('HLVA') market. If carrier pre-select ('CPS') and SB-WLR services are taken into account, Eir's market share is around 53% of the retail HLVA market (at Q4 2013). In the RFVA Decision, ComReg recognises that absent regulation Eir would have the ability and incentive to leverage market power into or from both horizontally and vertically related markets. By doing so, Eir could strengthen its position in the LLVA market and the HLVA market. As a result an obligation was imposed on Eir in the RFVA Decision not to cause a margin squeeze.

10.45 Similarly, in the FACO Decision, Eir has been designated with SMP. As noted in the FACO Decision, in Chapter 11, Eir's strong position in both the downstream RFTS markets and the FACO markets means that Eir not only has the ability, but also has an incentive, to engage in vertical leveraging and / or foreclosure type behaviours. For example, to impede downstream competitors through price (e.g excessive / discriminatory pricing) and / or non-price anti competitive behaviours. Eir could leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets. ComReg considers that in the context of the FACO markets a margin squeeze between FACO and downstream prices could undermine the effectiveness of a FACO product offering and, in doing so, could harm competition in downstream markets by eliminating competing service providers, distorting competition or indeed discouraging the entry of new service providers. Therefore, the obligation not to cause a margin squeeze was imposed on Eir in the FACO Decision. This Decision is a further specification of that obligation.

10.46 Other operators have also raised concerns regarding the need for a margin squeeze test, in particular Vodafone stated in its letter of 2 December that "*...eir's recent price changes strongly indicate a need for both cost orientated pricing at the Wholesale level, and retail controls, such as a Retail Margin Squeeze, on eir*

*to protect the continued development of competition*⁵¹⁷. In addition, Vodafone considered that *“the continued use of a Retail Margin Squeeze enables the wider industry to have some reassurance that eir will have reduced ability to use (short term) retail pricing movement to manipulate the retail market.”*⁵¹⁸

- 10.47 With regard to Eir and CEG’s views, at paragraphs 10.12 and 10.13, that by ComReg imposing a cost-orientation that a margin squeeze could only be implemented by Eir incurring losses and therefore be somehow improbable, ComReg does not agree. There are well established economic arguments on predatory pricing that seek to show the dynamics of predatory behaviour and its motivations including Reputation Theories of Predation, Deep Pocket Theories of Predation, Signal Jamming and Capital Markets — which can manifest in the form of a margin squeeze by either reducing or eliminate the economic space between retail and wholesale prices to the extent that losses are incurred. The fact that losses are incurred and even to the extent that they may or may not be recovered is irrelevant in the context as an abuse of dominance. The affect or intention of such a margin squeeze may be to leverage dominance by Eir (either vertically or horizontally) and/or foreclose such markets to competitors/new entrants. Such outcomes would not be consistent with ComReg’s regulatory objectives and consequently ComReg, in the FACO Decision has imposed pricing remedies on Eir (as the SMP operator) to prevent such potential abuses (see paragraph 10.45).
- 10.48 Another way of looking at the above point is that, even if the cost oriented SB-WLR price would prevent Eir from increasing its wholesale charge, Eir can, by reducing its retail price, ensure that certain OAOs may not be able to match the prevailing retail price and still earn sufficient margin to cover their own costs. In essence, OAOs may not be able to replicate Eir’s retail price and as a result Eir could foreclose the market. Any OAOs that had been forced out of the market due to these price reductions would be inhibited from returning even when margins are restored if they feared that Eir would respond by repeating the retail price reductions to squeeze margins again. Vodafone state that *“eir’s argument that other operators have the capability of moving in and out of the Retail Markets in reaction to eir’s Retailing activities, appears deeply flawed.”*⁵¹⁹ Vodafone believed that *“...other operators, in particular smaller operators, would more simply exit the market completely, as these additional costs to the business could not be funded from margins being earned at the Wholesale level.”*⁵²⁰ Consequently, absent appropriate regulation other operators may not enter or re-enter the market following such an abuse of dominance. ComReg considers

⁵¹⁷ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁵¹⁸ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁵¹⁹ Vodafone letter of 2 December 2015, page 2, at Annex 8.

⁵²⁰ Vodafone letter of 2 December 2015, page 2, at Annex 8.

that this would not be consistent with its regulatory objectives and in particular the long-term benefits of end-users.

10.49 In response to the points raised by Michael Rhodes at paragraph 10.17, ComReg has addressed each one in turn below.

- (i) In relation to Michael Rhodes views that the national markets for broadband access and line rental at the retail level in Ireland are competitive, ComReg refers to paragraph 10.56.
- (ii) In relation to Michael Rhodes views and the views of Compass Lexecon at paragraphs 10.14 to 10.17 that the arguments used by ComReg for retaining a margin squeeze test despite subjecting Eir's WBA prices to a cost orientation obligation are unsound, ComReg does not agree. ComReg would like to point out that the pricing decision for current generation WBA was issued previously in the WBA Pricing Decision (D11/14) in 2014. This Decision Document does not reassess or reopen any elements of that decision other than further specifying the cost orientation obligation for SABB Outside the LEA. Vodafone also noted a similar point stating that it "*...finds it unusual that many of eir's arguments against the Retail Margin Squeeze requirements proposed by ComReg were not more properly argued and debated as part of previous ComReg's Decisions, for example ComReg 14/89, D12/14.*"⁵²¹
- (iii) In relation to Michael Rhodes views that margin squeeze tests in these circumstances limit pro-competitive pricing and competitive entry, ComReg does not agree. Please see paragraph 10.50.
- (iv) In relation to Michael Rhodes views that the retail markets for broadband access and line rental in Ireland would not meet the Three Criteria Test, ComReg notes that the market reviews for the FACO markets and RFVA markets are only recently completed as noted at paragraphs 10.44 - 10.45, where Eir was designated with SMP in each such markets. The conclusions regarding SMP were arrived at by ComReg having conducted Three Criteria Test in each of these market analyses, with the European Commission agreeing with ComReg's conclusions in this regard. Please also see paragraph 10.56. With regard to the point on the retail broadband market, it is worth noting pointing out that the retail broadband market is not regulated.

⁵²¹ Vodafone letter of 2 December 2015, page 2, at Annex 8.

- (v) In relation to Michael Rhodes views that the margin squeeze tests are inconsistent with the approach of the European Commission and NRAs in other EU member states, ComReg would like to point out that we will take utmost account of any comments received from the European Commission. ComReg considers that in the context of a finding of SMP and having identified remedies to protect against potential abuses by a dominant operator, precedent based on other possible market circumstance in other countries is irrelevant.
- 10.50 With respect to Eir's and CEG's submissions' at paragraphs 10.18 and 10.19 that the margin squeeze test would forestall the development of greater competition by constraining Eir's ability to launch competitive offers to the benefit of lower prices for consumers, ComReg does not agree. ComReg considers that Eir can launch any competitive offer so long as it does not sell the service on a portfolio basis at a loss. While the outcomes of competitive markets may result in downward pressure on prices, this needs to be balanced with any risk to sustainable competition (in particular in the context that Eir has SMP in both retail line rental and WLR) and the risk that OAOs are forced to sell the service at a loss as discussed at paragraph 10.47.
- 10.51 With regard to Eir's submission at paragraph 10.20 and CEG's views at paragraph 10.21 that competition law rather than ex ante approval mechanisms would allow for greater pricing flexibility in the interests of consumers, ComReg does not agree. ComReg notes, as submitted by BT that "*Past margin squeeze problems have taken a considerable time and industry resource to progressthe potential for market damage can continue for at least a year before action can be taken to stop the issue ...*"⁵²² ComReg considers that the ex-post enforcement provided under competition law would be inadequate and consequently we considered that the express imposition of ex-ante regulatory obligations, in particular the obligation not to cause a margin squeeze, would be more appropriate. Given the identified risk of potential leverage arising from Eir's SMP, it was further considered that identifying margin squeeze only after it had occurred would not sufficiently protect against possible market foreclosure and the associated consumer harm. We consider that the choice of parameters associated with the margin squeeze test are a means of ensuring an appropriate regulatory balance between ensuring an appropriate margin and allowing for some degree of pricing flexibility so that the long-term benefits of consumers are maximised. Please see paragraphs 10.58 to 10.70.
- 10.52 Further to CEG's point at 10.22 that ComReg needs to substantiate why it believes a margin squeeze would occur in the future given the absence of a margin squeeze to date, ComReg considers that our market analysis (see paragraphs 10.44 and 10.45) recognises that Eir has SMP and is subject to a

⁵²² BT Response to Consultation 15/67, page 9.

number of regulatory obligations including a margin squeeze obligation therefore the counterfactual does not exist. In addition, ComReg would note that it is neither necessary to catalogue examples of actual abuse, nor to provide exhaustive examples of potential abuse. Rather, ComReg notes that the purpose of *ex ante* regulation is to prevent the possibility of abuses given that Eir has been designated with SMP in the FACO Decision and RFVA Decision, and thus has both the ability and incentives to engage in exploitative and exclusionary behaviour to the detriment of competition and end-users.⁵²³

- 10.53 At paragraph 10.22, Eir and CEG made submissions that Eir's prices are significantly undercut by rivals, by way of reference to Figure 1 of the ComReg Quarterly Report. ComReg notes that these are headline prices and there may be promotional or discounts available that these broad baskets does not compare offers like for like. A similar point was noted by Sky in its letter of 27 November, that the baskets used in Eir and CEG submission "*...do not reflect actual consumer needs and/or ignores actual demand profiles observed in the Irish market.*"⁵²⁴
- 10.54 In relation to CEG's submission at paragraph 10.23 that the imposition of the line rental margin squeeze test would effectively amount to the regulation of Eir's retail line rental charges, ComReg disagrees. As demonstrated in the FACO Decision there is a risk of abuse of dominance by Eir, as discussed at paragraph 10.45. The margin squeeze test ensures that such competition concerns can be dealt with on an ex-ante basis. The purpose of the test is to ensure there is an appropriate margin between retail and wholesale prices. While there is currently a cap on retail line rental prices it would not prevent Eir from dropping the retail line rental price so low as to cause a margin squeeze. Nonetheless, the purpose of this further specification of the margin squeeze obligation is not to regulate or set retail line rental prices but to ensure that there is sufficient margin between the prevailing retail and underlying regulated wholesale prices such as that the potential abuses as identified in paragraph 10.45 do not occur.
- 10.55 ComReg notes CEG's views, at paragraph 10.24 that the Commission has called for ComReg to review regulations affecting the retail access market without delay and to streamline the multiple layers of regulation. ComReg would like to point out that it has taken utmost account of the comments received from the European Commission.
- 10.56 Furthermore, and also with regard to CEG's point at paragraph 10.25 that the proposed restrictions on Eir's retail prices are inconsistent with the Commissions recognition that Eir has a relatively moderate share of the market, ComReg notes

⁵²³ While the SB-WLR price has been subject to a retail minus price control of at least 14% until now, the recent 2015 Eir HCAs appears to show that the unadjusted downstream costs accounts for 3%.

⁵²⁴ Sky letter of 27 November 2015, at Annex 8.

that the market reviews for the FACO markets and RFVA markets are only recently completed as noted at paragraphs 10.44-10.45, where Eir was designated with SMP in each such markets. The conclusions regarding SMP were arrived at by ComReg having conducted Three Criteria Test in each of these market analyses, with the European Commission agreeing with ComReg's conclusions in this regard. We also refer to the RFVA Decision (D12/14) and the FACO Decision (D05/15) where we noted that subject to the completion of various pricing work streams relating to SB-WLR and margin squeeze in the FACO and WBA markets that it could lead to amendments and/or the withdrawal of the price control obligations imposed in the FACO Decision and in the downstream RFVA markets. In this respect, it was also noted that on foot of the completion of the abovementioned Workstreams ComReg intends to commence a review of the RFVA markets without undue delay to assess whether, in the presence of effective regulation in upstream markets there is a need for continued regulation in the Bundled LLVA and HLVA Markets as identified in the RFVA Decision.

- 10.57 Having considered the submissions from respondents we remain of the view that a margin squeeze test between the price for retail line rental and the price for SB-WLR is required for the reasons set out at paragraphs 10.43 to 10.56 above and for the reasons set out in Chapter 10, subsection 10.2 of the Consultation Document.

Principles of the margin squeeze test:

- 10.58 In relation to the points raised by CEG at paragraph 10.29 and 10.30 that the retail margin squeeze test should require prices to only cover ongoing costs i.e., average avoidable costs (AAC), ComReg does not agree. See also paragraphs 10.59-10.70.
- 10.59 ComReg's preliminary view in the Consultation Document was that ATC was appropriate. ATC requires an operator with SMP to price at levels that include appropriate amounts of variable, fixed and common costs, which is the calculus faced by any operator when deciding to enter or expand. For example, an operator will consider the current and future potential competitive environment (including price) when formulating its business plan when deciding to enter or expand in the market.
- 10.60 On the other hand AAC are the avoidable variable and incremental fixed costs of the additional sales of the product in question. The inclusion of fixed costs which would otherwise be avoided if the incremental output were no longer produced distinguishes AAC from AVC. Furthermore, the exclusion of a mark-up for overall fixed and common retail costs distinguish AAC from ATC. More specifically, AAC represents the avoidable costs of developing, launching, marketing and servicing each individual product. This means that general fixed and overhead costs are excluded, though not the fixed development, launch and any other costs directly

attributable to the products and which would be avoided should they cease to be provided.

- 10.61 As the AAC standard does not include provision for (non-avoidable) fixed costs and common costs, it could be argued that this provides the SMP operator with an advantage given the broad range of products and services over which it could conceivably recover such common costs. Entry/expansion by efficient OAOs, albeit with lower economies of scale and scope than Eir, could thereby be impeded.
- 10.62 Critically, ComReg believes that the decision to enter, and remain in, the market depends on the expectation that fixed and common costs will be recovered; not only additional avoidable costs incurred by the SMP operator. The reasoning behind this is that an entrant would enter a market only if it considered that it would be profitable to do so, taking into account all the costs that it would have to incur in order to enter the market and sustain a competitive position i.e., the fixed, common, joint and variable costs. Cost measures such as AAC do not ensure this as the total full costs of an operator are not covered. This view is supported by the ERG

“...Avoidable costs are typically employed in ex post predatory pricing cases and here, they are defined as costs that the vertically integrated SMP firm could avoid if it decided to close its downstream operations while continuing to provide the upstream input to third parties. However, avoidable costs are also subject to criticism. In the context of an ex-ante regulatory tool, they may provide too low a threshold for retail prices, constraining the potential for entry by efficient entrants when the avoidable cost standard does not guarantee the recovery of the fixed costs of entry. Similarly, pricing at the avoidable cost level could even mean that competitors who provide a competitive constraint could be excluded. This is especially so if there are common or joint costs between different downstream services. Accordingly, the use of fully allocated costs as a proxy for average total cost has also been put forward as an alternative cost measure or the allocation of common costs to the LRIC calculation.”⁵²⁵

- 10.63 Therefore, ComReg considers that to apply a pure AAC cost rule in an ex-ante context could lead to sub-optimal entry/expansion conditions with little entry/expansion occurring. This would be to the detriment of competition and, in turn, consumers.

⁵²⁵ At paragraph 60 & 61 of ERG 09(07) ‘Report on the Discussion on the application of margin squeeze tests to bundles’ dated March 2009.

- 10.64 Given ComReg's statutory objective to promote competition, as well as taking account of the current state of market development of retail fixed narrowband access in Ireland, ComReg considers that the use of a pure AAC test in this ex-ante context is not appropriate.
- 10.65 However, ComReg considers that a cost standard of LRIC — estimated by ComReg in this instance from Eir's accounts as ATC less common costs and less fixed indirect costs — could be used. This is also consistent with the approach used in the context of retail calls in the Bundles Decision (D04/13).
- 10.66 In terms of the relative increment to determine which costs are appropriate to consider under the LRIC cost standard Oxera⁵²⁶ noted in a report produced for ComReg that *"these are costs that can be avoided in the long run if the provision of a given increment (eg, a product) ceases. They include all fixed costs of the increment, and incorporate common costs if these would be avoided in the long run were the increment no longer to be produced"*. This suggests that within most cost categories there is some element of costs that, at least in the long-run, can be driven by service volumes. However, this element is likely to be smaller for cost categories linked to corporate type activities such as general management, finance or personnel administration than it would be for cost categories more closely associated with products such as product development, billing / credit management and marketing and sales.
- 10.67 Consequently, ComReg regards common costs as costs incurred across the whole organisation regardless of product — so that the cost cannot be directly attributed to a particular product or service e.g., general finance function costs, personnel and administration costs, general corporate services costs, CEO salary, regulatory licence fees, redundancy costs / cost of voluntary leaving programmes. Similarly, ComReg considers that there may be additional common costs associated with certain product related cost categories such as billing and sales and marketing costs which may not be incremental to a specific Eir product / service. However it would be necessary for Eir to demonstrate why it considers such costs to be a common / indirect cost rather than a direct cost on a case by case basis. ComReg regards fixed indirect costs as the indirect costs⁵²⁷ that do not change with an increase or decrease in output e.g., general IT depreciation and software licence costs (that do not vary by service volumes), building costs, pension provisions, exceptional items.

⁵²⁶ http://www.comreg.ie/_fileupload/publications/ComReg1490a.pdf

⁵²⁷ ComReg regards indirect costs as a cost allocated to more than one product. These costs are not specific (direct) to one product but to a set of products e.g., Marketing & Sales spend in the residential market.

- 10.68 With respect to paragraphs 10.65-10.67, ComReg considers that there are downstream retail costs which could due to their nature (i.e., they are fixed indirect costs or common costs) that may be recovered elsewhere. As such, and in order to replicate as far as possible the dynamics of competitive markets that it may be more appropriate for Eir to identify where within its retail portfolio those retail costs are recovered.
- 10.69 Therefore, we consider that a cost standard of LRIC is appropriate — where LRIC in this instance is estimated from Eir’s accounts as ATC less common costs and fixed indirect costs — could be used for retail costs associated with line rental.
- 10.70 However, should Eir so choose to only recover ATC less common costs and fixed indirect costs then ComReg considers that those fixed indirect costs and common costs should be recovered elsewhere. Consequently, as part of the notification process discussed at paragraphs 10.86 to 10.89 ComReg would expect Eir to demonstrate (in the context of Eir implementing the LRIC approach) to ComReg in the case of a price change that there is sufficient margins in other areas, e.g., when retail line rental is sold/offered in bundles, so that all retail costs including fixed indirect and common costs are recovered from within the retail portfolio.
- 10.71 CEG’s point at paragraph 10.31 that ComReg has not considered the extent to which the test itself would prevent further efficient price discrimination, ComReg considers that for the reasons set out in paragraphs 10.44 and 10.45 a margin squeeze test is required. However, ComReg considers that the adjustment from ATC to ATC minus fixed indirect costs and common costs, as discussed in paragraphs 10.58-10.59, achieves the appropriate balance between safeguarding against the competition concerns identified in paragraphs 10.44-10.45 and providing appropriate pricing flexibility to the long-term benefits to end-users.
- 10.72 Further to Vodafone’s submission at paragraph 10.32 that the use of EEO costs is at odds with the 2013 Recommendation as Vodafone considers that these costs should be based on BU costs (as opposed to Eir’s costs) and also given that other wholesale/retail tests use REO costs, ComReg does not agree. The choice of the Operator Cost base is fully reasoned in the Consultation Document. In this case, for the reasons set out in the Consultation Document ComReg considered that the EEO cost base was most appropriate. ComReg maintains the view that applying a margin squeeze between retail and wholesale line rental that an EEO cost base is appropriate.
- 10.73 With regards to Vodafone’s views, as set out in paragraph 10.32, that Eir continue to benefit from improved returns while access seekers struggle to make a return on wholesale access products and that the SB-WLR price should be €5-€6 lower to ensure there is sufficient margin at prevalent retail prices, ComReg

notes that Vodafone did not provide any evidence to substantiate its calculation of the €5-€6 margin. ComReg considers that the further specification of the obligation not to cause a margin squeeze set out in this Decision Document ensures that there is an appropriate economic space between the cost of SB-WLR and the price of Eir's retail line rental.

- 10.74 In relation to Vodafone's query at paragraph 10.33 as to why additional retail costs as a result of Eir not meeting its SLA costs are not included in the test, ComReg considers that as the terms and conditions of SLAs may include wholesale price rebates and downstream margin compensation to OAOs which may be complex to offset against notional or actual costs inferred to by Vodafone on an ex ante basis (i.e., for inclusion in the margin squeeze test). Furthermore, the penalty paid by Eir not meeting SLAs to OAOs is a negotiated value between each OAO and Eir. As such, the compensation offset for the SLA is complex and may not be readily established on an ex-ante basis. Consequently, ComReg considers that it would not be appropriate to specifically include such costs in the margin squeeze test. However, as Eir's own downstream retail costs are used to establish the appropriate margin between retail and wholesale prices – Eir's retail customer care costs would provide a proxy to those actual costs which would be incurred by OAOs in the event of Eir wholesale arm not meeting its SLAs.
- 10.75 In respect to BT's views at paragraph 10.34 that ComReg does not further specify whether the test is product-by-product or a basket approach, ComReg refers to Chapter 10, paragraphs 10.35 and 10.36 of the Consultation Document where we discussed the options of a national test and a regional test (LEA and Outside the LEA) and where we considered that a national test seemed most appropriate. In addition and with regard to BT's views at paragraph 10.34 regarding the work of Oxera and its relevance to the context of this workstream, ComReg considers that the relevant principles associated with the margin squeeze test for line rental have been considered, which is consistent with those principles applied in other regulatory pricing contexts.
- 10.76 In respect to the point raised in the Eir August Letter, as set out in paragraph 10.36, where Eir considers that the retail line rental test should only use the \times to determine the unit retail costs for the margin squeeze test, ComReg agrees. The retail margin squeeze test in this Decision should replicate Eir's efficiently incurred retail costs and Eir's retail volumes for the provision of a retail line rental. Therefore, we have corrected the volumes in the retail margin squeeze model to reflect the retail PSTN volumes only. This has resulted in an increase in the monthly retail cost per line per month from \times .
- 10.77 Further to Eir's views, as set out at paragraph 10.37, that the proposed introduction of enhancements would have the effect of reducing downstream costs faced by resellers of WLR and that these reductions should therefore be taken into account in the test, ComReg does not agree. ComReg considers that

as the proposed service enhancements would appear to be to the benefit of all resellers of the SB-WLR service including Eir Retail, ComReg would expect the reduction in downstream costs to become evident in the retail margins faced by Eir Retail. In particular, ComReg notes that Eir's response⁵²⁸ describes two of the proposed enhancements as:

- changes to the provisioning process that will see Open Eir taking end-to-end responsibility for new line SB-WLR connections around a range of issues such as failed customer appointments; and
- an improved repair process that will see Open Eir supporting all retailers by accepting screened line fault reports across the UG and taking full responsibility until clearance is confirmed.

10.78 As there is nothing to suggest that either of these enhancements would not also be to the benefit of Eir Retail, ComReg considers that a margin squeeze test based on an EEO approach using Eir Retail's costs remains appropriate.

10.79 Further to CEG's view, at paragraphs 10.38, 10.39 and 10.40, regarding the test that should apply in the context of bundles as opposed to a standalone test, ComReg would like to clarify that the retail margin squeeze test set out in this Decision Document is for standalone offers only. In the case where retail line rental is sold in a bundle, then the test specified in the Bundles Decision (D04/13) applies.

10.80 Further to Sky's submission, at paragraphs 10.41 and 10.42, regarding the 42 month customer lifetime and their views that not taking account of Eir's further discounts could result in the standard MST being passed whereas in reality competitors would not be able to replicate the 42 month scenario without incurring losses, ComReg notes that the illustration used by Sky relates to retail line rental sold in a bundle with other services, which is subject to a separate test set out in the Bundles Decision.

10.81 Having considered the submissions from respondents, the principles of the retail margin squeeze test remain appropriate for the reasons set out at paragraphs 10.71 to 10.77 above and in Chapter 10 of the Consultation, paragraphs 10.14 to 10.38 except for modifications to the ATC cost standard as discussed in paragraph 10.58.

⁵²⁸ Eir Response to Consultation 15/67, page 26.

10.2.4 ComReg's Final Position:

10.82 Eir should ensure that it does not cause a retail margin squeeze between retail line rental and wholesale line rental where the retail costs are based on an EEO cost standard and where Eir should recover its LRIC — estimated by ComReg in this instance from Eir's accounts as ATC less common costs and fixed indirect costs on a national basis. However, should Eir so choose to only recover ATC less common costs and fixed indirect costs then ComReg considers that those fixed indirect costs and common costs avoided should be recovered elsewhere.

10.3 Retail price notification and compliance procedures

10.3.1 Overview:

10.83 In Chapter 10 of the Consultation Document ComReg proposed that the retail margin squeeze test for SB-WLR should follow pre-notification and pre-clearance procedures.

10.84 ComReg also considered an alternative approach whereby, Eir could demonstrate a form of self-compliance, so as to ensure ahead of launching a new or revised retail price for retail line rental that it meets its obligations not to cause a margin squeeze.

10.85 ComReg proposed in the Consultation Document that Eir should notify ComReg (by email) of all retail prices for new retail products and for retail price amendments to existing retail products (in circumstances where there is a proposed change in the retail line rental price) no later than 5 working days prior to the date that the new or revised price is to become operative.

10.86 For the purposes of a new or revised price and for amendments to existing retail products, Eir should furnish to ComReg, at the same time as it notifies ComReg, a detailed written statement of compliance demonstrating Eir's compliance and proposed compliance with the price control obligation. Please see paragraph 10.40 of the Consultation Document.

10.87 Upon receipt of the statement of compliance ComReg will review it. Within the 5 working day period ComReg may do one or more of the following things:

- (i) Provide Eir with both (a) an appropriate written view, insofar as possible based on the available information provided by Eir at that point in time, in relation to the statement of compliance and (b) written confirmation that the making available or offering for sale of the new or existing retail product appears to be in compliance with the retail margin squeeze test. However, any such written view or confirmation provided by ComReg is a *prima facie* view

and does not fetter ComReg's future discretion in relation to its statutory powers;

- (ii) Request any further information from Eir and set a deadline by which such information shall be provided. Eir should provide the requested information by the deadline and in such format and to the level of detail as stipulated by ComReg. Upon receipt of the requested information from Eir and within the 5 working day period above, ComReg may do one or more the of the things referred to in sub-sections (i), (iii), (iv) or (v).
- (iii) Inform Eir in writing that the amendment(s) to either the new or existing retail product would in ComReg's view, not be in compliance with the price control and the retail margin squeeze test. This written notification would include reasoning for ComReg's view and would also inform Eir that the amendment or change will or could result in the issuing of a notification of non-compliance;
- (iv) For the purpose of further specifying requirements to be complied with by Eir relating to the price control and the retail margin squeeze test, issue a direction or directions to Eir, to refrain from making operative the corresponding amendment(s) to the equivalent wholesale offering of any new or existing product, service or facility; or
- (v) For the purpose of further specifying requirements to be complied with by Eir relating to the price control and the retail margin squeeze test(s), issue a direction or directions to Eir, to refrain from making available or offering for sale, the equivalent wholesale offering of any new product, service or facility.

10.88 For the purposes of promotions, discounts and bundles, ComReg proposed in the Consultation Document that the obligations above should apply to new and existing retail product(s) and any equivalent wholesale product(s).

10.89 Please refer to the Consultation Document, Chapter 10, paragraphs 10.39 – 10.49 for further details on the proposed pre-notification and compliance procedures.

10.3.2 Submissions to the Consultation Document:

10.90 Vodafone, BT and ALTO generally agreed that pre-notification and pre-clearance obligations relating to the retail margin squeeze test for line rental were required while Eir disagreed. BT and ALTO also raised some points for further consideration.

- 10.91 Vodafone stated that it “supports”⁵²⁹ ComReg’s approach.
- 10.92 Eir stated that “...issues of pre-clearance and pre-notification do not arise once ComReg has set the price control for SB-WLR by cost orientation as there is no longer any economic justification for the test.”⁵³⁰
- 10.93 BT considered that “...5 working day notice is insufficient for ComReg to respond to eir Group’s submissions...”⁵³¹
- 10.94 Furthermore, BT rejected the proposal of self-compliance and stated that “...the recent Eircom Governance Report highlights the approach of self-compliance by declaration is unlikely to work at this time.”⁵³² BT believed that “...Eircom Governance Report raises serious compliance questions at this time and undermines our confidence the proposal will work. Hence we reject this proposal.”⁵³³
- 10.95 BT also noted that “Past margin squeeze problems have taken a considerable time and industry resource to progress...the potential for market damage can continue for at least a year before action can be taken to stop the issue ...”⁵³⁴
- 10.96 BT agreed that notifications should include promotions, discounts and bundles but raised concerns that “...eir Group has continued some promotions for well over a year.”⁵³⁵ and that these should be treated as “...prices rather than promotions.”⁵³⁶
- 10.97 ALTO raised similar points to BT and in addition stated that “...notice should be 15 working days, and that penalties for any incorrect declaration should be such as to create the appropriate incentive for eircom to provide accurate and timely declarations.”⁵³⁷

10.3.3 ComReg’s Position:

- 10.98 We note that the majority of respondents agreed that pre-notification and pre-clearance requirements are necessary in relation to price changes to retail line rental. The points raised by respondents are addressed below.

⁵²⁹ Vodafone Response to Consultation 15/67, page 12.

⁵³⁰ Eir Response to Consultation 15/67, page 38.

⁵³¹ BT Response to Consultation 15/67, page 8/9.

⁵³² BT Response to Consultation 15/67, page 9.

⁵³³ BT Response to Consultation 15/67, page 9.

⁵³⁴ BT Response to Consultation 15/67, page 9.

⁵³⁵ BT Response to Consultation 15/67, page 9.

⁵³⁶ BT Response to Consultation 15/67, page 9.

⁵³⁷ ALTO Response to Consultation, page 14.

- 10.99 Further to Eir's submission at paragraph 10.92 that pre-clearance and pre-notification does not arise once cost orientation is in place as margin squeeze is no longer justified, ComReg does not agree. ComReg considers that the margin squeeze test is required for the reasons set out in paragraphs 10.44 to 10.45 above and in subsection 10.2 in the Consultation Document.
- 10.100 In relation to BT's view (see paragraph 10.93) that 5 days is not sufficient for ComReg to respond and ALTO's view (see paragraph 10.97) that retail pricing notice to ComReg should be 15 working days, ComReg would like to point out that 5 days' notice is already applied in the context of NGA, Bundles and current generation Bitstream. In addition, it is important to note that if ComReg requires further information from Eir around the notified retail price then ComReg can set a new deadline by which this information must be provided to ComReg. Therefore, the timeframe can be extended if a further detailed review is required.
- 10.101 Further to BT's submission at paragraph 10.96 regarding ongoing promotions from Eir which should be treated as "...*prices rather than promotions*.", ComReg would like to point out that the cost of SB-WLR connections are now included in the SB-WLR rental price. Please refer to Chapter 12, paragraph 12.74. However, for the avoidance of doubt, subject to passing the margin squeeze test, Eir's retail arm could continue to provide promotions and discounts.
- 10.102 In response to ALTO's submission at paragraph 10.97 regarding penalties for any incorrect declaration, ComReg notes that the pre-clearance stage allows ComReg to inform Eir of suspected non-compliance with its pricing obligations in advance of launch to the market place which means that ComReg would not give Eir pre-clearance to make any price changes in such case. Alternatively, if it appears that Eir are non-compliant with its pricing obligations after the pre-clearance stage then ComReg can request Eir to make amendments so as to come into compliance. This is without prejudice to issuing a notification of non-compliance and / or taking a compliance case against Eir.
- 10.103 Having considered the submissions from respondents we remain of the view that the pre-notification and pre-clearance requirements for retail line rental are appropriate.

10.3.4 ComReg's Final Position:

- 10.104 Eir should notify ComReg of all new and revised retail prices for retail line rental at least five working days before launch and obtain prima facie approval from ComReg for their launch.
- 10.105 For the avoidance of doubt, approval in this context means that ComReg is of the view (based on the information provided to it by Eir) that the notified price does not appear to breach those obligations. The granting of approval does not

amount to a definitive finding by ComReg that the product is compliant, or will remain compliant in the future, with the margin squeeze obligations. It should be noted that the granting of approval would be strictly without prejudice to ComReg's right to take action (whether pursuant to a final decision and/or pursuant to any of its relevant statutory enforcement powers) in respect of any SB-WLR product that it believes may be non-compliant with Eir's regulatory or competition law obligations.

10.4 Wholesale margin squeeze test - POTS based VUA

10.4.1 Overview:

10.106 In Chapter 10 of the Consultation Document ComReg proposed that there should be a sufficient margin / economic space between the price of POTS based VUA (SB-WLR price plus port costs) and the price for standalone VUA / NGA Bitstream (including a contribution towards Managed VoB investment) so that an OAO is encouraged to invest in their own Managed VoB platform either currently or prospectively.

10.107 ComReg proposed a set of assumptions as follows:

- a) A Managed VoB hypothetical investment by an OAO of €10m;
- b) A Managed VoB asset life of 5 years;
- c) A mark-up for operating costs associated with the Managed VoB service of 10%;
- d) Customer lifetime of 42 months consistent with other wholesale margin squeeze tests;
- e) Wholesale connection cost appropriately discounted over a 42 month customer lifetime.

10.108 In addition, ComReg proposed that the following principles should apply with regard to the wholesale margin squeeze test:

- *Operator cost base*: the REO cost base should be used.
- *Operator volume base*: a hypothetical operator with a market share of 25% should be the relevant volume base to apply in the context of the wholesale margin squeeze test.

10.4.2 Submissions to the Consultation Document:

Objective of the POTS based VUA test:

- 10.109 There was general agreement from the majority of respondents regarding the proposed wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs).
- 10.110 BT stated that “...we welcome the introduction of VUA/POTs versus Standalone VUA/bitstream plus MST and agree there needs to be sufficient space to encourage investment in Voice over broadband.”⁵³⁸
- 10.111 ALTO also “...welcomes the introduction of a VUA/POTS vs. Standalone VUA/Bitstream plus MST and agree with Comreg there needs to be sufficient space to encourage investment in Voice over broadband...”⁵³⁹.
- 10.112 ALTO and BT also noted that: “...the Vodafone presentation provided by ComReg as part of the consultation...highlights the significant detrimental impact the SABB price increase had on their attempts to use VoIP.”⁵⁴⁰
- 10.113 Vodafone welcomed the “...overall costing and pricing approach”⁵⁴¹. Vodafone in its letter of 2 December 2015 noted that Eir in its response to the Consultation Document “...does not address the fact that the self-supply of FACO via Managed Voice over Broadband is included in the ComReg definition of the FACO market Decision ... on the basis that “Managed VOB is ultimately likely to replace eir’s traditional circuit switched telephony services”.”⁵⁴² Vodafone therefore considered that “...ComReg is within its powers to apply a margin squeeze requirement between POTS based VUA and standalone VUA/NGA Bitst[r]eam.”⁵⁴³ In addition, Vodafone stated in the letter that “It is logical from a ladder of investment point of view that ComReg is mindful of the need that eir would not act in a manner that would lead to operators not seeing a viable business case for investing in VoB due to eir pricing decisions, and thus potentially leading to eir having dominance in Wholesale VoIP.”⁵⁴⁴
- 10.114 Eir considered that “While we understand ComReg’s policy objective in proposing the new test, the proposed margin squeeze test is not economically well grounded.”⁵⁴⁵ In particular, Eir stated that “...it is not likely to promote

⁵³⁸ BT Response to Consultation 15/67, page 9.

⁵³⁹ ALTO Response to Consultation 15/67, page 15.

⁵⁴⁰ ALTO Response to Consultation 15/67, page 5.

⁵⁴¹ Vodafone Response to Consultation 15/67, page 13.

⁵⁴² Vodafone letter of 2 December 2015, page 12, at Annex 8.

⁵⁴³ Vodafone letter of 2 December 2015, page 12, at Annex 8.

⁵⁴⁴ Vodafone letter of 2 December 2015, page 12, at Annex 8.

⁵⁴⁵ Eir Response to Consultation 15/67, page 38.

*productive economic efficiency.*⁵⁴⁶ Eir stated that the core of the problem is that ComReg has set an objective of ensuring that VoB platform investment is economic but *“From an economic perspective it is not clear why that specific objective is desirable if ComReg’s policy objective is to promote overall efficiency and consumer welfare.”*⁵⁴⁷

10.115 Eir also considered that if *“ComReg believes that there is a need for competitive safeguards in this area...that these can be efficiently addressed through an obligation on eircom to offer wholesale VoIP services to third parties.”*⁵⁴⁸

10.116 CEG stated that *“...the test does not establish that investment in a VoB platform will not be viable for OAO operators.”*⁵⁴⁹ CEG considered that it would only establish this *“...if the VoB platform offers no additional value whatsoever (compared with POTS) in downstream activities.”*⁵⁵⁰ However, according to CEG *“If no additional value is created, it is unclear why incentivising investment in VoB is a valid policy objective.”*⁵⁵¹

10.117 CEG also noted that *“...investment in VoB might provide additional services or cost savings (e.g. lower retail calling costs) downstream of the access service being modelled that are more valuable to the consumer than the POTS based alternative. If these services or benefits are of sufficient value, VoB investment may be viable, even if the proposed margin squeeze test is failed...”*⁵⁵²

10.118 CEG also considered another reason why VoB investment could be economic, *“it might be a cheaper way (at the access level of the network) than POTS to provide voice services.”*⁵⁵³ CEG explained that in a network with both copper and fibre assets *“...VoB would be commercially viable if the cost of adding VoB functionality for an OAO is less than the avoidable costs of copper voice provision.”*⁵⁵⁴ In other words *“if the costs saved by not using the legacy copper voice loop over the long run outweigh the costs of investing in VoB, then it will be economically efficient to invest in VoB.”*⁵⁵⁵ However, CEG stated that *“The margin squeeze test proposed does not conduct such a check, and is therefore unlikely to promote efficient investment.”*⁵⁵⁶

10.119 CEG stated that *“ComReg’s proposed test is based on the assumption that it is necessary for an OAO to have a VoB platform that is dedicated to the Irish*

⁵⁴⁶ Eir Response to Consultation 15/67, page 38.

⁵⁴⁷ Eir Response to Consultation 15/67, page 38.

⁵⁴⁸ Eir Response to Consultation 15/67, page 4.

⁵⁴⁹ CEG report, page 44.

⁵⁵⁰ CEG report, page 44.

⁵⁵¹ CEG report, page 44.

⁵⁵² CEG report, page 44.

⁵⁵³ CEG report, page 45.

⁵⁵⁴ CEG report, page 45.

⁵⁵⁵ CEG report, page 45.

⁵⁵⁶ CEG report, page 45.

market.”⁵⁵⁷ CEG stated that *“It is not clear this is necessary...[as there are a]... number of large international telecoms and media companies competing in Ireland today that would be to likely leverage platforms based in the UK or other EU Member States to provide VoB services in Ireland.”*⁵⁵⁸ CEG also added that *“Over-the-top competition from competitors such as Skype typically occurs internationally”*.⁵⁵⁹

10.120 Furthermore, CEG stated that *“Given the ability of telecoms operators such as Colt to leverage investment across markets, it is not clear that the margin squeeze test proposed reflects the true incremental costs likely to be faced by major competitors to eircom that are operating in Ireland...”*⁵⁶⁰

10.121 CEG stated that it is *“...not aware of any other regulator applying a similar test to that proposed by ComReg.”*⁵⁶¹

Principles of the margin squeeze test:

10.122 With regard to the REO cost base and the 25% market share, CEG considered that *“The implication of these proposals is that eircom would be prevented from being price competitive with any operator with costs lower than the margin required by ComReg, including operators with a higher than 25% market share.”*⁵⁶² CEG noted that *“...UPC currently has a share of 29% of the fixed broadband market and that Vodafone’s share of 17.5% can be expected to grow rapidly with the imminent launch of SIRO’s services.”*⁵⁶³

10.123 CEG believed that the POTS based VUA test *“... would constrain eircom’s competitiveness while not giving benefits to smaller operators who would have to compete with eircom’s larger rivals anyway.”* CEG stated that *“...eircom’s rivals such as UPC, Vodafone, BT and Sky are part of large international groups that are likely to bring their own competitive advantages that may more than offset any current scale advantage that eircom enjoys.”*⁵⁶⁴

10.124 CEG noted that *“An EEO standard would better promote competition on the merits and efficiency.”*⁵⁶⁵

⁵⁵⁷ CEG report, page 43.

⁵⁵⁸ CEG report, page 43.

⁵⁵⁹ CEG report, page 44.

⁵⁶⁰ CEG report, page 44.

⁵⁶¹ CEG report, page 45.

⁵⁶² CEG report, page 45.

⁵⁶³ CEG report, page 45.

⁵⁶⁴ CEG report, page 45.

⁵⁶⁵ CEG report, page 46.

SABB NGA pricing:

- 10.125 BT stated that “...the significant price hike of 2 Euros per line per month by Eircom earlier this year acted to stall business cases for deploying VoIP and impacted the market.”⁵⁶⁶
- 10.126 Similarly, Vodafone stated that “...the significant price increase of €2 per line, per month by Eircom earlier in 2015 ...has stalled the business cases for deploying VoIP and has negatively impacted on market developments and this needs to be addressed.”⁵⁶⁷ Vodafone raised concerns that “...the market is moving to a VUA/NGA model which should be encouraged but the current pricing and assumptions by ComReg does not go far enough to make the business case.”⁵⁶⁸
- 10.127 Vodafone is particularly concerned “...the SABB pricing of over €22 does not reflect the need to incentivise a move to standalone broadband with VoIP.”⁵⁶⁹

10.4.3 ComReg’s Position:

- 10.128 ComReg notes that the majority of respondents agreed with the POTS based VUA wholesale margin squeeze test. The points raised by respondents are addressed below.

Objective of the POTS based VUA test:

- 10.129 With respect to Eir’s submission, at paragraph 10.114, that in their view the POTS based VUA test is not economically well grounded, ComReg does not agree. ComReg would like to point out that in the FACO Decision Eir has been designated with SMP. Given concerns that Eir could leverage its market power into adjacent vertically or horizontally related markets through price and non-price means with the effect of foreclosing or excluding competitors in downstream retail and/or upstream wholesale markets, a margin squeeze obligation is considered appropriate to address such risks – discussed previously in paragraphs 10.44-10.45.
- 10.130 With regard to Eir’s view, at paragraph 10.115, that a competitive safeguard for VoB could be achieved through imposing an obligation on Eir to offer wholesale VoB services to third parties, ComReg does not agree. In the FACO Decision Eir was not mandated to provide Managed VoB, and ComReg maintains that view. However, as set out in the Consultation Document, as Eir has the ability to control the key inputs (namely in this case NGA Bitstream/VUA and POTS based VUA) used by wholesale customers — which compete against Eir in such markets — that it has the incentive to use its market power in upstream markets to affect the competitive conditions in downstream wholesale and/or retail markets. Such

⁵⁶⁶ BT Response to Consultation 15/67, page 9.

⁵⁶⁷ Vodafone Response to Consultation 15/67, page 13.

⁵⁶⁸ Vodafone Response to Consultation 15/67, page 13.

⁵⁶⁹ Vodafone Response to Consultation 15/67, page 13.

issues were raised by BT and Vodafone (see paragraphs 10.125-10.126) in the context of Eir's wholesale price increase of €2 for NGA Bitstream and VUA.

10.131 Eir submitted (see paragraph 10.114) that the POTS based VUA test is not likely to promote productive economic efficiency and it is not clear why the objective of an economic VoB platform is desirable. CEG, at paragraph 10.116, considered that if no additional value is created it is unclear why incentivising investment in VoB is a valid policy objective. One of ComReg's regulatory objectives is to facilitate infrastructure-based competition and to promote the long-term benefits of end-users. VoB allows an OAO to provide a voice service using their own infrastructure (SB-WLR is based on Eir infrastructure). Therefore, the objective is not to favour VoB but to encourage OAO investment in their own infrastructure. As Managed VoB requires considerable investment in infrastructure it is important to protect operators currently using Managed VoB and in addition to encourage other operators to invest in their own Managed VoB platform prospectively. Furthermore, as Eir has SMP in both the FACO market (Market 2) and in the WBA market (Market 5) and controls the wholesale inputs to which OAOs rely on to compete with Eir, ComReg considers that absent a margin squeeze test Eir has the incentive and ability to dampen or foreclose such infrastructure-based competition. See also paragraph 10.132.

10.132 With respect to CEG's submission (at paragraph 10.117 and 10.118) that if investment in Managed VOB provided additional services or cost savings then VoB investment might be viable even if the proposed margin squeeze test fails, ComReg considers that it is important to consider the purpose of the test — which is to ensure that OAOs have sufficient confidence such that it can determine for itself the appropriate business case of whether to invest or not. While such additional services or cost savings may act as further incentives for OAOs to climb the ladder of investment it is important that appropriate build or buy signals are not dampened or eliminated by Eir's pricing behaviours.

10.133 We note CEG's view (at paragraph 10.119 and paragraph 10.120) that the test assumes that it is necessary for an OAO to have a VoB platform dedicated to the Irish market despite large international telcos likely to leverage their platforms from other countries to provide VoB in Ireland. While we acknowledge CEG's point, ComReg would like to point out that the contribution towards Managed VOB in the wholesale margin squeeze test is in part informed by the fact that the Managed VOB platform investment costs are the costs of a dedicated Managed VOB platform for the Irish market.

10.134 Further to CEG's point at paragraph 10.119 that over-the-top competition from competitors such as Skype typically occurs internationally, ComReg notes that over-the-top services is an unmanaged VOB services. In the RFVA Decision ComReg recognises that Skype provides access to unmanaged VOIP services which are provided over the networks of third parties and the supplier has very

limited control over the quality of the service experienced by the end user. In addition, the end user would also need access to a non telephone access device e.g., a computer.⁵⁷⁰ In the RFVA Decision we stated that unmanaged VOIP over a broadband connection (e.g., Skype, Viber) is unlikely to be considered a suitable substitute for a narrowband fixed voice access ('FVA') service for the majority of end users in light of not yet meeting the functional characteristics similar to traditional narrowband FVA in relation to telephony. This type of substitution would only be likely to occur at the margins, at least during the review period and, therefore, in ComReg's view would not be sufficient to constrain narrowband FVA.⁵⁷¹ Consequently, we do not agree with CEG's submission.

10.135 In relation to CEG's claim at paragraph 10.121 that it is not aware of any other regulator applying a similar test, ComReg notes that as the development of Managed VoB in Ireland remains very low, as operators continue to mainly use SB-WLR, we consider that the POTS based VUA test is required to encourage operators to invest in their own VoB platform as appropriate.

Principles of the margin squeeze test:

10.136 ComReg notes CEG's submission, at paragraphs 10.122-10.124, that the REO cost base and the 25% market share prevent Eir from being price competitive with any operator with costs lower than the margin required by ComReg and that the EEO test would better promote competition. ComReg considers that the REO cost base is more appropriate as the objective of the test is to promote investment in Managed VoB by alternative operators. The REO approach recognises that even in the long-run, alternative operators may not be able to compete with the SMP operator due to structural diseconomies of scale and scope, and the nature of the market.

10.137 ComReg notes CEG's views at paragraph 10.122 in particular that UPC currently has a share of 29% of the fixed broadband market and Vodafone's share of 17.5% can be expected to grow rapidly with the imminent launch of SIROs services. Our recent quarterly data shows that UPC's share of fixed voice subscriptions is 24%⁵⁷² based on all VoB lines which is below the assumed 25% market share. Vodafone's share of fixed voice subscriptions is 15%⁵⁷³ predominantly based on WLR and whitelabel access ("WLA") and with less than 30 lines provided by VOB, resulting in a very low VOB market share well below the assumed market share of 25%. Considering these values, it seems that choosing a market share higher than 25% would further reduce the economic space for operators which are competing with Eir. While UPC may be capable of getting a share greater than 25% in the medium term, this may be more difficult

⁵⁷⁰ Please see paragraph 3.4 and footnote 55 of the RFVA Decision.

⁵⁷¹ Please see paragraph 4.85 of the RFVA Decision.

⁵⁷² ComReg Document 15/130: Key Data Report – Q3 2015, Figure 2.2.3, page 20. Calculated by 30 .

⁵⁷³ ComReg Document 15/130: Key Data Report – Q3 2015, Figure 2.2.3, page 20.

for other alternative operators. As such, the risk of having too high market share assumption would be to create a duopoly situation in this segment of the market. In addition, a 25% market share is consistent with a market made up of 4 operators with symmetric market shares (100%/4) or with a market made of 3 operators with asymmetric market shares. While a 33% market share is only consistent with a duopoly situation with asymmetric market share or a market made up of 3 operators with symmetric market shares (100%/3), the latter is less likely in reality given existing market share asymmetries. As a consequence, a market share of 25% is more consistent with the objective of incentivising infrastructure based competition with more than 2 operators.

SABB pricing:

10.138 Further to the submissions from BT and Vodafone, as set out in paragraphs 10.125-10.126, regarding their view that the €2 price increase per line per month by Eir acted to stall business cases for deploying Managed VoB, ComReg considers that the new wholesale test should ensure that there is an appropriate economic space between VUA (or NGA Bitstream) and POTS based VUA to enable an REO to invest in Managed VoB.

10.139 In response to Vodafone's view at paragraph 10.127 that a SABB price of over €22 does not reflect the need to incentivise a model to SABB with Managed VoB, ComReg would like to point out that the SABB price of €22 (based mainly on TD costs) relates to current generation standalone broadband Outside the LEA only, as discussed at Chapter 7. The costs associated with a newly built network (based predominantly on BU costs) for the provision of current generation SABB Outside the LEA would be more expensive (at circa €31), as discussed at Chapter 7 of the Consultation Document.

10.140 Having considered the submissions from respondents we remain of the view that the POTS based VUA margin squeeze test is appropriate.

10.4.4 ComReg's Final Position:

10.141 Eir should be subject to a wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream plus a contribution towards Managed VoB costs based on a REO cost standard with an assumed OAO market share of 25%.

Chapter 11

11 Review of Ancillary Charges

11.1 Overview

- 11.1 In this chapter we outline our review of the charges for a number of Eir's ancillary services associated with SB-WLR and Market 4. The ancillary services for SB-WLR are contained in Eir's RIO price list while the ancillary services for Market 4 are contained in the Eir's ARO price list, on Eir's Wholesale website.
- 11.2 Pursuant to the WPNIA Market Decision and the NGA Decision, Eir's ancillary charges for Market 4 are subject to the obligation of cost orientation. For SB-WLR ancillary charges, the obligation of cost orientation was imposed pursuant to the FACO Decision.
- 11.3 The respective discussion is considered under the following headings:
- ARO ancillary charges; and
 - SB-WLR ancillary charges.

11.2 ARO ancillary charges

11.2.1 Overview:

- 11.4 In Chapter 11 of the Consultation Document ComReg proposed that changes to the key parameters used in determining the relevant costs for the ARO ancillary services should be reflected by way of updated ARO ancillary charges. The key parameters included the following:
- WACC;
 - Hourly wage rate;
 - Process charge for product management; and
 - Customer lifetimes i.e., 42 months.
- 11.5 In Chapter 11 of the Consultation Document ComReg reviewed the ARO ancillary services contained in Eir's ARO price under the following headings:
- Co-location charges;
 - Connections; and

- Fault repair.
- 11.6 ComReg was of the preliminary view that the ancillary charges for Market 4 products and services should be based on no more than the actual costs incurred adjusted for efficiency plus a reasonable rate of return.
- 11.7 Please refer to the Consultation Document, Chapter 11, paragraphs 11.16 – 11.35 for a further discussion on review of the ARO ancillary charges.

11.2.2 Submissions to the Consultation Document:

- 11.8 In general, the majority of respondents agreed with the preliminary views regarding the ancillary charges for Market 4 products and services.
- 11.9 Enet agreed that “...*ancillary charges for Market 4 products and services should be based on no more than the actual costs incurred adjusted for efficiency plus a reasonable rate of return.*”⁵⁷⁴
- 11.10 While Vodafone was supportive of ComReg’s approach it requested ComReg “...*to explain in greater detail n[h]ow efficiency adjustments to the Ancillary Services cost base*”⁵⁷⁵ have been calculated. Vodafone noted in particular “...*how has the ‘appropriate’ national LFI” ...been incorporated into charges...*”⁵⁷⁶
- 11.11 BT, however, raised concerns about power requirements stating that “...*the granularity of eir Group power is insufficient as we have to purchase power plants greater than we require – and in some cases the power plant is twice the size we require...*”⁵⁷⁷ BT stated that “...*we are over paying for power and cooling infrastructure and ComReg should stop this.*”⁵⁷⁸ ALTO raised similar points to BT regarding power charges.

11.2.3 ComReg’s Position:

- 11.12 ComReg notes that the majority of respondents agreed with the review of ancillary charges associated with Market 4.
- 11.13 Further to Vodafone’s views at paragraph 11.10 regarding efficiency adjustments and the appropriate LFI, ComReg notes that the majority of charges are connection charges which have no link to faults. For fault charges (or fault clearance charges), the price is intended to correspond to the unit cost of repairing one fault based on the incremental costs associated with fault repair. Consequently, the costs associated with the fault repair charge are the variable

⁵⁷⁴ Enet Response to Consultation 15/67, page 6.

⁵⁷⁵ Vodafone Response to Consultation 15/67, page 13.

⁵⁷⁶ Vodafone Response to Consultation 15/67, page 13.

⁵⁷⁷ BT Response to Consultation 15/67, page 9.

⁵⁷⁸ BT Response to Consultation 15/67, page 9.

costs excluding fixed and common costs, which are recovered from the line rental charge. Therefore, while the overall costs associated with fault repair will increase in line with an increase in the LFI, the unit cost per fault remains relatively stable. From the initiation of the LLU service, fault clearance has been charged separately on unbundled lines — on the basis that this provides access seekers with an economic signal to prove service faults out of their own network. The necessary consequence of this price structure is an adjustment to the level of network operating cost to be recovered from the LLU monthly rental — in order to avoid double recovery by Eir. So the assessment of the price of LLU monthly rental includes a downward adjustment to the level of modelled operating expenditure to reflect the level of cost likely to be recovered from fault clearance charges. This adjustment is calculated as the observed line fault rate multiplied by the applicable LLU fault clearance charge.

- 11.14 With regard to BT's and ALTO's submissions' on power at paragraph 11.11, we consider that these issues were addressed in the power review carried out by ComReg and TERA in 2013. In any event power plant size is outside the scope of this Decision Document.
- 11.15 Having considered the submissions from respondents we remain of the view that the ancillary charges for Market 4 services should continue to be based on no more than actual costs incurred adjusted for efficiency plus a reasonable rate of return for the reasons set out at paragraphs 11.12 to 11.14 above and for the reasons set out in Chapter 11, subsection 11.2 of the Consultation Document.

11.2.4 ComReg's Final Position:

- 11.16 The ancillary charges for Market 4 products and services should continue to be based on no more than the actual costs incurred adjusted for efficiency plus a reasonable rate of return.
- 11.17 Eir should continue to keep the ancillary charges under review in line with its pricing obligations.

11.3 SB-WLR ancillary charges

11.3.1 Overview:

- 11.18 In Chapter 11 of the Consultation Document ComReg considered the SB-WLR ancillary charges under the following categories:
1. SB-WLR order handling charges;
 2. SB-WLR connections charges;
 3. SB-WLR other charges.

11.19 For SB-WLR connection charges, ComReg considered two pricing approaches as follows:

- Option 1: SB-WLR connection and rental charged separately; and
- Option 2: Increase to SB-WLR rental charge to account for connection costs.

11.20 ComReg was of the preliminary view that an uplift of €0.50 per line per month should be included in the SB-WLR rental charge to account for SB-WLR connection costs. Please refer to the Consultation Document, Chapter 11, paragraphs 11.47 – 11.59 for further details.

11.21 As set out in the Consultation Document at paragraph 11.38, the 2014 FACO Consultation Document⁵⁷⁹ proposed that the ancillary charges for SB-WLR products and services (i.e., SB-WLR order handling charges and SB-WLR other charges) should be based on no more than the actual costs incurred adjusted for efficiency plus a reasonable rate of return.

11.22 Please refer to the Consultation Document, Chapter 11, paragraphs 11.38 – 11.63 for a further discussion on review of the SB-WLR ancillary charges.

11.3.2 Submissions to the Consultation Document:

11.23 Respondents generally agreed with the proposal to include connection costs of circa €0.50 per line per month in the SB-WLR rental charge.

11.24 Eir stated that *“the analysis of connection costs undertaken by ComReg to determine the appropriate recovery per month from line rental has been thorough and balanced... For this reason we agree with ComReg’s preliminary view.”*⁵⁸⁰

11.25 Separately, in the Eir August Letter, Eir noted that *“In general ISDN provisioning costs are very much higher than PSTN provisioning costs. Yet there is no discussion as to whether the price control proposed should include a higher charge per line for ISDN rental than the single charge per line mentioned in the consultation.”*⁵⁸¹

11.26 Sky considered that this approach *“...ensures that eircom recovers its costs and provides greater certainty to OAOs by removing the ‘promotion’ led regime.”*⁵⁸²

⁵⁷⁹ ComReg Document No 14/26: Market Review: Wholesale Fixed Voice Call Origination and Transit Markets, dated 4 April 2014.

⁵⁸⁰ Eir Response to Consultation 15/67, page 38.

⁵⁸¹ ComReg Document No 15/67d - http://www.comreg.ie/_fileupload/publications/ComReg1567D.pdf

⁵⁸² Sky Response to Consultation 15/67, page 3.

- 11.27 BT agreed with ComReg and stated that *“This will also prevent Eir Group from using wholesale promotions for its own targeted commercial aims.”*⁵⁸³
- 11.28 Vodafone agreed in principle with ComReg and stated that it *“...assumes that this would also apply to the disconnection fees, in the line rental.”*⁵⁸⁴

11.3.3 ComReg’s Position:

- 11.29 ComReg notes that there was general agreement among respondents to include the connection costs in the SB-WLR rental charge.
- 11.30 With regard to Eir’s point at paragraph 11.25 that ISDN provisioning costs are much higher than PSTN provisioning costs, ComReg would like to clarify that the €0.50 per line per month connection costs relate to PSTN provisioning costs only. Therefore, the provisioning costs for ISDN are not included in the €0.50 and in this case OAOs will continue to pay for the ISDN rental and connection charges separately.
- 11.31 In relation to Vodafone’s point at paragraph 11.28 that it assumes that the same principle applies to disconnection fees, ComReg confirms that the SB-WLR monthly charge includes all costs associated with connections and disconnections of the SB-WLR service.
- 11.32 Having considered the submissions from respondents we remain of the view that the SB-WLR rental price should include the cost of SB-WLR connections at €0.50 per line per month for the reasons set out at paragraphs 11.29 to 11.31 above and for the reasons set out in Chapter 11, subsection 11.3.2 of the Consultation Document.
- 11.33 Following the FACO Decision (D05/15), the SB-WLR ancillary services are subject to a cost orientation obligation based on no more than the actual costs incurred adjusted for efficiency plus a reasonable rate of return.

11.3.4 ComReg’s Final Position:

- 11.34 An uplift of €0.50 per line per month should be included in the SB-WLR PSTN rental charge to account for SB-WLR connection costs.
- 11.35 Eir should continue to keep the PSTN provisioning costs under review in line with its pricing obligations.

⁵⁸³ BT Response to Consultation, page 10.

⁵⁸⁴ Vodafone Response to Consultation 15/67, page 14.

Chapter 12

12 Other Regulatory Measures

12.1 Introduction

12.1 In this chapter we determine the appropriate length of the Price Control Period, the transparency obligation for SABB Outside the LEA and for SB-WLR nationally, the regulatory approval mechanism to allow Eir reduce prices in certain geographic areas and the approach for SB-WLR promotions and discounts.

12.2 The respective discussion is considered under the following headings:

- Price Control Period;
- Transparency obligations for SABB Outside the LEA and for SB-WLR nationally;
- Regulatory approval mechanism to allow Eir to reduce prices in certain geographic areas; and
- SB-WLR promotions and discounts.

12.3 Each one is discussed in turn below.

12.2 Price control period

12.2.1 Overview:

12.4 In Chapter 12 of the Consultation Document ComReg proposed that the price control period should be for at least three years (i.e., 2016 – 2018) from the date of ComReg's decision but in any event it should remain in place until further notice by ComReg.

12.5 ComReg was of the preliminary view that Eir should review the inputs, costs and assumptions of the Revised CAM annually.

12.6 Please refer to the Consultation Document, Chapter 12, paragraphs 12.3 – 12.10 for further details on the price control period.

12.2.2 Submissions to the Consultation Document:

12.7 While Enet and BT agreed with the three year price control period ALTO called on ComReg to have reviews every 2 years while Vodafone considered that the prices directed by ComReg from this review should only be in place for 12 months. Eir considered that if prices were determined for each year of the price

control period then the three year period is less critical. Further points for consideration were raised by some respondents.

- 12.8 Enet agreed with the three year price control stating that “...it is the minimum practicable.”⁵⁸⁵ In addition, Enet considered that three years was appropriate for a number of reasons including “...required stability and predictability for proper investment decisions.”⁵⁸⁶ and it “...supports good business planning.”⁵⁸⁷
- 12.9 Eir noted that “...if a rigid price control is implemented with a single monetary value set for price levels for a range of wholesale access services then... the review leading to the next price control will need to start no more than one year into the control period.”⁵⁸⁸ In addition, Eir stated that “...If however the control is of the form of either an initial rate with a “CPI – x%” change per annum, or an initial rate with a money amount change per annum, consistent with predicted cost trends, then the issue as to whether the price control remains in place is less critical.”⁵⁸⁹
- 12.10 BT agreed with ComReg but noted that “...ComReg should consult in the event that material changes are detected.”⁵⁹⁰ BT considered that this “...will lessen the price shock, allow other parties to express their informed views to ComReg and allow the market to plan for the changes.”⁵⁹¹
- 12.11 ALTO raised concerns that “...ComReg has not defined ‘material’...when analysing the annual costs.”⁵⁹² In addition, ALTO suggested that “...reviews take place every 2 years.”⁵⁹³
- 12.12 Vodafone welcomed ComReg’s decision to allow access to the models underpinning the access prices and stated that “...there is a need to allow time for operators to review the models and comment after ComReg have decided on the revision of the access prices in this consultation.”⁵⁹⁴ For this reason Vodafone considered that “...the prices directed by ComReg following this review should only be in place for 12 months...”⁵⁹⁵
- 12.13 Vodafone, in its letter of 2 December, also refers to Eir’s arguments noted in its response to the Consultation Document about the complexity of cost models as part of its justification for not moving to a cost oriented price control for SB-WLR.

⁵⁸⁵ Enet Response to Consultation 15/67, page 6.

⁵⁸⁶ Enet Response to Consultation 15/67, page 6.

⁵⁸⁷ Enet Response to Consultation 15/67, page 6.

⁵⁸⁸ Eir Response to Consultation 15/67, page 39.

⁵⁸⁹ Eir Response to Consultation 15/67, page 39.

⁵⁹⁰ BT Response to Consultation 15/67, page 10.

⁵⁹¹ BT Response to Consultation 15/67, page 10.

⁵⁹² ALTO Response to Consultation 15/67, page 16.

⁵⁹³ ALTO Response to Consultation 15/67, page 16.

⁵⁹⁴ Vodafone Response to Consultation 15/67, page 14.

⁵⁹⁵ Vodafone Response to Consultation 15/67, page 14.

Vodafone stated that it “... would again strongly urge ComReg to ensure that these cost models are continually reviewed against eir’s Separated Accounts ...[and] We would strongly urge that that this review be explicitly incorporated into any existing ComReg’s (regulated) pricing review processes, as well as the overall process for regulatory price consultations and determinations.”⁵⁹⁶

12.2.3 ComReg’s Position:

- 12.14 ComReg notes that two respondents agreed with the three year price control period while two suggested a shorter period with Eir claiming that the Price Control Period became less relevant if prices were specified each year.
- 12.15 Further to Eir’s submission at paragraph 12.9 regarding a single monetary value as opposed to varying annual prices, this is addressed in Chapter 5, paragraphs 5.125 - 5.131.
- 12.16 Regarding the duration of the price control period, ComReg maintains its preliminary view. The Price Control Period should last for at least three years (from [1 July] 2016 to 30 June 2019) from the implementation date of the decision but in any event will continue in place until further notice by ComReg. The new revised fixed wholesale access services prices will be effective from [1 July] 2016 and will change each year on 1 July in line with the Revised CAM, as set out in Chapter 13 of the Decision Document. For transparency purposes, we have also specified the indicative prices, as determined by the Revised CAM, for the first two years beyond the price control period (i.e., 2019/20 and 2020/21). This should ensure that should the next pricing review not be completed by the end of the current price control period, prices in year 4 (and subsequently, if necessary) can continue to be informed by cost information extracted from the Revised CAM. Giving the timing of this Decision an implementation date of [1 July] is considered appropriate for a number of reasons. Firstly, the implementation date of [1 July] aligns with Eir’s financial year which is advantageous especially in the context of SB-WLR where the price is set by reference Eir’s HCAs. Secondly, the timing of our Decision means that it is more pragmatic for the revised prices to align with Eir’s financial year.
- 12.17 In relation to BT’s submission at paragraph 12.10 and ALTO’s submission at 12.11 regarding material changes as well as Vodafone’s point at paragraph 12.13 on the comparison of the model to the accounts, ComReg considers that on annual basis Eir should review the inputs and assumptions of the Revised CAM. However, the Revised CAM will only be reopened where significant and sustainable changes are noted to key parameters. For example, for SB-WLR, a case to reopen to the Revised CAM would be considered where there is significant changes to the TD data from Eir’s HCAs or volume changes, during

⁵⁹⁶ Vodafone letter of 2 December 2015, page 6, at Annex 8.

the Price Control Period. The materiality of any changes would be considered on a case-by-case basis and ComReg may consult with the industry, as appropriate. However, it should be noted that the annual review is not a static point in time review but rather a review over the duration of the Price Control Period and where cost recovery issues are apparent a more detailed dynamic review may be necessary before any possible price changes could be considered. It is important that any one-off increases or decreases to historic costs do not give rise to distortions in the market. Therefore, it is only changes that, to ComReg's satisfaction, that are significant and sustainable. This provision also ensures consistency with the requirements of Regulation 13(4) of the Access Regulations regarding the recovery of actual efficient costs plus a reasonable rate of return.

- 12.18 ComReg considers that Eir should provide ComReg with an annual reconciliation statement for the provision of SB-WLR, to assess in particular the cost, volumes and returns per the HCAs accounts compared with the costs and volumes contained in the Revised CAM in order to assess any material and sustainable changes over the duration of the Price Control Period. This should be provided in line with the templates set out in Annex 12. This review should allow us to assess any material under / over recovery of costs over the Price Control Period. We consider that this annual reconciliation statement, should be provided by Eir in accordance with the procedures which govern the provision of Additional Financial Information ('AFI') contained in the Decision Instrument annexed to ComReg Decision D08/10 and should be provided no later than seven months after the end of the financial year.
- 12.19 In the case of poles, Eir should submit annually to ComReg a reconciliation statement including:
- (i) The actual number of poles deployed during the respective financial year, separately indentifying the number of poles invested in for the roll-out of NGA services, in line with the template set out in Annex 13. This information will allow ComReg to compare the pole investment assumptions in the Revised CAM with the actual investments being made by Eir.
 - (ii) Confirmation on whether the forecasted number of poles for subsequent years remains appropriate, in line with the template set out in Annex 13. Where this is not the case, Eir should provide an update on the revised forecasts as part of the annual statement.

- 12.20 Similar to the annual reconciliation statement for SB-WLR, the annual statement for poles should be provided in accordance with the provision of AFI contained in the Decision Instrument annexed to ComReg Decision D08/10 and should be provided no later than seven months after the end of the financial year. Please refer to the Annex 12 for the annual statement to be provided by Eir as part of the annual AFI statement.
- 12.21 ComReg considers that the annual reconciliation process supports cost recovery and continued investment by Eir in its existing access network, where appropriate. This should incentivise Eir to invest in maintaining or upgrading its network on the basis that its actual efficiently incurred expenditure can be recouped. Therefore, if Eir's investment in poles is significantly different to the volumes of poles provisioned in the Revised CAM over the next three years ComReg may have to revisit the price per pole.
- 12.22 ALTO proposed in its submission at paragraph 12.11 that a review should take place every two years while Vodafone in its submission at paragraph 12.12 considered that a review should take place after 12 months. ComReg considers that a Price Control Period of at least three years provides more certainty and stability to the market place. In addition, the three year period should also ensure that ComReg will have conducted a market review of the current Market 4 (or Market 3a). ComReg considers that the annual review by Eir, as discussed at paragraphs 12.17-12.20, should provide the market with reasonable price certainty and stability.
- 12.23 Having considered the submissions from respondents we remain of the view that the Price Control Period should be for three years but should remain in place until further notice by ComReg for the reasons set out at paragraphs 12.15 to 12.22 above and for the reasons set out in Chapter 12, subsection 12.2 of the Consultation Document. In addition, we remain of the view that annually, Eir should review the key inputs, costs and assumptions of the Revised CAM for SB-WLR and poles and we have decided that Eir should provide ComReg with an annual written statement and reconciliation for SB-WLR and poles for the reasons set out in paragraphs 12.17-12.20 above.

12.2.4 ComReg's Final Position:

- 12.24 The Price Control Period should last at least three years (from [1 July] 2016 to 30 June 2019) from the date of ComReg's decision but in any event it should remain in place until further notice by ComReg.
- 12.25 The new revised fixed wholesale access services prices will be effective from [1 July] 2016 and will change each year on 1 July in line with the model, as set out in Chapter 13 of the Decision Document.

- 12.26 Eir should review the key inputs, costs and assumptions of the Revised CAM on an annual basis, in particular with regard to SB-WLR and poles.
- 12.27 For SB-WLR, Eir should submit annually to ComReg a reconciliation statement in line with the templates set out in Annex 12.
- 12.28 For poles, Eir should submit annually to ComReg a reconciliation statement including:
- (i) The actual number of poles deployed during the respective financial year, separately indentifying the number of poles invested in for the roll-out of NGA services, in line with the template set out in Annex 13.
 - (ii) Confirmation on whether the forecasted number of poles for subsequent years remains appropriate, in line with the template set out in Annex 13. Where this is not the case, Eir should provide an update on the revised forecasts as part of the annual statement.
- 12.29 The annual reconciliation statements at paragraphs 12.27 and 12.28 should be provided in accordance with the procedures which govern the provision of Additional Financial Information contained in the Decision Instrument annexed to ComReg Decision D08/10 and should be provided no later than seven months after the end of the financial year.

12.3 Transparency obligations for SABB Outside the LEA and for SB-WLR nationally

12.3.1 Overview:

- 12.30 In Chapter 12 of the Consultation Document we proposed that Eir should pre-notify ComReg of any SB-WLR national price changes or SABB price changes Outside the LEA, before the new or revised price is expected to come into effect.
- 12.31 For price increases, ComReg was of the preliminary that for SB-WLR that Eir should make publically available on its wholesale website at least three (3) months in advance of any proposed amendments to the national SB-WLR price resulting from a price increase. Eir should notify ComReg at least one (1) month in advance of such publication – that is at least four (4) months before any increase to the national SB-WLR price would be expected to come into effect. Please refer to the Consultation Document, Chapter 12, paragraphs 12.12 – 12.15 for further details on the proposed notification procedures for SB-WLR price increases.
- 12.32 For amendments to the national price for SB-WLR and / or the SABB price Outside the LEA, ComReg proposed in Chapter 12 of the Consultation Document

that pre-notification and approval procedures should apply. Please refer to Consultation Document, Chapter 12, paragraphs 12.16 – 12.23.

12.3.2 Submissions to the Consultation Document:

- 12.33 There was general agreement among the majority of respondents regarding the pre-notification and pre-clearance requirements for SB-WLR price changes nationally and for SABB prices Outside the LEA.
- 12.34 Vodafone, ALTO and BT agreed with ComReg. BT stated that *“This aligns with existing rules and also provides sufficient time for ComReg to analyse the proposed change and for the industry to challenge the proposal to ComReg or factor the changes into their business models.”*⁵⁹⁷
- 12.35 ALTO *“agrees with ComReg’s preliminary view...This appears to align with existing rules and also provides sufficient time for ComReg to analyse the proposed change and for the industry to challenge any proposal to ComReg or factor any proposed changes into operators’ business models.”*⁵⁹⁸
- 12.36 Eir stated that *“Where the form of price control for either SB-WLR nationally, or for SABB outside the LEA, may allow for a natural price increase there should be no requirement for the notification procedure...”*⁵⁹⁹ However, Eir noted that if *“...the form of control allows eircom to submit the cost model for changes unforeseen in the revised CAM so as to achieve an increase beyond the initial level then the procedures proposed seem reasonable.”*⁶⁰⁰

12.3.3 ComReg’s Position:

- 12.37 While our focus in this section relates mainly to the notification procedures relating to price increases for SB-WLR nationally and SABB Outside the LEA, it is important to note that the existing transparency obligations in the WBA market and in the FACO market apply to price changes generally i.e., price reductions. Similarly, for LLU, SLU, Line Share, CEI and dark fibre the existing transparency obligations set out in the WPNIA Market Decision (or as amended by the NGA Decision) apply regarding the pre-notification of any price changes (increases or reductions) concerning WPNIA products and services.
- 12.38 Further to Eir’s view at paragraph 12.36 that there should be no requirement for a notification procedure where there is a natural price increase to SB-WLR nationally or SABB Outside the LEA, ComReg considers that pre-notification obligations allow ComReg time to understand whether the new price(s) appear

⁵⁹⁷ BT Response to Consultation 15/67, page 10.

⁵⁹⁸ ALTO Response to Consultation 15/67, page 16.

⁵⁹⁹ Eir Response to Consultation 15/67, page 39.

⁶⁰⁰ Eir Response to Consultation 15/67, page 39.

consistent with the cost orientation obligations specified by ComReg in this Decision Document. In particular, given that the national SB-WLR price and the SABB price Outside the LEA are set by reference to Eir's TD HCAs it is important to understand how any changes to the HCAs may be reflected by way of a revised price(s) for SB-WLR nationally and / or SABB Outside the LEA, while ensuring that Eir complies with its obligation of cost orientation. In addition, the pre-notification obligations for SB-WLR nationally and SABB Outside the LEA gives OAOs time to assess the likely impact of the changes in terms of their business case and also to notify its customers of a price change, where appropriate. It should be noted that similar pre-notification and pre-clearance obligations are currently in place in the context of current generation Bitstream and for NGA.

- 12.39 For the avoidance of doubt, approval means that ComReg is of the view (based on the information provided to it by Eir) that the notified national price for SB-WLR and / or the price for SABB price Outside the LEA does not appear to breach the obligations set out in any final decision. The granting of approval does not amount to a definitive finding by ComReg that the national SB-WLR product and/ or the SABB product Outside the LEA is compliant, or will remain compliant in the future, with the cost orientation obligations set out in this Decision. It should be noted that the granting of approval is strictly without prejudice to ComReg's right to take action (whether pursuant to this Decision and/or pursuant to any of its relevant statutory enforcement powers) in respect of any national SB-WLR product and / or SABB product Outside the LEA that it believes may be non-compliant with Eir's regulatory or competition law obligations. It is incumbent on Eir to ensure that the national SB-WLR product and /or the SABB product Outside the LEA remains compliant with this Decision at all times.
- 12.40 Having considered the submissions from respondents we remain of the view that there should be wholesale pre-notification obligations for price changes to the national SB-WLR price and the price for SABB Outside the LEA for reasons set out at paragraphs 12.39-12.39 above and for the reasons set out in Chapter 12, subsection 12.3 of the Consultation Document.

12.3.4 ComReg's Final Position:

Wholesale price notification timelines:

- 12.41 For SABB Outside the LEA, Eir should notify price increases in line with the WBA Pricing Decision⁶⁰¹.
- 12.42 For SB-WLR, Eir should make publically available on its wholesale website at least three (3) months in advance of any proposed amendments to the national SB-WLR price resulting from a price increase. Eir should notify ComReg at least one (1) month in advance of such publication – that is at least four (4) months before any increase to the national SB-WLR price would be expected to come into effect.

Notification procedures for revised prices and/or increased prices:

- 12.43 In the case of a new price or an increase to the national price of SB-WLR and / or the price for SABB Outside the LEA, the following notification and approval procedures should apply:
- 12.44 At notification, Eir should furnish to ComReg a detailed written submission demonstrating that the proposed new or increased charge(s) complies with the cost orientation obligation as specified in any final decision. The submission should make full and true disclosure of all material facts for the purpose of demonstrating that the proposed new or increased charge(s) comply with the relevant cost orientation obligations specified. Upon receipt of the submission, ComReg should review the submission and within one (1) month, communicate to Eir its decision whether to give or withhold approval to implement the proposed new or increased charge(s). Such approval should not be unreasonably withheld by ComReg. Eir should not implement any new or increased charge(s) for SB-WLR nationally and / or for SABB Outside the LEA without having received such approval from ComReg. Prior to the expiry of the one (1) month period, ComReg may seek further information from Eir to inform its decision as to whether approval to implement the new or increased charge(s) should be given or withheld. If such further information is not provided by Eir within ComReg's timeline or to the standard required by ComReg, approval to implement the proposed new or increased charge(s) may be withheld pending the required information being made available to ComReg for review and consideration. Upon receipt of the requested information, ComReg would proceed to make a decision as to whether approval for implementation of the new or increased charge(s) should be granted or withheld.

⁶⁰¹ Section 5.1 of the Decision Instrument contained in Chapter 11 of ComReg Decision D11/14.

12.4 “Regulatory Approval” mechanism to allow Eir reduce prices in certain geographic areas

12.4.1 Overview:

- 12.45 In Chapter 12 of the Consultation Document ComReg proposed that Eir should have the flexibility, subject to ComReg’s regulatory approval, to reduce the wholesale access price for SB-WLR nationally and for SABB Outside the LEA below the regulated price subject to a price floor which should be set by reference to the BU-LRAIC+ costs in the LEA.
- 12.46 ComReg considered that there may be circumstances where a price reduction below the regulated price at the wholesale level is deemed necessary to allow Eir Retail and the OAOs that use the relevant wholesale service as an input in their retail offerings to compete with the services provided over an alternative platform. Lower prices should also benefit the interests of end-users.
- 12.47 The “regulatory approval” mechanism would allow Eir to justify a proposed wholesale price reduction to SB-WLR nationally and /or SABB Outside the LEA on the basis of an ex-ante margin squeeze test. However, any price reduction by Eir would be subject to a price floor based on the BU-LRAIC+ costs of the LEA.
- 12.48 The objective of the price floor would prevent Eir from setting prices too low where they could foreclose economically efficient alternative investment by other operators either investing or planning to invest. Therefore, the price floor (based purely on BU-LRAIC+ costs) would prevent the risk that Eir could set wholesale access prices too low which could be detrimental to build/buy signals and investment in networks by other operators.
- 12.49 The margin squeeze test would have to demonstrate that Eir is unable to replicate the alternative platform operator’s price. Eir’s ability to reduce prices would be limited and would only arise subject to a retail price decrease from one of the alternative operators. In essence, Eir would have to demonstrate to ComReg, using a margin squeeze test, that the alternative platform operator’s retail price is non-replicable otherwise and that, in the absence of such a price reduction, the operators (including Eir Retail) that rely on the wholesale access service to provide their retail offers to end users would not be able to compete effectively in a specific area.
- 12.50 Please refer to the Consultation Document, Chapter 12, paragraphs 12.28 – 12.37 for further details on the Price Control Period.

12.4.2 Submissions to the Consultation Document:

- 12.51 There was general agreement among respondents regarding the regulatory approval mechanism where Eir should be allowed to reduce the wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price.
- 12.52 Eir agreed stating that “*The floor based on the BU-LRAIC+ within the LEA is considered to be the level above which eircom could set prices without risk of damaging the investment of a competing infrastructure provider operating an efficient network.*”⁶⁰²
- 12.53 BT agreed with ComReg but stated that “*...where prices are proposed to go below a regulated floor there should be significant advance transparency to the industry so that any concerns that ComReg are not aware can be communicated.*”⁶⁰³
- 12.54 ALTO also agreed with ComReg and made similar comments to that of BT.
- 12.55 While Vodafone agreed “*...in principle*”⁶⁰⁴ it questioned the use of the BU-LRAIC+ costing approach.

12.4.3 ComReg’s Position:

- 12.56 While the regulatory approval mechanism focuses on reductions to SB-WLR nationally and SABB Outside the LEA, for the avoidance of doubt the monthly LLU / SLU rental charges in Chapter 6 would not prevent Eir from charging lower LLU / SLU prices, when appropriate, provided that any proposed lower charges are subject to ComReg’s prior approval and that Eir is in compliance with its regulatory obligations and other laws. Please see paragraph 5.29 of this Decision Document.
- 12.57 There was general agreement from respondents that Eir should be allowed to reduce the wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price, subject to regulatory approval from ComReg.⁶⁰⁵
- 12.58 Further to BT’s concerns at paragraph 12.53 that where prices go below the floor that industry should be given significant advance notice, ComReg notes BT’s point on transparency.

⁶⁰² Eir Response to Consultation 15/67, page 40.

⁶⁰³ BT Response to Consultation 15/67, page 11.

⁶⁰⁴ Vodafone Response to Consultation 15/67, page 15.

⁶⁰⁵ Where Eir proposes to reduce prices for SB-WLR nationally and / or SABB Outside the LEA this may include a review of the costing assumptions for civil engineering infrastructure (ducts and poles) so as to justify the cost reductions in the overall cost stack for either SB-WLR and/or SABB Outside the LEA.

- 12.59 With regard to Vodafone's submission at paragraph 12.55 on the use of BU-LRAIC+ approach, ComReg would like to point out that the objective of the price floor is to prevent Eir from setting prices too low where they could foreclose economically efficient alternative investment by other operators either investing or planning to invest. Therefore, the price floor based purely on BU-LRAIC+ costs would prevent the risk that Eir could set wholesale access prices too low which could be detrimental to build/buy signals and investment in networks by other operators.
- 12.60 Having considered the submissions from respondents we remain of the view that Eir should have flexibility, subject to ComReg's approval, to reduce the SB-WLR national price and the SABB price Outside the LEA subject to a price floor based on the BU-LRAIC+ costs in the Modified LEA.

12.4.4 ComReg's Final Position:

- 12.61 Eir has flexibility, subject to ComReg's regulatory approval, to reduce the wholesale access price for SB-WLR nationally and for SABB Outside the LEA below the regulated price subject to a price floor which is set by reference to the BU-LRAIC+ costs in the Modified LEA.
- 12.62 Eir should demonstrate to ComReg, using a margin squeeze test that the alternative platform operator's retail price is non-replicable and in the absence of a price reduction, the operators (including Eir Retail) that rely on the wholesale access service to provide their retail offers to end users would not be able to compete effectively in a specific area.

12.5 SB-WLR promotions & discounts

12.5.1 Overview:

- 12.63 In Chapter 12 of the Consultation Document ComReg considered two approaches with regard to SB-WLR promotions and discounts, as follows:
- As ComReg has identified the cost oriented cost/price of new connections, there should be no future promotions and/or discounts available from Eir with respect to new connection costs; and
 - A network operator is best placed to manage customer numbers on its networks and there may be merit in allowing Eir Wholesale some latitude to offer promotional discounts in a non-discriminatory manner to Eir Retail and OAOs.

12.64 In the Consultation Document ComReg stated that it was interested in receiving submissions from interested parties regarding whether industry considered it appropriate for Eir to be able to offer promotions and discounts on new connection charges. In particular, ComReg welcomed the views of industry on whether the SB-WLR connection charge should be recovered in the monthly SB-WLR rental charge across all the WLR line base such that there would be zero upfront or additional charges for new connections.

12.5.2 Submissions to the Consultation Document:

12.65 Vodafone agreed with ComReg's proposal. In its letter of 2 December 2015, it stated that *"Given the recent and most relevant use of Discounts and Promotions by eir (in particular the removal of €3 per month per customer increase on SB-WLR lines) which has had a significant effect on Wholesale and Retail markets, it is now appropriate to restrict the use of promotions and discounts."*⁶⁰⁶ Vodafone added that *"This makes perfect logical sense with the incorporation of the €0.50 per month additional charge for connections into the revised SB-WLR PSTN charge."*⁶⁰⁷

12.66 Eir considered that *"Any ban on price promotions in a wholesale price control is entirely unwarranted..."*⁶⁰⁸ Furthermore, Eir *"...is concerned that ComReg's proposal would deny wholesale and retail customers the benefit of promotions and discounts without providing any competitive benefit given that eircom is already subject to competition law and a number of margin squeeze tests that protect the margins of LLU-based operators."*⁶⁰⁹ Eir also added that *"...there is huge demand for promotions and discounts among our wholesale customers to try to stimulate new access line growth and retention."*⁶¹⁰

12.67 Eir suggested that *"The correct form of price control for a large scale product such as SB-WLR is a multi-year control of the type CPI – x%...[which]...should cover all revenues from whichever price elements eircom chooses to deploy ..."*⁶¹¹

12.68 In subsequent correspondence between ComReg and Eir on 23 October 2015, regarding points of clarification on their response to the Consultation Document, we requested Eir to provide take-up of previous rental promotions for SB-WLR and also the details on how successful these promotions were at stimulating new demand on the network.

⁶⁰⁶ Vodafone letter of 2 December 2015, page 12, at Annex 8.

⁶⁰⁷ Vodafone letter of 2 December 2015, page 12, at Annex 8.

⁶⁰⁸ Eir Response to Consultation 15/67, page 40.

⁶⁰⁹ Eir Response to Consultation 15/67, page 40.

⁶¹⁰ Eir Response to Consultation 15/67, page 41.

⁶¹¹ Eir Response to Consultation 15/67, page 40.

- 12.69 In the Eir / CEG clarifications of 10 November 2015, Eir stated that “...we will continue to have a requirement to offer promotional pricing for connection services but that it is unlikely that we will seek to offer promotional discounts from standard recurring charges for standard wholesale access services.”⁶¹² Eir explained that connection / one-off fee promotions will continue to be “...an important part of the pricing approach for managing demand for network access products with business cases developed on the trade-off between connection costs incurred and revenues forgone early in the service life and rental volume increases due to enhanced take-up from customers sensitive to up-front charges.”⁶¹³
- 12.70 For the rental promotions for PSTN, LLU and Bitstream services where the monthly rental charges are discounted to zero for an introductory period, Eir stated that the “experience of these discounts has not been positive.”⁶¹⁴ Eir stated that “...many of these services were ceased soon after the normal level of service rental fell due” and were also the subject of “...negative feedback from several other operators.”⁶¹⁵
- 12.71 Sky stated that “The extent to which eircom runs or chooses not to run promotions on provisioning charges has proved to be a source of uncertainty for operators from a planning perspective...”⁶¹⁶ Furthermore, Sky added that “...the uncertainty from a business planning perspective caused by eircom’s flexibility with respect to line rental promotions (like the “€3 discount”) is exacerbated when connection charges are subject to the same flexibility.”⁶¹⁷ Sky also stated that “The approach proposed by ComReg of including the cost of provisioning in the monthly line rental charge ensures that eircom recovers its costs and provides greater certainty to OAOs by removing the ‘promotion’ led regime.”⁶¹⁸
- 12.72 BT considered that “...the cost of SB-WLR connections should be built into the SB-WLR rental as the long term nature of these discounts have conditioned the market to consider them price changes.”⁶¹⁹
- 12.73 While ALTO agreed with the concept of promotions and discounts, it considered that “...these should be short term in nature and more in line with the traditional approach to promotions.”⁶²⁰ ALTO further added that “...longer-term promotions should become price change and made permanent.”⁶²¹ ALTO raised concerns

⁶¹² Eir covering note “Additional information from meeting of 22nd October”, page 2, at Annex 8.

⁶¹³ Eir covering note “Additional information from meeting of 22nd October”, page 1, at Annex 8.

⁶¹⁴ Eir covering note “Additional information from meeting of 22nd October”, page 1, at Annex 8.

⁶¹⁵ Eir covering note “Additional information from meeting of 22nd October”, page 1, at Annex 8.

⁶¹⁶ Sky Response to Consultation 15/67, page 3.

⁶¹⁷ Sky Response to Consultation 15/67, page 3.

⁶¹⁸ Sky Response to Consultation 15/67, page 3.

⁶¹⁹ BT Response to Consultation 15/67, page 11.

⁶²⁰ ALTO Response to Consultation 15/67, page 17.

⁶²¹ ALTO Response to Consultation 15/67, page 17.

that “...promotions could be used to unfairly distort the market and this we consider they should be limited to a short period only so they do not unreasonably cause a market distortion.”⁶²² ALTO also suggested that “...promotions should be treated in the same way as price changes, i.e., subject to notification, declaration and MST.”⁶²³

12.5.3 ComReg’s Position:

- 12.74 Further to Eir’s concerns at paragraph 12.66 that any “ban” on promotions is entirely unwarranted and would deny wholesale and retail customers the benefit, ComReg does not agree. ComReg notes that the cost of SB-WLR PSTN connections are included in the rental charge (see paragraph 11.34) and therefore in order to ensure compliance with its cost orientation obligation it would be difficult to determine how offering discounts and promotions on connections would be compliant with same. As noted by Sky at paragraph 12.71 “*The approach proposed by ComReg of including the cost of provisioning in the monthly line rental charge ensures that eircom recovers its costs and provides greater certainty to OAOs by removing the ‘promotion’ led regime.*” With respect to discount and promotions to retail customers, subject to passing the margin squeeze test (see Chapter 10), Eir’s retail arm could continue to provide promotions and discounts.
- 12.75 With regard to Eir’s views at paragraph 12.67 that a large scale product such as SB-WLR should be based on a CPI-X approach, ComReg notes that a CPI-X approach may create a divergence between revenues and actual costs incurred as the prices over the control period are not set by reference to the actual costs from the model but rather based on costs adjusted by CPI. In addition, this approach is more difficult to implement as a price adjustment may be required at the end of the Price Control Period given over / under recovery of costs over the control period — prices are set by reference to costs adjusted by CPI rather than actual costs derived from the model. This may also create price instability / uncertainty for OAOs.
- 12.76 In response to ALTO’s views at paragraph 12.73 that the promotions should be short term in nature otherwise they should be permanent price points, ComReg considers that given the level of uncertainty generated by these promotions and given the views of other respondents it seems reasonable to include the cost of PSTN connections in the SB-WLR PSTN rental charge.

⁶²² ALTO Response to Consultation 15/67, page 17.

⁶²³ ALTO Response to Consultation 15/67, page 18.

12.77 Having considered the submissions from respondents we remain of the view that SB-WLR promotions should be discontinued and instead the connection costs should be recovered in the SB-WLR rental charges for the reasons set out in paragraphs 12.74-12.76 above and for the reasons set out in Chapter 12 of the Consultation Document.

12.5.4 ComReg's Final Position:

12.78 Discounts and promotions for SB-WLR should be discontinued and the provisioning / connection costs associated with SB-WLR should be recovered as part of the SB-WLR rental charge.

Chapter 13

13 Wholesale fixed access prices

13.1 In this chapter we summarise the prices for LLU, SLU, Line Share, SB-WLR, ISDN BRA, SABB Outside the LEA as well as the charges for pole access, duct access and dark fibre over the Price control Period and for the first two years beyond that for transparency purposes.

13.1.1 LLU and SLU prices:

13.2 Figure 17 and Figure 18 sets out the the monthly rentals for LLU and SLU, respectively, for the years covered by the Price Control Period i.e., 2016-2019 as well as the prices that could apply beyond the Price Control Period i.e., 2019/20 and 2020/21, in the event that a subsequent review is not completed by then.

13.3 In addition, Figure 17 sets out the current monthly fault repair charges and the monthly connection/provisioning charges for LLU, as per the ARO price list, for completeness.

13.4 The prices set out in Figure 17 and Figure 18 should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 17 (for LLU) and Figure 18 (SLU).

Figure 17: LLU monthly rental prices

Description	LLU - €
[1 July] 2016 – 30 June 2017	9.34
1 July 2017 – 30 June 2018	9.88
1 July 2018 – 30 June 2019	10.40
1 July 2019 – 30 June 2020	10.92
1 July 2020 – 30 June 2021	11.52
Monthly fault repair	0.96

Monthly connection provisioning	/	0.38
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Figure 18: SLU monthly rental prices

Description	SLU - €
[1 July] 2016 – 30 June 2017	5.41*
1 July 2017 – 30 June 2018	5.60*
1 July 2018 – 30 June 2019	5.77*
1 July 2019 – 30 June 2020	5.92*
1 July 2020 – 30 June 2021	6.12*

* Includes fault repair costs.

13.1.2 Maximum Line Share price:

- 13.5 Figure 19 sets out the maximum monthly rental charges for Line Share, for the years covered by the Price Control Period i.e., 2016-2019 as well as the maximum rental prices that could apply beyond the Price Control Period i.e., 2019/20 and 2020/21.
- 13.6 In addition, Figure 19 sets out the current monthly fault repair charges and the monthly connection/provisioning charges for Line Share, as per the ARO price list, for completeness.

Figure 19: Maximum monthly price for Line Share

Description	Line Share - €
[1 July] 2016 – 30 June 2017	0.77
1 July 2017 – 30 June 2018	0.77
1 July 2018 – 30 June 2019	0.77
1 July 2019 – 30 June 2020	0.77
1 July 2020 – 30 June 2021	0.77

Monthly fault repair	0.05
Monthly connection / provisioning	0.38

13.1.3 SB-WLR prices:

- 13.7 Figure 20 sets out the price for SB-WLR, including the SB-WLR rental, the SB-WLR fault repair costs and the SB-WLR connection / provisioning costs). The SB-WLR price relates to the years covered by the Price Control Period i.e., 2016-2019 as well as the monthly charges that should apply beyond the Price Control Period i.e., 2019/20 and 2020/21, in the event that a subsequent review is not completed by then.
- 13.8 The SB-WLR prices set out in Figure 20 should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 20.

Figure 20: SB-WLR monthly price

Description	€ National
[1 July] 2016 – 30 June 2017	15.91*
1 July 2017 – 30 June 2018	16.20*
1 July 2018 – 30 June 2019	16.41*
1 July 2019 – 30 June 2020	16.59*
1 July 2020 – 30 June 2021	16.82*

* Includes rental costs, fault repair costs and connection / provisioning costs

13.1.4 Maximum SABB prices Outside the LEA:

- 13.9 Figure 21 sets out the maximum monthly charges for current generation SABB Outside the LEA, which includes the rental costs, the fault costs and the SABB connection / provisioning costs. Please note that the monthly charge for SABB Outside the LEA does not include traffic / usage costs.

- 13.10 The maximum prices set out in Figure 21 should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 21.

Figure 21: Maximum monthly price for current generation SABB Outside the LEA

Description	€
[1 July] 2016 – 30 June 2017	21.68*
1 July 2017 – 30 June 2018	22.09*
1 July 2018 – 30 June 2019	22.45*
1 July 2019 – 30 June 2020	22.80*
1 July 2020 – 30 June 2021	23.15*

* Includes rental costs, fault repair costs and connection / provisioning costs

13.1.5 Maximum pole access prices

- 13.11 The maximum annual prices for pole access is set out in Figures 22, which should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 22.

Figure 22: Maximum annual price per pole per annum

Maximum price per pole*	Modified LEA €	Outside the Modified LEA €
[1 July] 2016 – 30 June 2017	23.15	19.18
1 July 2017 – 30 June 2018	24.30	20.00
1 July 2018 – 30 June 2019	25.46	20.84
1 July 2019 – 30 June 2020	26.63	21.68
1 July 2020 – 30 June 2021	27.79	22.50

*This is subject to the number of operators (incl. Eir itself) present on the pole

13.1.6 Maximum duct access prices:

13.12 The maximum annual prices for duct access is set out in Figures 23 and Figure 24, which should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 23 and Figure 24.

Figure 23: Maximum duct access price per metre per annum – Dublin:

Description	€ Carriageway	€ Footway	€ Verge
[1 July] 2016 – 30 June 2017	2.57	1.96	1.16
1 July 2017 – 30 June 2018	2.64	2.00	1.18
1 July 2018 – 30 June 2019	2.71	2.04	1.20
1 July 2019 – 30 June 2020	2.76	2.08	1.21
1 July 2020 – 30 June 2021	2.84	2.12	1.22

Figure 24: Maximum duct access price per metre per annum – Provincial:

Description	€ Carriageway	€ Footway	€ Verge
[1 July] 2016 – 30 June 2017	1.80	1.39	0.97
1 July 2017 – 30 June 2018	1.82	1.40	0.97
1 July 2018 – 30 June 2019	1.86	1.43	0.98
1 July 2019 – 30 June 2020	1.88	1.44	0.98
1 July 2020 – 30 June 2021	1.92	1.45	1.00

13.1.7 Maximum dark fibre prices:

13.13 The maximum annual prices for dark fibre is set out in Figures 25, which should be implemented from [1 July] 2016 and should be subsequently revised each year on 1 July during the Price Control Period in line with the prices from the Revised CAM which are set out in Figure 25.

Figure 25: Maximum dark fibre price per metre per annum (for 1 single fibre):

Description	Dublin - €	Provincial - €
[1 July] 2016 – 30 June 2017	0.24	0.13
1 July 2017 – 30 June 2018	0.25	0.13
1 July 2018 – 30 June 2019	0.26	0.14
1 July 2019 – 30 June 2020	0.27	0.14
1 July 2020 – 30 June 2021	0.28	0.15

Chapter 14

14 Regulatory Impact Assessment (“RIA”)

14.1 Overview

- 14.1 A Regulatory Impact Assessment (“RIA”) is an analysis of the likely effect of new regulation or regulatory change. The RIA should help identify regulatory options, and should establish whether the proposed regulation is likely to have the desired impact. The RIA is a structured approach to the development of policy, and analyses the impact of regulatory options on various stakeholders.
- 14.2 ComReg’s approach to the RIA is set out in the Guidelines published in August 2007 in ComReg document No. 07/56 and 07/56a. In conducting the RIA, ComReg takes into account the RIA Guidelines⁶²⁴, issued by the Department of An Taoiseach in June 2009 under the Government’s Better Regulation programme. Section 13(1) of the Communications Regulation Act 2002 (as amended), requires ComReg to comply with Ministerial Policy Directions. The Policy Direction of February 2003⁶²⁵ requires that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and International best practice and otherwise in accordance with measures that may be adapted under the Government’s “Better Regulation” programme.
- 14.3 In conducting the RIA, ComReg has regard to the RIA Guidelines, while recognising that regulation by way of issuing decisions e.g. imposing obligations or specifying requirements in addition to promulgating secondary legislation may be different to regulation exclusively by way of enacting primary or secondary legislation. Our ultimate aim in conducting a RIA is to ensure that all measures are appropriate, proportionate and justified. To ensure that a RIA is proportionate and does not become overly burdensome, a common sense approach will be taken towards a RIA.
- 14.4 In the context of this Decision Document ComReg considers that where no material changes are required to the underlying price control obligation then a RIA is not required. This is relevant in relation to the following wholesale access services where we will continue with the cost orientation obligation:

⁶²⁴ See “RIA Guidelines: How to conduct a Regulatory Impact Analysis”, October 2005 and revised in 2009 - see www.betterregulation.ie

⁶²⁵ Ministerial Policy Direction made by the Minister for Communications, Marine and Natural Resources on 21 February 2003.

- LLU monthly rental;
- SLU monthly rental;
- Line Share monthly rental;
- CEI rental charges
- Dark fibre rental charges.

14.5 However, where we are changing the underlying price control obligation and / or further specifying an obligation for the first time we consider that a RIA is necessary. This is relevant in relation to the following wholesale access services:

- For SB-WLR we amending the price control from the current retail minus price control to a cost orientation control;
- For SABB Outside the LEA we are further specifying the cost orientation obligation which was set out in the WBA Pricing Decision.

14.6 In addition, to the above we are also further specifying the margin squeeze obligation contained in the FACO market (Market 2), including a retail margin squeeze test between retail line rental and SB-WLR and in addition a wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs). We refer to these two tests as the '**margin squeeze tests**' throughout this Chapter 14. We consider that the margin squeeze tests also require assessment as part of the RIA.

14.2 Steps for assessing regulatory options

14.7 In assessing the available regulatory options, ComReg's approach to the RIA is based on the following five steps:

Step 1: describe the policy issue and identify the objectives

Step 2: identify and describe the regulatory options

Step 3: determine the likely impacts on stakeholders

Step 4: determine the likely impacts on competition

Step 5: assess the likely impacts and choose the best option

14.8 Each step is discussed in detail below.

14.3 Step 1: Describe the policy issue and identify the objectives

- 14.9 An important consideration in this RIA is the withdrawal of the retail minus price control and the imposition of the cost orientation obligation for SB-WLR in the FACO market. In addition, this Decision Document further specifies the cost orientation obligation for SABB Outside the LEA in the WBA market. ComReg has also further specified the margin squeeze obligation in the FACO market (Market 2) for SB-WLR as well as POTS based VUA.
- 14.10 In the Modified LEA one of the key regulatory objectives of ComReg is to maximise viable infrastructure investment and to send appropriate 'build or buy' signals to help inform efficient investment decisions and encourage OAOs to climb the investment ladder. This objective is addressed in Chapter 4 of this Decision Document and more specifically in Chapter 6 with regard to the pricing approach for LLU and SB-WLR.
- 14.11 Outside the LEA and given the absence of competing infrastructure, the key regulatory objective is to prevent Eir from over / under recovering its actual efficient costs plus a rate of return (which is based on the fixed line telecoms WACC of 8.18%). This is particularly important in the context of SABB where the SABB price Outside the LEA is based on no more than Eir's Actual Costs Adjusted for Efficiencies for the area Outside the LEA with active equipment based on BU-LRAIC+ costs. This is discussed at Chapter 7 of this Decision Document.
- 14.12 In choosing remedies we have taken account of Section 12 of the Communications Regulation Act, Regulation 6(1) of the Access Regulations⁶²⁶, Regulation 8(6) of the Access Regulations, Regulation 13 of the Access Regulations and Regulation 16 of the Framework Regulations⁶²⁷. Set out below is a discussion on how each of the relevant objectives from the Access and Framework Regulations and the Communications Regulations Act are addressed in the context of the pricing approach set out in this Decision Document.

14.3.1 Section 12 of the Communications Regulations Act

- 14.13 Our objectives as set out in Section 12 of the Communications Regulations Act (as amended) aims to:

⁶²⁶ S.I. No 334 of 2011 European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011.

⁶²⁷ S.I. No 333 of 2011 European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011.

- (i) Promote competition and in particular to encourage efficient investment in infrastructure and promoting innovation;*
- (ii) Contribute to the development of the internal market;*
- (iii) Promote the interests of users within the Community and in particular to encourage access to the internet at a reasonable cost to end-users.*

Promote Competition

- 14.14 With respect to the competition objective, we must consider the trade-off between promotion of competition in the short term, in the medium term and in the long term. While infrastructure-based competition, when each competitor constructs its own local loop, provides the OAOs with more freedom it requires significant investment to duplicate infrastructures in their entirety, thus this option will rarely be chosen by OAOs in the short to medium term. Service-based competition, when OAOs use different access services, is more likely to develop in the short and medium term. In order to promote competition in the short to medium term, ComReg should ensure that the difference between wholesale access prices and retail prices is not so small that it could create a margin squeeze. On the other hand the access price should not be set too low as it may deter investments in the long term.
- 14.15 If the price for Bitstream or SB-WLR is set too low compared to LLU, OAOs will not upgrade their network to reach those exchanges that benefit from LLU which is consistent with the ladder of investment principle. If the price for LLU/ SLU/ VUA is set too low OAOs may not have sufficient incentives to invest in NGA networks. Therefore, in choosing the appropriate pricing approach for SB-WLR nationally and for SABB Outside the LEA it is important to balance these objectives.
- 14.16 For SB-WLR, the price should be based on the higher of:
- (i) Eir's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally with active equipment (line card) based on the BU-LRAIC+ methodology; or
 - (ii) the costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets.
- 14.17 ComReg considers that this approach maintains the correct build-or-buy signals in the Modified LEA (where there is varying prospective competitive conditions) and it ensures that Eir does not under-recover its actual efficiently incurred costs (plus a reasonable rate of return) nationally for SB-WLR. Please see Chapter 6.
- 14.18 For SABB Outside the LEA, the price should be set with reference to Eir's Actual Costs Adjusted for Efficiencies (with active equipment based on BU-LRAIC+

costs). This approach allows Eir to recover its efficiently incurred costs and sets a wholesale price which relative to the combined price of SB-WLR and BMB would make commercial sense for OAOs to make available to end-users. In addition, without regulation, the prospects for increased competition in current generation Bitstream SABB Outside the LEA are limited, and therefore the impact on competition is minimal. The pricing approach Outside the LEA should protect end-users from excessive pricing. Please see Chapter 7.

- 14.19 The retail margin squeeze test for retail line rental should protect operators that rely on SB-WLR. ComReg considers that competition is protected by ensuring that operators have a sufficient economic space between retail line rental and wholesale line rental so that they can compete with Eir and still make a margin. Similarly, the wholesale margin squeeze test for POTS based VUA should ensure sufficient economic space between the price for POTS based VUA and the price for standalone NGA Bitstream / VUA plus a contribution towards the cost of Managed VoB so that an OAO is encouraged to invest in their own Managed VoB platform either currently or prospectively. Please see Chapter 10.

Encourage efficient investment in infrastructure and promoting innovation

- 14.20 Access prices should be set in such way that OAOs are able to make an efficient decision on whether to build their own network or alternatively to use / rent the access service(s). Similarly, they should make an efficient decision on which service to use.
- 14.21 The priority between short-term and long-term investments may vary depending on the specific conditions of each wholesale product and geographical area.
- 14.22 In the Modified LEA there is infrastructure-based competition (mainly from UPC but potentially from SIRO (Vodafone/ESB) in the future) as well as competition relying on LLU and Line Share services. There is also some service-based competition based solely on Eir's copper local loop i.e., WBA and SB-WLR. Outside the Modified LEA, infrastructure based competition and competition relying on LLU, Line Share and SLU are unlikely absent state funding. In areas where no infrastructure based competition is likely and where service based competition relying on SB-WLR and WBA is present, there is no need to send a correct build or buy signals – cost recovery by the Incumbent in this area is more important than the costs that would be faced by a new entrant. On the other hand where infrastructure based competition has developed or is likely to develop sending the correct build or buy signal is important while also ensuring that the Incumbent does not under recover its efficient costs plus a reasonable rate of return.
- 14.23 For OAOs, visibility and certainty regarding future wholesale access prices is important so that operators can progress their investment plans. For the

Incumbent it is necessary to ensure that it recovers at least its efficiently incurred costs plus a reasonable rate of return through the wholesale access prices otherwise there is a risk that the Incumbent could stop maintaining its copper network.

- 14.24 As set out in Chapter 6, the pricing approach for SB-WLR allows Eir to recover the higher of its actual efficient costs plus a reasonable rate of return for the provision of SB-WLR nationally with active equipment (line card) costs based on the BU-LRAIC+ methodology or the costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets.
- 14.25 If the SB-WLR national price based on Eir's Actual Costs Adjusted for Efficiencies nationally (with active equipment based on BU-LRAIC+ costs) is the higher price then this price should allow Eir to recover any money invested in maintaining or upgrading its network on that basis that Eir will have the assurance that what it spends can be recouped over the Price Control Period. Therefore, Eir's investment incentives are unlikely to be affected. The BU-LRAIC+ approach for active equipment should ensure that Eir are incentivised to continue to invest and upgrade its network in an efficient manner. In addition, the cost orientation price control for SB-WLR should lead to reasonable price stability for other operators' investment plans. In addition, this approach maintains the correct build-buy signals in the Modified LEA for OAOs.
- 14.26 If the SB-WLR national price based on the BU-LRAIC+ for Non-reusable Assets and active equipment and Eir's Indexed RAB for Reusable assets inside the Modified LEA is the higher price then the appropriate build or buy signals are provided in terms of investment in the Modified LEA.
- 14.27 For SABB Outside the LEA, the use of Eir's Actual Costs Adjusted for Efficiencies (with active equipment based on BU-LRAIC+ costs) means that Eir should recover any money invested in maintaining or upgrading its network on that basis that Eir will have the assurance that what it spends can be recouped over the Price Control Period. The BU-LRAIC+ approach for active equipment should ensure that Eir is incentivised to continue to invest and upgrade its network in an efficient manner. The build or buy signal is not appropriate with regard to the area Outside the LEA as discussed in paragraph 14.31 and Chapter 7.
- 14.28 The retail margin squeeze test for retail line rental (at Chapter 10) should protect operators that rely on SB-WLR and ensure that they can compete with Eir and still make a margin. The wholesale margin squeeze test for POTS based VUA should encourage OAOs to invest in their own Managed VoB platform either currently or prospectively.

Contribute to the development of the internal market

- 14.29 In this Decision Document we have taken utmost account of the 2013 Recommendation issued by the European Commission.
- 14.30 While the 2013 Recommendation is not specifically relevant to Market 2 (SB-WLR) ComReg considers that the objectives of the 2013 Recommendation are equally important in the context of SB-WLR i.e., cost recovery and appropriate build or buy signals. In addition, for all access services provided across the access network there should be regulatory consistency regarding the choice of costing methodology applied. Consequently, ComReg assessed the various pricing options for SB-WLR using the 2013 Recommendation. Please refer to Chapter 6.
- 14.31 For SABB Outside the LEA, ComReg considers that the objective is not to stimulate alternative operator investment where it is clear no commercial operator might invest, therefore the need for build-or-buy signals are less relevant in this area. Instead Eir's Actual Costs Adjusted for Efficiencies (combined with the BU-LRAIC+ costs for active equipment) associated with the provision of SABB Outside the LEA ensures that there is no over or under recovery of costs by Eir. This approach is consistent with the WBA Pricing Decision. Please refer to Chapter 7 for discussion on the reasons for divergence from the 2013 Recommendation.
- 14.32 Further to Regulations 13 and 14 of the Framework Regulations, the draft measures have been made accessible to the Commission, the Body of European Regulators for Electronic Communications ("**BEREC**") as well as other national regulatory authorities ("**NRAs**") in other EU Member States.
- 14.33 We have considered the responses received to our consultation in making our final decision.

Promote the interests of users within the Community

- 14.34 A cost orientation price control for SB-WLR nationally and for SABB Outside the LEA should help to facilitate greater regulatory certainty for longer-term competitive entry and expansion. This should have positive implications for the price, choice and quality of services ultimately delivered to end-users.

Encourage access to the internet at a reasonable cost to end users

- 14.35 ComReg is required to take all reasonable measures to encourage access to the internet at reasonable cost to users. The cost orientation obligation for SB-WLR ensures that Eir's level of recovery of costs is restricted to the higher of Eir's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally with active equipment (line card) costs based on the BU-LRAIC+ methodology or the

costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets. This should ensure that the price for SB-WLR nationally, when coupled with the price for Line Share is reasonable.

- 14.36 For SABB Outside the LEA, Eir's recovery of costs is restricted to no more than Eir's Actual Costs Adjusted for Efficiencies (with active equipment based on BU-LRAIC+ costs) for the provision of SABB Outside the LEA. This should ensure that end-users are prevented from excessive pricing Outside the LEA.

14.3.2 Regulation 6(1) of the Access Regulations

- 14.37 Regulation 6(1) of the Access Regulations provides that the Regulator shall acting in pursuit of its objectives set out in Section 12 of the Act of 2002 and Regulation 16 of the Framework Regulations, encourage and, where appropriate, ensure adequate access, interconnection and the interoperability of services in such a way as to:

- a) Promote efficiency;
- b) Promote sustainable competition;
- c) Promote efficient investment and innovation; and
- d) Give the maximum benefit to end-users.

- 14.38 Please refer to paragraphs 14.63-14.65 for discussion on promoting efficiency.

- 14.39 Please refer to paragraphs 14.14-14.19 for discussion on promoting competition.

- 14.40 Please refer to paragraphs 14.20-14.28 for discussion on investment and innovation.

- 14.41 Please refer to paragraphs 14.34-14.36 regarding the benefits to end-users.

14.3.3 Regulation 8(6) of the Access Regulations

- 14.42 Regulation 8(6) of the Access Regulations provides that:

Any obligations imposed in accordance with this regulation shall –

- (a) Be based on the nature of the problem identified,*
- (b) Be proportionate and justified in light of the objectives laid down in section 12 of the 2002 Act and Regulation 16 of the Framework Regulations, and*
- (c) Only be imposed following consultation in accordance with Regulation 12 and 13 of the Framework Regulations.*

Based on the nature of the problem identified:

- 14.43 In the WPNIA Market Decision ComReg identified the competition problems associated with the WPNIA market. The competition problems identified by ComReg as part of the WPNIA market review included exploiting customers by virtue of its SMP position e.g. excessive pricing, leveraging its market power into adjacent vertically or horizontally related markets and foreclosing or excluding competitors such as to protect its existing dominance on the market or markets in question. Please refer to Chapter 5 of the WPNIA Market Decision for further details.
- 14.44 In the WBA Market Decision ComReg identified the competition problems associated with the WBA market. ComReg considered that Eir would have the ability and incentive to set excessive prices in Market 5 which would exploit retail broadband users and potentially harm competition from OAOs relying on Eir's WBA inputs. In addition, ComReg identified scope and incentive for the SMP operator to engage in possible price-related leveraging through pricing its upstream and downstream services in such a way as to give rise to an insufficient wholesale/retail margin which would impede effective downstream competition. Please see Chapter 6 of the WBA Market Decision.
- 14.45 In the FACO Decision ComReg identified the competition problems associated with the FACO market. The problems identified included price related behaviours by way of excessive pricing and margin squeeze. Please see Chapter 8 of the FACO Decision.

Proportionate and justified

- 14.46 ComReg considers that the pricing approach for SB-WLR and for SABB Outside the LEA is justified based on the detail, reasoning and information provided in this Decision Document. Please refer to Chapter 4 (subsection 4.3) for justification of the cost orientation obligation for SB-WLR and to Chapter 6 (subsection 6.4) for justification of the pricing approach for SB-WLR. In addition, please refer to Chapter 7 for justification of the pricing approach for SABB Outside the LEA.
- 14.47 ComReg considers that the pricing approach for SB-WLR nationally and for SABB Outside the LEA as set out in this Decision Document is proportionate and justified.
- 14.48 This Decision Document should provide transparency to the industry insofar as Eir can recover the higher of its actual efficient costs plus a reasonable rate of return for the provision of SB-WLR nationally with active equipment (line card) costs based on the BU-LRAIC+ methodology or the costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and

active equipment (line card) and Eir's Indexed RAB for Reusable Assets. ComReg considers that this approach is proportionate and justified as it maintains the correct build-or-buy signals in the Modified LEA (where it is most relevant) and ensures that Eir does not under-recover its actual efficiently incurred costs (plus a reasonable rate of return) nationally for SB-WLR.

- 14.49 For SABB Outside the LEA, ComReg considers that a price which is reflective of Eir's Actual Costs Adjusted for Efficiencies for the provision of SABB Outside the LEA with active equipment costs based on the BU-LRAIC+ methodology should protect those operators, and ultimately end-users in more rural areas from excessive prices where they decide to purchase a broadband only service from Eir.
- 14.50 In addition, this Decision Document should provide reasonable price certainty and predictability to operators in Market 5 with regard to SABB prices Outside the LEA and also in Market 2 with regard to the monthly rental for SB-WLR. In particular, Eir must notify ComReg before it increases or introduces a new national price for SB-WLR in Market 2 and / or for SABB Outside the LEA in Market 5. As part of the notification procedure, Eir should demonstrate that the new or increased price complies with the specified cost orientation obligation. This allows ComReg sufficient time to understand the proposed price changes for SB-WLR nationally and / or for SABB Outside the LEA and to ensure that the revised / new prices are in line with Eir's pricing obligations. It also allows OAOs to assess the likely impact of the changes in terms of their business case and to allow the OAOs time to notify its customers of a price change, where appropriate.
- 14.51 The retail margin squeeze test for SB-WLR is proportionate and justified given that ComReg is concerned that even if the cost oriented SB-WLR national price would prevent Eir from increasing its wholesale charge it can, by reducing the retail price, reduce the retail margin available to OAOs such that an OAO cannot replicate Eir's retail prices either on a standalone basis or in a bundle. Eir's retail line rental price is subject to a price cap which means that Eir has flexibility to price below this price cap should it wish to do so. Please refer to Chapter 10 for further details.
- 14.52 The wholesale margin squeeze test for POTS based on VUA is to ensure that Eir's price for standalone VUA / NGA Bitstream cannot go so high that it would disincentivise investment in VoB currently or prospectively. ComReg considers that this test is proportionate and justified on the basis that the SB-WLR rental and the port price combined must respect the economic space / margin determined by the wholesale margin squeeze test such that an OAO can invest in Managed VoB and still make a margin.

Only be imposed following consultation

- 14.53 ComReg has considered all responses received to this Decision Document and, based upon those responses it has in some cases amended some of its views in making its final decision.

14.3.4 Regulation 13 of the Access Regulations

- 14.54 According to Regulation 13(1) of the Access Regulations, ComReg may:

impose on an operator obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of access or interconnection in situations where a market analysis indicates that a lack of effective competition means that the operator concerned may sustain prices at an excessively high level or may apply a price squeeze to the detriment of end users.

- 14.55 The requirements set out in Regulation 13(1) of the Access Regulations have been discussed in the context of SB-WLR in Chapter 4 (subsection 4.2). For SABB Outside the LEA, the requirements under Regulation 13(1) of the Access Regulations were discussed in the WBA Pricing Decision. The requirements set out in Regulation 13(1) of the Access Regulations with regard to the retail margin squeeze obligation for retail line rental and the wholesale margin squeeze test for POTS based VUA are discussed in the competition concerns set out in Chapter 10 (subsection 10.2.2 and 10.3.2) of the Consultation Document.

- 14.56 Regulation 13(2) of the Access Regulations provides that:

To encourage investments by the operator, including in next generation networks, the Regulator shall, when considering the imposition of obligations under paragraph (1), take into account the investment made by the operator which the Regulator considers relevant and allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project.

- 14.57 As set out in Chapter 6 (subsection 6.4) in the context of SB-WLR, the pricing approach should allow Eir to recover the higher of its actual efficient costs plus a reasonable rate of return for the provision of SB-WLR nationally with active equipment (line card) based on the BU-LRAIC+ costs or the costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets. Reference to Eir's Actual Costs Adjusted for Efficiencies should allow Eir to recover any money invested in maintaining or upgrading its network nationally on the basis that Eir will have the assurance that what it spends can be recouped

over the Price Control Period. If the SB-WLR price is higher by reference to the Modified LEA costs (based on BU-LRAIC+ and Eir's Indexed RAB costs) then Eir can recover the higher replacement costs by virtue of the BU-LRAIC+ costs associated with Non-reusable Assets and Eir's Indexed RAB associated with Reusable Assets for SB-WLR in the Modified LEA.

14.58 For SABB Outside the LEA the reference to Eir's Actual Costs Adjusted for Efficiencies should ensure that Eir recovers any money invested in maintaining or upgrading its network on the basis that what it spends can be recouped over the Price Control Period. The main objective in setting the price for SABB Outside the LEA is not to stimulate investment where it is clear no commercial operator might invest but to ensure Eir do not materially over or under recover its actual efficient costs (including a reasonable rate of return).

14.59 The retail margin squeeze test for line rental is based on EEO costs. This is discussed in Chapter 10 (subsection 10.2.4) of the Consultation Document. The EEO costs are consistent with a cost orientation obligation as they ensure cost recovery for Eir i.e., EEO costs are based on Eir's Actual Costs Adjusted for Efficiencies. The fixed line telecoms WACC of 8.18% is also applied to the costs which should allow for a reasonable rate of return in line with Regulation 13(2) of the Access Regulations.

14.60 The notification procedure for SB-WLR nationally and for SABB Outside the LEA ensures that any proposed changes by Eir to the SB-WLR national price and / or the SABB price Outside the LEA are consistent with the specified cost orientation obligation and more generally with the requirements of Regulation 13(2) of the Access Regulations.

14.61 Regulation 13(3) of the Access Regulations provides that:

The Regulator shall ensure that any cost recovery mechanism or pricing methodology that ComReg imposes under this Regulation serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard, the Regulator may also take account of prices available in comparable competitive markets.

14.62 Each of these objectives are discussed below.

Promote efficiency

14.63 A cost oriented price control aims to ensure that prices do not exceed an appropriate level of efficient costs where there is a risk that competitive pressure alone would not achieve this outcome.

14.64 There are three forms of efficiency including:

- Allocative Efficiency: Where prices of different products results in an optimum allocation of resources to end-users;
- Productive Efficiency: Where the cost of producing the products is minimised;
- Dynamic Efficiency: This refers to the efficiency of investor and customer behaviour over time.

14.65 ComReg believes that any price control imposed needs to strike a balance between these three forms of efficiency. Allocative and productive efficiency are essentially static concepts taking into account the level of costs to deliver products at a particular point in time. In terms of productive efficiency, ComReg believes that the sequential nature of investment decisions, when assessing whether the level of costs reported is efficiently incurred, needs to be considered in the price control. This has been reflected in Chapter 5 (cost modelling approach) where ComReg has incorporated efficiency adjustments to Eir's Actual Costs Adjusted for Efficiencies for SB-WLR nationally and for SABB Outside the LEA. The BU-LRAIC+ approach adopted in the context of active equipment for SB-WLR and SABB already assumes a level of efficiency (as it assumes a brand new network) therefore no further adjustments are required in the context of active equipment costs.

Promote sustainable competition

14.66 Please refer to paragraphs 14.14 to 14.19.

Maximise consumer benefits

14.67 Please refer to paragraphs 14.34 to 14.36.

14.68 Regulation 13(4) of the Access Regulations provides that:

“Where an operator has an obligation under this Regulation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs, including a reasonable rate of return on investment shall lie with the operator concerned.....”

14.69 In the event that Eir proposes to increase or introduce a new price for SB-WLR nationally and / or SABB Outside the LEA, it must demonstrate to ComReg that the new price or the increased price complies with the specified cost orientation obligation. This ensures that the onus lies with Eir that its prices for SB-WLR nationally and for SABB Outside the LEA are set by reference to efficient costs, consistent with Regulation 13(4) of the Access Regulations

14.3.5 Regulation 16 of the Framework Regulations

14.70 While some of the main requirements / objectives of Regulation 16 of the Framework Regulations are addressed above as part of the discussion on Regulation 8 of the Access Regulations, Section 12 of the Communications Regulation Act and / or Regulation 13 of the Access Regulations, set out below is some other key requirements associated with Regulation 16 which have not been addressed so far as part of the discussions above.

Promoting regulatory predictability by ensuring a consistent approach over appropriate review periods:

14.71 The cost orientation obligation for SB-WLR should ensure that all Wholesale Access Services are priced consistently (based on cost orientation) across Eir's wholesale access network. This is discussed in Chapter 4 (subsection 4.2) of the Consultation Document.

14.72 For SABB Outside the LEA, the pricing approach is consistent with the recent WBA Pricing Decision with regard to the use of Eir's Actual Costs Adjusted for Efficiencies for setting current generation Bitstream prices.

14.73 The margin squeeze tests are consistent with similar tests imposed on Eir in the context of NGA and current generation Bitstream.

Taking due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State:

14.74 As set out in detail in Chapter 6 of the Consultation Document, we recognise that there may be varying structural and competitive conditions prospectively between the LEA (urban areas) and Outside the LEA (rural areas).

- 14.75 While ComReg considers that for the purposes of this Decision the LEA footprint should be the fixed / locked-in during the Price Control Period in order to provide certainty and price stability to operators in terms of infrastructure investment over the next few years, we have given further consideration to the appropriate footprint for build/buy signals. For the purposes of this Decision, we have also decided to exclude qualifying exchanges based on Criterion 5 from the LEA footprint, as defined in the Bundles Decision and in the WBA Pricing Decision, which we have termed the 'Modified LEA'. See also paragraph 1.9. The Bundles Decision identified Criterion 5 exchanges as exceptional exchanges which either: (a) is surrounded by a qualifying exchange; or (b) serves fewer than 500 residential premises and is located either adjacent to or in reasonable proximity to qualifying exchanges; or (c) is determined to the satisfaction of ComReg to have an economic affinity with adjacent qualifying exchanges. In the Bundles Decision we considered that the LEA may create 'islands' or 'pockets' of exchanges that do not meet any of the primary criteria (i.e., criteria 1-4) but are surrounded by exchanges and neighbouring communities that do. In the Bundles Decision, ComReg considered that to exclude such exchanges would be inconsistent with commercial dynamic outcomes of competitive markets where the same bundle / offering would not be available on equal terms in neighbouring exchanges. However, in the context of this Decision and setting appropriate price signals for wholesale fixed access services such as LLU, the same objectives are not relevant — in that we are not trying to encourage infrastructure-based competition in those specific types of exchanges covered by Criterion 5. See also paragraph 6.40.
- 14.76 Our pricing approach for SB-WLR allows Eir to recover the higher of its actual efficient costs plus a reasonable rate of return for the provision of SB-WLR nationally with active equipment (line card) based on the BU-LRAIC+ costs or the costs for SB-WLR in the Modified LEA implementing a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets. We consider that this ensures that the appropriate investment signal is provided in the relevant area (in the Modified LEA) while the approach also ensures that Eir recovers its efficient costs plus a reasonable rate of return for SB-WLR nationally. Please refer to Chapter 6 for a further discussion on the pricing options for SB-WLR.
- 14.77 For SABB Outside the LEA we recognise that the appropriate investment signals (of build or buy) are not relevant in this area (absent state funding) and therefore the objective of cost recovery is important. The SABB price Outside the LEA should be set by reference to Eir's Actual Costs Adjusted for Efficiencies (with active equipment based on BU-LRAIC+ costs) for the provision of SABB Outside the LEA.

14.78 Regulation 16(2) of the Framework Regulations requires that ComReg applies objective, transparent, non-discriminatory and proportionate regulatory principles. The obligations contained in the Decision Document are:

- objectively justifiable, in that the obligations facilitate and encourage fair, reasonable and timely access to Eir's network and therefore promotes competition to the benefit of end users;
- not unduly discriminatory, in that Eir has been found to have SMP in the relevant markets;
- proportionate, in that the proposed obligations are targeted at addressing the market power that Eir holds in the relevant markets and allows Eir to recover its efficient costs (including a reasonable rate of return); and
- transparent, in that the obligations set out in this Draft Decision are clear with regard to the pricing approach for SB-WLR nationally and for SABB Outside the LEA as well as the imposition of the margin squeeze tests.

14.4 Step 2: Identify and describe the regulatory options

14.79 The regulatory options considered in the context of setting the SB-WLR price, the price for SABB Outside the LEA and for the margin squeeze tests were as follows:

- Options on the form of price control for SB-WLR;
- Options for determining appropriate costing methodology for SB-WLR nationally and for SABB Outside the LEA;
- Options for determining the appropriate geographic scope for SB-WLR; and
- Options for determining the appropriate principles for the retail margin squeeze test;
- Options for determining the hypothetical investment in the Managed VoB platform; and
- Options for notifying retail price changes for retail line rental.

14.4.1 Options on the form of price control for SB-WLR

14.80 ComReg may in accordance with Regulation 13(1) of the Access Regulations impose obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost

accounting systems, for the provision of specific types of access or interconnection.

14.81 The main forms of price control that were considered by ComReg in Chapter 4 of the Consultation Document were:

- Regulatory forbearance;
- Benchmarking;
- Retail minus;
- Margin squeeze test; and
- Cost orientation.

14.82 Please refer to Chapter 4 (subsection 4.1) of the Consultation Document for a detailed discussion on each of the various forms of price control listed above. In the context of the RIA we focus on the retail minus option and the cost orientation option for SB-WLR.

14.4.2 Options for determining appropriate costing methodology

14.83 The following two options were considered in terms of the appropriate costing methodology for SB-WLR nationally and for SABB Outside the LEA:

- BU-LRAIC+ or
- Eir's Actual Costs Adjusted for Efficiencies.

14.84 Please refer to Chapter 4 (subsection 4.3) of the Consultation Document for a detailed discussion on the costing methodology options considered.

14.4.3 Options for determining the appropriate geographic scope for SB-WLR

14.85 For SB-WLR, it is important to achieve an appropriate balance between setting the necessary build / buy signals in the relevant areas (Modified LEA) while at the same time ensuring that Eir does not over / under recover its actual efficient costs nationally. If the access price is too high in areas where infrastructure investment is also unlikely to develop (as the deployment cost for each line is high i.e., in rural areas), this would not be desirable due to the detrimental long-term impact on consumers arising from a lack of competition, as competition from operators acting as resellers may also be dampened. On the other hand the access price should not be too low, especially in the Modified LEA, as it could deter investments in the long term in infrastructure-based competition. Therefore,

consideration of the derived SB-WLR prices from each pricing option is important with regard to determining the appropriate pricing approach for SB-WLR.

14.86 In Chapter 6 (subsection 6.6) of the Consultation Document we considered the following options:

- National price based on national costs i.e., Eir's Indexed RAB for Reusable Assets and BU-LRAIC+ costs for Non-reusable Assets and active equipment;
- Prices based on geographic de-averaged costs i.e., LEA⁶²⁸ and Outside the LEA; or
- National price based on higher of Eir's Actual Costs Adjusted for Efficiencies nationally (with BU-LRAIC+ costs applied to active assets) or the BU-LRAIC+ for Non-reusable Assets and active equipment and Eir's Indexed RAB for Reusable Assets in the LEA⁶²⁹.

14.87 Please refer to Chapter 6 (subsection 6.6) of the Consultation Document for the details.

14.4.4 Options for determining appropriate principles for the retail margin squeeze test

14.88 The following were the main options considered for determining the appropriate principles for the margin squeeze tests:

- (i) **Cost base:** The retail margin squeeze test should be based on either:
 - A SEO (or REO) cost base, which assumes that entrants are currently not likely to be as efficient as Eir given that they cannot achieve the same scale; or
 - An entire EEO approach once the OAOs have achieved sufficient scale to encourage efficient entry.
- (ii) **Cost standard:** The retail margin squeeze test should take account of either:
 - The LRAIC+ costs; or
 - The ATC costs; or

⁶²⁸ See paragraph 14.74-14.75.

⁶²⁹ *ibid.*

- The ATC costs minus fixed indirect costs and common costs.
- (iii) **Assessment basis:** The retail margin squeeze test should be assessed either:
 - Nationally (i.e., a portfolio approach): Eir would have some flexibility to efficiently price discriminate on individual products so long as Eir recovers the overall costs across the national portfolio of products; or
 - Sub-nationally: Eir would have to comply with two difference tests based on LEA⁶³⁰ and Outside the LEA i.e., a different sub geographic footprint.

14.89 Please refer to Chapter 10 of the Consultation Document for a discussion on the principles for the retail margin squeeze test.

14.4.5 Options for determining the hypothetical investment in the Managed VoB platform

14.90 We considered the following options with regard to the appropriate cost base for the wholesale margin squeeze test for Managed VoB:

- EEO;
- REO; and
- SEO.

14.91 Please refer to Chapter 10 of the Consultation Document for a detailed discussion on each option.

14.4.6 Options for notifying retail price changes for retail line rental

14.92 We considered the following options for notifying retail price changes for retail line rental:

- The introduction of new/revised retail prices for retail line rental should be pre-notified and pre-cleared with ComReg; or
- Eir should be allowed to self-certify its obligation not to cause a margin squeeze for the introduction of new/revised retail prices for retail line rental products.

⁶³⁰ See paragraph 14.74-14.75.

14.93 Please refer to Chapter 10 (subsection 10.2.7) of the Consultation Document for further discussion on each option.

14.5 Step 3: Determine the likely impact on stakeholders

14.94 This section summarises the impact of the options above on the various stakeholders. We consider the potential impacts that could be incurred by Eir in complying with the obligations imposed as well as the potential benefits that would accrue to Eir, its wholesale customers and end users.

14.95 The likely impact on stakeholders is discussed under the following headings:

- Forms of price control for SB-WLR;
- Costing methodology for SB-WLR nationally and for SABB Outside the LEA;
- Geographic scope for SB-WLR;
- Principles for the retail margin squeeze test; and
- Options for determining hypothetical investment in Managed VoB platform.

A. Forms of price control for SB-WLR:

Option 1: Retail Minus

(a) Impact on Eir

- This approach provides a degree of regulatory consistency for Eir as the SB-WLR price is already set on this basis.
- This approach allows Eir some pricing flexibility as the wholesale price is set with reference to the retail price less the retail costs (set at no more than 14%).
- This approach may not send the appropriate build-or buy signals to Eir.

(b) Impact on OAOs

- This approach should provide sufficient margin (at no more than 14%) to ensure entry is possible at prices that are consistent with the outcome of a competitive process.
- Under this approach, the access price charged to OAOs could be too high if Eir's retail price is high – especially in rural areas.

- This approach may not prevent excessive pricing from Eir as the wholesale price is not set with reference to costs.
 - This approach may not send the appropriate build or buy signals to OAOs.
 - This approach may lead to pricing instability for other operators.
- (c) Impact on end users
- This approach could give rise to excessive retail prices.

Option 2: Cost Orientation

- (a) Impact on Eir
- This approach ensures that Eir's SB-WLR price is set by reference to strict cost recovery i.e., actual efficient costs plus a reasonable rate of return – therefore maintains price stability.
 - This approach should ensure that Eir does not over or under recover its efficient costs for the provision of SB-WLR.
 - This approach should allow Eir to recover any money invested in maintaining or upgrading the network which should ensure that Eir's investment incentives are unlikely to be affected.
 - This approach means that Eir would have to demonstrate to ComReg that any price increase or new price for SB-WLR is in line with the specified cost orientation obligation.
 - This approach provides less pricing flexibility to Eir.
 - This approach ensures consistency across the investment ladder.
- (b) Impact on OAOs
- This approach should ensure that the access price is not too high so that competition can develop.
 - This approach should provide certainty / predictability for OAOs about price levels for SB-WLR which may have implications for their investment decisions.
 - This approach should provide more consistency across the investment ladder and therefore ensure the appropriate build-or-buy are provided to OAOs in the relevant areas.

- This approach should ensure that OAOs are not subject to excessive SB-WLR prices.
- (c) Impact on end users
- This approach should ensure that competition can develop to the benefit of end-users.
 - Lowers risk of excessive prices.

B. Costing methodology for SB-WLR nationally and for SABB Outside the LEA

Option 1: Eir's Actual Costs Adjusted for Efficiencies⁶³¹

- (a) Impact on Eir:
- This approach should ensure that Eir does not materially under / over recover its costs as the value is linked to the actual investment made (for Reusable Assets and Non-reusable Assets) adjusted for efficiency plus a reasonable rate of return.
 - This approach should allow Eir to recover any money invested in Reusable Assets and Non-reusable Assets so as to maintain or upgrade the network which should ensure that Eir's investment incentives are unlikely to be affected.
 - This approach should ensure that Eir does not price excessively as the price is set by reference to Eir's Actual Costs Adjusted for Efficiencies – especially with regard to rural areas.
 - This approach means that Eir has to demonstrate to ComReg that any price increase or new price for SB-WLR nationally and / or SABB Outside the LEA is set by reference to its actual costs adjusted for efficiencies plus a reasonable rate of return.
- (b) Impact on OAOs:
- This approach should lead to reasonable price stability and predictability which should help operators' investment plans.
 - This approach should ensure that OAOs are only paying for actual investments made by Eir in relation to Reusable Assets and Non-reusable Assets associated with the provision of SB-WLR nationally and for SABB Outside the LEA.

⁶³¹ BU-LRAIC+ costs are applied to active equipment for SB-WLR nationally and for active equipment for SABB Outside the LEA.

- This approach should ensure that OAOs are not subject to excessive prices as the prices are set by reference to actual efficient costs plus a reasonable rate of return.
 - This approach provides OAOs with a degree of price certainty as Eir cannot increase the price or introduce a new price for SB-WLR nationally and / or SABB Outside the LEA without demonstrating to ComReg compliance with its specified cost orientation obligation and with reference to its actual costs adjusted for efficiencies plus a reasonable rate of return.
- (c) Impact on end users
- This approach should ensure that retail prices are not excessive.

Option 2: BU-LRAIC+

- (a) Impact on Eir
- This approach should send the appropriate investment signals ‘build or buy’ to OAOs, in the appropriate area – Modified LEA. This is particularly relevant for infrastructure based competition.
 - This approach allows Eir to recover its costs by reference to the replacement cost associated with the asset (rather than the actual efficient cost).
 - This approach could allow Eir to recover the cost of investments that may not have taken place / are not likely to take place in the future, in certain rural areas.
 - This approach could allow Eir to over recover costs in certain areas i.e., Outside the LEA / Outside the Modified LEA – which could give rise to excessive wholesale prices.
- (b) Impact on OAOs
- This approach should send the correct investment signals to the market place – especially in the Modified LEA.
 - This approach could mean that OAOs would be paying for the cost of investments that Eir has not made or it not likely to make, in certain rural areas i.e., Outside the LEA / Outside the Modified LEA. Therefore, in the absence of alternative network competition the BU-LRAIC+ may result in excessive pricing Outside the LEA / Outside the Modified LEA as it facilitates the recovery of hypothetical costs which may not actually have been incurred.

- Where there is limited prospects of entry in certain rural areas of the country this may not be an appropriate approach.
- (c) Impact on end users
- This approach in the absence of alternative network competition may encourage Eir to “sweat” its assets in certain rural areas resulting in excessive prices relative to active investment without any benefit to end-users in terms of alternative platform based investment.

C. Appropriate geographic scope for SB-WLR:

Option 1: SB-WLR national price based on national costs (i.e., BU-LRAIC+ costs for Non-reusable Assets and active equipment and Eir’s Indexed RAB for Reusable Assets)

- (a) Impact on Eir
- This approach may lead to over recovery of costs by Eir.
 - The BU-LRAIC+ costs applied to the Non-reusable Assets Outside the Modified LEA may result in a SB-WLR price that over-compensates Eir relative to its actual investment, especially Outside the Modified LEA.
 - This approach may not send the appropriate signals to Eir, especially with regard the build or buy signals Outside the Modified LEA. Relative to the actual efficient costs incurred by Eir nationally this approach Outside the Modified LEA could result in Eir over-recovering its actual efficiently incurred costs plus a reasonable rate of return.
 - This approach ensures that there is no added complexities or costs in terms of billing and administration as there is just one national price for SB-WLR.
- (b) Impact on OAOs
- This approach may result in a higher SB-WLR price for OAOs – as OAOs are paying for investments that did not take place / may not take place Outside the Modified LEA.
 - This approach may send the wrong investment signal to OAOs in terms of efficient investment – this approach derives a higher national price than is required for the appropriate build or buy signal especially in the Modified LEA.
- (c) Impact on end users

- This approach may result in higher costs being passed onto end-users by OAOs.

Option 2: SB-WLR national price based on geographic de-averaged costs (i.e. BU-LRAIC+ and Eir's Indexed RAB for each area)

(a) Impact on Eir

- This approach means that the price for SB-WLR in the Modified LEA reflects the BU-LRAIC+ costs (for Non-reusable Assets and active equipment) and Eir's indexed RAB (for Reusable Assets) in the Modified LEA – this should send the appropriate investment (build or buy) signals to Eir in the Modified LEA.
- This approach means that the price for SB-WLR Outside the Modified LEA reflects the BU-LRAIC+ costs (for Non-reusable Assets and active equipment) and Eir's indexed RAB (for Reusable Assets) Outside the Modified LEA – this approach derives a higher price than is required for appropriate build or buy signals Outside the Modified LEA. Relative to the actual efficient costs incurred by Eir nationally this approach Outside the Modified LEA could result in Eir over-recovering its actual efficiently incurred costs plus a reasonable rate of return.

(b) Impact on OAOs

- This approach means that the price for SB-WLR Outside the Modified LEA becomes very expensive as it is set by reference to the BU-LRAIC+ costs for Non-reusable Assets and active assets (with the Reusable Assets based on Eir's indexed RAB) for area Outside the Modified LEA. OAOs are paying for investments in Non-reusable Assets Outside the Modified LEA that did not take place / may not take place in the future as no commercial operator would invest in this area absent state funding.
- This approach may create a digital divide where OAOs are subject to different SB-WLR depending on the geographic location i.e., Modified LEA or Outside the Modified LEA.
- This approach may result in additional costs associated with billing systems as different prices will apply depending on geographic location i.e., Modified LEA and Outside the Modified LEA.

(c) Impact on end users

- This could create a digital divide where alternative operators charge different retail charges depending on geographic location.

Option 3: SB-WLR national price based on higher of Eir's Actual Costs Adjusted for Efficiencies nationally (with BU-LRAIC+ costs for active equipment) or BU-LRAIC+ costs for Non-reusable Assets and active equipment and Eir's indexed RAB for Reusable Assets in the Modified LEA

(a) Impact on Eir

- This approach should ensure that Eir does not under / over recover costs – this approach should allow Eir to recover its actual efficient costs plus a reasonable rate of return nationally.
- This approach should ensure that any money efficiently invested by Eir in maintaining or upgrading its network should be recouped by it in line with the HCAs. Therefore, this should encourage further investment by Eir as it is assured that what it invests can be recovered.

(b) Impact on OAOs

- This approach should provide the appropriate build or buy signals in the Modified LEA.
- This approach should ensure that OAOs only pay for those actual investments made by Eir especially for investment Outside the Modified LEA.

(c) Impact on end users

- This approach should ensure that end-users are not subject to excessive prices while appropriate incentives are in place for continued investment and competition in the relevant areas.

D. Appropriate inputs for retail margin squeeze test

Cost base:

Option 1: Retail margin squeeze test is based on an EEO cost base

a) Impact on Eir:

- In general, an entire EEO assumption would imply that entrants could achieve similar economies of scale as Eir.
- EEO approach is more consistent with cost orientation and ensures overall cost recovery for Eir.
- EEO approach provides Eir with more flexibility in setting its retail prices.

b) Impact on OAOs:

- An entire EEO cost base could make entry more difficult for new entrants, as the resulting gap between wholesale prices and retail prices would be lower, but may incentivise them to invest in their own infrastructure.
- An entire EEO cost based would also encourage OAOs to at least be as efficient as Eir's retail arm.

c) Impact on end-users:

- It should provide more choice if OAOs are incentivised to invest in their own infrastructure.
- It could lower prices for end users also because EEO costs should be lower than SEO/REO costs.

Option 2: Retail margin squeeze test is based on a SEO / REO cost base

a) Impact on Eir:

- The SEO / REO assumes higher costs (compared to EEO) thereby requiring a higher retail margin.
- The SEO / REO should promote competition from OAOs who would face higher costs compared to Eir. This could increase the willingness of OAOs to enter the retail market using Eir wholesale inputs.
- Where OAOs have lower costs than the assumed SEO / REO approach it would allow OAOs to charge lower retail prices compared to Eir' retail arm.
- The SEO/ REO approach provides Eir with less flexibility when setting its retail prices.

b) Impact on OAOs:

- The SEO / REO assumes that entrants have not yet gained sufficient economies of scale to that of Eir. By using the SEO / REO cost standard in the margin squeeze test, the resulting retail margins (assuming Eir retail prices remain constant) would be higher compared to a margin squeeze based on the EEO cost standard.
- The SEO / REO approach may encourage entry to the retail market and allow less efficient (compared to the EEO approach) OAOs and existing smaller operators to grow their customer base, by giving rise to a greater space between retail prices and wholesale prices.

c) Impact on end-users:

- The SEO / REO approach is likely to result in the medium/long-term (marginally) higher retail prices.
- As the SEO/REO approach provides greater margin between retail and wholesale prices it may cause inefficient market entry. This may not replicate as far as possible the outcomes of competitive markets to the long-term detriment of end-users.

Cost standard:**Option 1: Retail margin squeeze test is based on 'LRAIC plus'**

a) Impact on Eir:

- This approach should allow Eir to recover its average efficiently incurred directly attributable variable and fixed costs and an apportionment of joint and common costs.

b) Impact on OAOs:

- This approach should allow the recovery of the relevant common costs, as well as fixed and variable costs. This is the calculus faced by an operator when deciding whether to enter or expand a market. This should also ensure efficient entry, compared with the ATC cost standard.

c) Impact on end-users:

- This approach should allow the promotion of sustainable competition by OAOs to the benefit of end-users.

Option 2: Retail margin squeeze test is based on ATC

a) Impact on Eir:

- This approach means a larger margin between products which is likely to mean easier entry potentially by an inefficient operator.
- ATC has been used to date for NGA pricing and for current generation Bitstream – therefore it ensures consistency across ladder of investment.
- ATC allows Eir to recover all of its efficiently incurred costs.

b) Impact on OAOs:

- This approach may promote further entry given that it includes the costs of 'LRAIC plus' and some additional common costs. However, the ATC may encourage inefficient entry.

c) Impact on end-users:

- This approach may mean additional competition could reduce prices or improve choice.

Option 3: Retail margin squeeze test is based on LRIC (which is defined as ATC minus fixed indirect and common costs)

a) Impact on Eir:

- This approach recognises that there are other large operators (with scope and scale) competing with Eir and therefore Eir has some additional pricing flexibility with regard to its standalone line rental price.
- If Eir chooses to only recover ATC less common costs and fixed indirect costs then those common costs and fixed indirect costs should be recovered elsewhere – e.g., when retail line rental is sold / offered in bundles.

b) Impact on OAOs:

- Entry / expansion by efficient OAOs albeit with lower economies of scale and scope than Eir could be impeded in terms of standalone line rental.
- This approach is consistent with the Bundles Decision in terms of retail calls.

c) Impact on end-users:

- This approach may mean additional competition or improved choice.

National or sub-national assessment:**Option 1: Retail margin squeeze test - National**

a) Impact on Eir:

- This approach allows Eir flexibility in its retail pricing, enabling Eir to price some retail products above and others below LRIC. This is likely to imply discounting on products where the competition is most intense, provided that other products are priced higher, such that the overall average

revenue matches LRIC. This flexibility may mean that Eir can experiment with price differentiation for different product offerings which may improve efficiency, and under certain conditions, can be welfare maximising.

- This approach means that should Eir so choose to only recover ATC less common costs and fixed indirect costs from its standalone line rental services then those fixed indirect costs and common costs must be recovered elsewhere e.g., when retail line rental is sold/offered in a bundle.

b) Impact on OAOs:

- This approach should encourage efficiency and promote competition between operators, especially in the LEA.

c) Impact on end-users:

- This approach may mean improved efficiencies, especially in the LEA.

Option 2: Retail margin squeeze test – Sub-national

a) Impact on Eir:

- This approach should ensure sufficient margin for each offer, but would restrict the ability of Eir to price products as flexibly as they would under the national approach. Each SB-WLR product in the LEA / Modified LEA i.e., a sub geographic footprint and Outside the LEA / Outside the Modified LEA i.e., a different sub geographic footprint, would need to be priced at a retail level to meet the LRIC requirement, which may limit the ability of Eir to adjust pricing.
- This approach means that should Eir so choose to only recover ATC less common costs and fixed indirect costs from its standalone line rental services then those fixed indirect costs and common costs must be recovered elsewhere e.g., when retail line rental is sold/offered in a bundle.

b) Impact on OAOs:

- This approach may enhance entry and competition, particularly for entrants that may lack economies of scope or those OAOs who sell the service sub-nationally.

c) Impact on end-users:

- There may be some gains from improved competition of a sub-national approach, but these may be offset by a reduction of efficiency.

E. Options for determining hypothetical investment in Managed VoB platform

Option 1: Hypothetical investment based on EEO costs:

a) Impact on Eir:

- The EEO approach would mean using Eir's costs.
- The EEO approach would assume that entrants could achieve similar economies of scale as Eir.
- The EEO provides Eir with more flexibility in setting its retail prices.

b) Impact on OAOs:

- The EEO approach may not reflect the investment costs of a new entrant operator, in a Managed VoB platform.
- The EEO approach could make entry more difficult for new entrants in the case where the gap between the POTS based VUA price and the standalone VUA / NGA Bitstream price (plus a contribution towards Managed VoB) may be lower.

c) Impact on end-users:

- The EEO may lead to lower retail prices in the shortrun but due to a decreased economic space it may disincentivise new entrants and may in fact lead to higher prices in the longrun.

Option 2 / 3: Hypothetical investment based on SEO / REO costs:

a) Impact on Eir:

- The SEO / REO approach assumes a larger gap between the POTS based VUA price and the standalone VUA / NGA Bitstream price (plus a contribution towards Managed VoB).

- The SEO / REO approach provides less pricing flexibility for Eir when setting its retail prices.

b) Impact on OAOs:

- The SEO/ REO approach mimics the costs of a typical entrant operator and should therefore encourage entry / investments in Managed VoB.
- The SEO / REO approach reflects the fact that OAOs have not achieved the same economics of scope and scale as the Incumbent (Eir). By using the SEO / REO cost standard in the wholesale test, the resulting economic space (or gap) between the POTS based VUA price and the standalone VUA / NGA Bitstream price (plus a contribution towards Managed VoB) would be higher compared to a test based on the EEO cost standard.
- The REO cost approach is most appropriate in the context of the hypothetical investment in Managed VoB as our objective is to encourage investment by other operators.

c) Impact on end-users:

- The SEO / REO approach is likely to result in the short to medium term in (marginally) higher retail prices.
- The SEO/REO approach is likely to provide more competition and lower retail prices in the long run.

F. Options for notifying retail price changes for retail line rental

Option 1: New/revised retail price for retail line rental must be pre-notified by Eir to ComReg

a) Impact on Eir:

- Eir is currently subject to a pre-notification requirement pursuant to RFVA Decision.

b) Impact on OAOs:

- It should give OAOs certainty that there will be regulatory monitoring of Eir's retail prices for retail line rental prior to their launch.

c) Impact on end-users:

- It ensures a transparent regulatory environment which monitors retail line rental products at risk of being anti-competitive and which may have long-term negative impacts for consumer choice.

Option 2: Eir must self-certify that new/revised retail price for retail line rental meets its obligation not to cause a margin squeeze

a) Impact on Eir:

- Eir would not need to get pre-clearance from ComReg when it wishes to launch a new/revised retail price for retail line rental. Eir would only need to notify ComReg of the details of the new/revised retail price for retail line rental.
- Eir would be required to maintain records which demonstrated that a margin squeeze test was undertaken prior to launch and that based on the reasonable assumptions used that no margin squeeze issues were raised.

b) Impact on OAOs:

- OAOs would have no certainty of whether a retail line rental product launched by Eir met its obligation not to cause a margin squeeze. However, as Eir would be required to demonstrate its ongoing compliance in respect of at least one retail amendment (chosen by ComReg) every three months, OAOs would have some comfort as a result of this continued regulatory monitoring.

c) Impact on end-users:

- It ensures a transparent regulatory environment which monitors retail line rental products at risk of being anti-competitive and which may have long-term negative impacts for consumer choice.

14.6 Step 4: Determine the likely impacts on competition

14.96 This is discussed at paragraphs 14.14-14.19.

14.7 Step 5: Assess the likely impacts and choose the best option

14.97 Step 5 is discussed under the headings:

- Submissions to the Consultation Document;
- ComReg's Position; and
- ComReg's Final Position.

14.7.1 Submissions to the Consultation Document:

14.98 ALTO agreed "*with the process engaged by ComReg*"⁶³² in setting out its RIA. ALTO cautioned ComReg on "*...legal challenges to decisions where reliance on Commissions Recommendations...[had] later been successfully challenged.*"⁶³³ ALTO noted that "*...Commission Recommendations are not in-fact binding.*"⁶³⁴

14.99 Enet "*agreed with the terms of the Regulatory Impact Assessment*"⁶³⁵ while Vodafone stated that it had "*...no further comments.*"⁶³⁶

14.100 BT considered that the RIA "*overlooked the impact of the SLU price change on NGA pricing and CGA vs. NGA competition.*"⁶³⁷

14.101 Eir considered that "*...many aspects of ComReg's Consultation Document are unclear, preliminary in nature and/or lack adequate justification.*"⁶³⁸ Furthermore, Eir requested ComReg "*...to publish a supplemental consultation document that addresses the main concerns raised...*"⁶³⁹ Eir noted that the following points should be addressed:

- "*whether and how the proposed cost accounting rules can be applied to FACO;*
- "*how the Net Revenue Test will apply when using wholesale rather than retail products as the focal point of the assessment;*
- "*the plan and timetable for removing Market 1 from ex-ante regulation;*

⁶³² ALTO Response to Consultation 15/67, page 18.

⁶³³ ALTO Response to Consultation 15/67, page 18/19.

⁶³⁴ ALTO Response to Consultation 15/67, page 18.

⁶³⁵ Enet Response to Consultation 15/67, page 7.

⁶³⁶ Vodafone Response to Consultation 15/67, page 15

⁶³⁷ BT Response to Consultation, page 11.

⁶³⁸ Eir Response to Consultation 15/67, page 41.

⁶³⁹ Eir Response to Consultation 15/67, page 41.

- *the treatment of a FACO sub-market in which all operators appear to have bottleneck control of call origination to NTCs;*
- *reviews the case for the line rental margin squeeze test on the basis of a decision as to what future regulation will be imposed on SB-WLR;*
- *reviews the economic case for POTS based VUA margin squeeze test given that the proposed test would undermine efficiency as currently designed and that a wholesale VoIP offer from eircom is likely to provide a more efficient means of meeting ComReg’s objective; and*
- *re-affirm that regulated access to dark fibre is limited to exceptional circumstances where the OAO has first sought access to duct/pole capacity, access to ducts and poles cannot reasonably be provided for technical or capacity reasons and there is sufficient dark fibre capacity available after taking into account eircom’s own future capacity requirements.”⁶⁴⁰*

14.102 Eir stated that the imposition of cost orientation on SB-WLR in the LEA “...is not justified given the competitiveness of the LEA.”⁶⁴¹ Eir stated that even ComReg’s own guidelines suggest that where possible it will “identify opportunities to withdraw from or reduce regulatory intervention in relevant markets...”⁶⁴² but “ComReg does not do this, despite acknowledging the competitiveness of the LEA...”⁶⁴³ Eir noted that with regard to Step 2 of the RIA “...the option not considered is not forbearing from SB-WLR regulation in the LEA and not having the margin squeeze tests.”⁶⁴⁴

14.103 Eir stated that “ComReg has failed to target the regulation to only the areas where effective competition is unlikely to develop, areas outside the LEA.”⁶⁴⁵ Furthermore, Eir believed that “ComReg is ignoring the competition in the market ...[and] proposing multiple layers of regulation when targeted upstream regulation would better achieve efficient outcomes”⁶⁴⁶

14.104 Eir also added that “The Revised RIA Guidelines make several pertinent comments, the first is that the process should reduce the unnecessary use of regulation through an examination of alternatives – ComReg has not done this.

⁶⁴⁰ Eir Response to Consultation 15/67, page 41.

⁶⁴¹ Eir Response to Consultation 15/67, page 41.

⁶⁴² Eir Response to Consultation 15/67, page 42.

⁶⁴³ Eir Response to Consultation 15/67, page 42.

⁶⁴⁴ Eir Response to Consultation 15/67, page 42.

⁶⁴⁵ Eir Response to Consultation 15/67, page 42.

⁶⁴⁶ Eir Response to Consultation 15/67, page 42.

One example is the failure to consider a wholesale VoIP offer as an alternative to the proposed VUA margin squeeze test.”⁶⁴⁷

14.105 Eir stated that ComReg also “...fails to determine the impact on stakeholders in anything other than a very superficial manner.”⁶⁴⁸

14.106 Eir referred to ComReg’s policy objectives at Paragraphs 14.10 and 14.11 of the Consultation Document and stated that they “...are inconsistent with ComReg’s duties as set out in s12 of the Communications Regulation Act...”⁶⁴⁹ Eir stated that “Section 12 (2)(a)(i) requires it to consider encouraging efficient investment by eircom and not just appropriate ‘build or buy’ signals from OAOs or eircom’s existing network...[and that] ComReg has failed to adequately address this objective.”⁶⁵⁰

14.107 In addition, Eir stated that “The ‘build or buy’ signals need to take into account sufficient incentives to deploy NGA networks.”⁶⁵¹

14.108 Eir stated that “ComReg is more concerned with investment by operators other than eircom.”⁶⁵² Eir stated that “The Government is investing in the NBP so there is high speed broadband – by allowing eircom to increase its revenues it will have a better chance of recovering its proposed FTTH investment and possibly extending it further.”⁶⁵³

14.109 Furthermore, Eir considered that ComReg should not just consider whether Eir is recovering its efficient costs plus a rate of return but “...whether that reasonable rate of return will permit it to both innovate and invest.”⁶⁵⁴

14.110 Eir stated that “ComReg’s proposed approach is not consistent with the Commission’s view that there is an already highly complex regulatory setting in Ireland.”⁶⁵⁵ Eir suggested that “ComReg should take the opportunity to streamline the existing pricing remedies, thereby enhancing transparency and legal certainty for market players.”⁶⁵⁶

14.111 Eir also noted that “...the Recommendation makes clear, one of its aims is to establish predictable and stable regulated wholesale copper access prices...”⁶⁵⁷

⁶⁴⁷ Eir Response to Consultation 15/67, page 42

⁶⁴⁸ Eir Response to Consultation 15/67, page 42.

⁶⁴⁹ Eir Response to Consultation 15/67, page 42.

⁶⁵⁰ Eir Response to Consultation 15/67, page 42.

⁶⁵¹ Eir Response to Consultation 15/67, page 43.

⁶⁵² Eir Response to Consultation 15/67, page 44.

⁶⁵³ Eir Response to Consultation 15/67, page 44.

⁶⁵⁴ Eir Response to Consultation 15/67, page 42.

⁶⁵⁵ Eir Response to Consultation 15/67, page 42/43.

⁶⁵⁶ Eir Response to Consultation 15/67, page 42/43.

⁶⁵⁷ Eir Response to Consultation 15/67, page 43.

14.112 Eir considered that ComReg's reference to the alleged problems identified in market reviews conducted in 2010 and 2011 "*are not consistent with the competitive position in 2015.*"⁶⁵⁸ Accordingly, Eir noted that "*...ComReg is obliged to conduct market reviews every 3 years ... but has failed to do so.*"⁶⁵⁹

14.113 Eir also noted that "*It is not sufficient to consider eircom's continuing maintenance of its copper network as ComReg does in para 14.23.*"⁶⁶⁰

14.7.2 ComReg's Position:

14.114 With regard to the ALTO's view at paragraph 14.98 regarding reliance on the Commissions Recommendations and the fact that they are not binding, ComReg is of course aware of the non-binding nature of Commission Recommendations and also mindful of ComReg's obligations to take utmost account of Commission Recommendations where relevant. In this regard, ComReg is mindful of the relevant jurisprudence of both the Court of Justice of the European Union and of the Irish Courts.⁶⁶¹

14.115 In relation to BT's point at paragraph 14.100 that we overlooked the impact of the SLU price in the context of NGA, ComReg has addressed this point at paragraphs 6.84 and 6.85 of this Decision Document.

14.116 ComReg notes Eir's view at paragraph 14.101 that many aspects of ComReg's Consultation Document are unclear, preliminary in nature and/or lack adequate justification and that ComReg should publish a supplemental consultation document addressing a number of points as listed at paragraph 14.101. ComReg considers that a supplemental consultation is not necessary for the following reasons:

- With regard to Eir's point on whether and how the proposed cost accounting rules can be applied to FACO, ComReg would like to point out that Eir's HCAs are used to determine the TD national price for SB-WLR and this does not affect any of the cost accounting rules relevant to the FACO market.

⁶⁵⁸ Eir Response to Consultation 15/67, page 43.

⁶⁵⁹ Eir Response to Consultation 15/67, page 43.

⁶⁶⁰ Eir Response to Consultation 15/67, page 42.

⁶⁶¹ See, e.g., the decision of the European Court of Justice (as it then was) in Case C-322/88 *Grimaldi v. Fonds des maladies professionnelles* [1989] ECR 4407 at para 16; and the decision of the Irish High Court (Cooke J) in *Vodafone Ireland Limited v Commission for Communications Regulation* [2013] IEHC 382, at paras 99 to 123.

- With regard to Eir's point on how the net revenue test ('**NRT**') will apply when using wholesale rather than retail products as the anchor for the NRT, ComReg notes that the NRT is outside the scope of this Decision Document.
- With regard to Eir's point on the plan for removing Market 1 from ex-ante regulation, this has been addressed at paragraph 10.55.
- With regard to Eir's point on the treatment of FACO sub-markets in which all operators appear to have bottleneck control of call origination to NTCs, ComReg refers to the FACO Decision, paragraphs 4.72-4.74.
- With regard to Eir's point that we need to review the case for line rental margin squeeze test on the basis of what future regulation will be imposed on WLR, ComReg refers to paragraph 3.37 of the Consultation Document regarding retail line rental price control.
- With regard to Eir's point to review the economic case for POTS based VUA margin squeeze test given that the proposed test would undermine efficiency as currently designed and that a wholesale Managed VoB offer from Eir is likely to provide a more efficient means of meeting ComReg's objective, these points have been addressed at paragraphs 10.130 and 10.131.
- With regard to Eir's view that ComReg should re-affirm that regulated access to dark fibre is limited to exceptional circumstances where the OAO has first sought access to duct/pole capacity, access to ducts and poles cannot reasonably be provided for technical or capacity reasons and there is sufficient dark fibre capacity available after taking into account Eir's own future capacity requirements, ComReg considers that these points have been addressed at paragraphs 8.100 - 8.104.

14.117 ComReg notes Eir's views at paragraph 14.102 that the imposition of cost orientation on SB-WLR in the LEA is not justified and we have not considered forbearing from SB-WLR regulation in the LEA. ComReg considers that these point have been addressed at paragraphs 4.46 and 4.47 in Chapter 4.

14.118 We note Eir's point at paragraph 14.104 that ComReg should reduce unnecessary use of regulation by assessing alternatives while also noting Eir's point at paragraph 14.103 that ComReg has failed to target regulation to only those areas where effective competition is unlikely to develop – Outside the LEA. It is important to note in this context that Eir has been found to have SMP nationally in Market 2, Market 4 and Market 5. As a result, Eir are subject to a number of obligations in order to address the potential competition problems that might arise absent regulation. Therefore, the regulatory framework is already in place with regard to those specific markets. This Decision is only further specifying and / or amending the price control obligations and / or transparency obligations in Market 2, Market 4 and Market 5.

14.119 In relation to Eir's point at paragraph 14.104 that we should consider a a wholesale VoIP offer as an alternative to the proposed VUA margin squeeze test, please see paragraph 10.130.

14.120 With regard to Eir's view at paragraph 14.105 that ComReg fails to determine the impact on stakeholders in anything other than a very superficial manner, ComReg considers that our approach to the RIA is consistent with the RIA guidelines set out at paragraphs 14.3.

14.121 We note Eir's views at paragraph 14.106 that our policy objectives in the Consultation Document (paragraphs 14.10 and 14.11) are inconsistent with Section 12 of the Communications Regulation Act in that ComReg has not addressed the objective of encouraging efficient investment. ComReg does not agree. Paragraphs 14.20-14.28 of the Consultation Document addressed the objective of encouraging investment in infrastructure and promoting innovation.

- (i) As noted in the Consultation Document at paragraph 14.21 the priority between short-term and long-term investments may vary depending on the specific conditions of each wholesale product and geographical area. In the Modified LEA there is infrastructure-based competition (mainly from UPC but potentially from SIRO (Vodafone/ESB) in the future) as well as competition relying on LLU, Line Share and SLU services. There is also some service-based competition based solely on Eir's copper local loop i.e., WBA and SB-WLR. Outside the Modified LEA, infrastructure based competition and competition relying on LLU, Line Share and SLU are unlikely absent state funding. However, in areas where no infrastructure based competition is likely to develop but where service based competition relying on SB-WLR and WBA is present there is no need to send a correct build or buy signals – cost recovery of the Incumbent in this area is more important than the costs that would be faced by a new entrant. On the other hand where infrastructure based competition has developed or is likely to develop sending the correct build or buy signal is

important while also ensuring that the Incumbent does not under recover its efficient costs plus a reasonable rate of return.

- (ii) For OAOs, visibility and certainty regarding future wholesale access prices is important so that operators can progress their investment plans. For the Incumbent it is necessary to ensure that it recovers at least its efficiently incurred costs plus a reasonable rate of return through the wholesale access prices otherwise there is a risk that the Incumbent could stop maintaining its copper network.

14.122 Further to Eir's point at paragraph 14.107 that the 'build or buy' signals need to take into account sufficient incentives to deploy NGA networks, ComReg agrees with Eir. This is one of the key considerations in Chapter 4 of the Consultation Document, in particular in subsection 4.4 and in paragraphs 4.127 - 4.130 of this Decision Document. Our pricing approach is based on TD costs for Reusable Assets while Non-reusable Assets are set based on BU-LRAIC+ costs, consistent with the 2013 Recommendation. The difference between Reusable Assets and Non-reusable Assets is that copper cables will be replaced by fibre cables in the future while most trenches and ducts can be reused for NGA purposes. Furthermore, for Non-reusable Assets, it is important to send the correct build-or-buy signal, so that an OAO is encouraged to take an efficient investment decision. ComReg believes that such a build-or-buy signal is best ensured by adopting a BU LRAIC+ methodology, based on replacement costs. In Chapter 4, paragraph 4.147 of the Consultation Document ComReg specified that unlike the Reusable Assets, the copper cables or Non-reusable Assets, especially in the LEA, are likely to be replaced by optical fibre — at least on the E-side. ComReg considers that in these areas OAOs should be encouraged to invest in the alternative NGA-based infrastructure. Therefore, we consider that our approach takes account of sufficient incentives to deploy NGA networks.

14.123 In response to Eir's view at paragraph 14.108 that ComReg is more concerned with investment by operators other than Eir, ComReg does not agree for a number of reasons as set out below.

- (i) The pricing approach for SB-WLR allows Eir to recover the higher of its actual efficient costs plus a reasonable rate of return for the provision of SB-WLR nationally with active equipment (line card) costs based on the BU-LRAIC+ methodology or the costs for SB-WLR in the Modified LEA based on a BU-LRAIC+ costs for Non-reusable Assets and active equipment (line card) and Eir's Indexed RAB for Reusable Assets. If the SB-WLR national price based on Eir's Actual Costs Adjusted for Efficiencies nationally (with active equipment based on BU-LRAIC+ costs) is the higher price then this price should allow Eir to recover any money invested in maintaining or upgrading its network on that basis that Eir will have the assurance that what it spends can be recouped over the Price

Control Period. Therefore, Eir's investment incentives are unlikely to be affected. The BU-LRAIC+ approach for active equipment should ensure that Eir are incentivised to continue to invest and upgrade its network in an efficient manner. In addition, the cost orientation price control for SB-WLR should lead to reasonable price stability for other operators' investment plans. In addition, this approach maintains the correct build-buy signals in the Modified LEA for OAOs. On the other hand if the SB-WLR national price based on the BU-LRAIC+ for Non-reusable assets and active equipment and Eir's Indexed RAB for Reusable assets inside the Modified LEA is the higher price then the appropriate build or buy signals are provided in terms of investment in the Modified LEA.

- (ii) For SABB Outside the LEA, the use of Eir's Actual Costs Adjusted for Efficiencies (with active equipment based on BU-LRAIC+ costs) means that Eir should recover any money invested in maintaining or upgrading its network on that basis that Eir will have the assurance that what it spends can be recouped over the Price Control Period. The BU-LRAIC+ approach for active equipment should ensure that Eir are incentivised to continue to invest and upgrade its network in an efficient manner. The build or buy signal is not appropriate with regard to the area Outside the LEA as discussed in paragraph 14.31 of the Consultation Document.
- (iii) The retail margin squeeze test for retail line rental (at Chapter 10) should protect operators that rely on SB-WLR and ensure that they can compete with Eir and still make a margin while the wholesale margin squeeze test for POTS based VUA should encourage OAOs to invest in their own Managed VoB platform either currently or prospectively.
- (iv) Therefore, ComReg considers that it has fully addressed the objective of encouraging efficient investment by both Eir and OAOs.

14.124 We note Eir's point at paragraph 14.108 that given that the Government is investing in the NBP so there is high speed broadband – by allowing Eir to increase its revenues it will have a better chance of recovering its proposed FTTH investment and possibly extending it further. Firstly, ComReg considers that its approach to Reusable Assets and Non-reusable Assets sets the appropriate build or buy signals in order to incentivise deployment of NGA networks, as set out in Chapter 4, subsection 4.4 of the Consultation Document and at paragraphs 4.127 - 4.130 of this Decision Document. Secondly, it is worth noting that this Decision Document is concerned with the price control obligations for current generation access services, our treatment of alternative technologies is set out at paragraphs 5.17 – 5.26 of the Consultation Document, in particular. In any event, NGA services are subject to ComReg Decision D03/13 based on a margin squeeze pricing regime.

- 14.125 ComReg notes Eir's views at paragraph 14.109 that ComReg should not just consider whether Eir is recovering its efficient costs plus a rate of return but whether that reasonable rate of return will permit it to both innovate and invest. The relevant WACC rate is addressed separately in ComReg Decision D15/14.
- 14.126 We note Eir's point at paragraph 14.110 that ComReg's proposed approach is not consistent with the Commission's view that there is an already highly complex regulatory setting in Ireland and that ComReg should take the opportunity to streamline the existing pricing remedies, thereby enhancing transparency and legal certainty for market players. ComReg has taken utmost account of the comments from the European Commission. The pricing remedies set out in this Decision Document are consistent with ComReg's regulatory objectives as set out in paragraphs 14.13 to 14.36. In addition, this Decision provides price stability and certainty to the market, as discussed at paragraph 14.136.
- 14.127 We note Eir's views at paragraph 14.111 that the 2013 Recommendation recognises that one of its aims is to establish predictable and stable regulated wholesale copper access prices ComReg would like to point out that in Chapter 13 we have set out the prices for each of the access services for each year during the Price Control Period and also for the first two years beyond that. This should provide operators with stability and predictability over the next few years. Please also see paragraph 14.136 on price predictability and stability.
- 14.128 We note Eir's point at paragraph 14.112 that the alleged problems identified in market reviews conducted in 2010 and 2011 are not consistent with the competitive position in 2015 and so a market review should be conducted every three years. ComReg notes the competition problems identified in the WPNIA Market Decision at Chapter 5 and in the WBA Market Decision at Chapter 6. In addition, please see paragraphs 3.8 and 3.9 of the Consultation Document regarding competition problems as well as Chapter 4 and Chapter 10 which sets out why the changes are necessary to the price controls and / or pricing methodologies. It is worth noting that while Eir seem to solely equate the changes with transparency, the key objectives are to avoid excessive pricing and to ensure that Eir do not create a margin squeeze – as discussed in detail throughout the Consultation Document and in this Decision Document. In addition and as Eir are aware, the review for Market 3a and 3b is in progress and it is envisaged that a consultation will be published in Q2 2016.

14.129 In response to Eir's point at paragraph 14.113 that it is not sufficient to consider Eir's continuing maintenance of its copper network, ComReg would like to clarify that to the extent that Eir continues to provide copper access services then it is sufficient to consider the continued maintenance of its copper network. Please also see ComReg's Call for Input in ComReg Document No 14/126 "*National Broadband Plan – Call for Input on Regulatory Implications*" ('**Call for Input**').⁶⁶²

14.7.3 ComReg's Final Position:

14.130 In light of the reasoning and justification set out throughout the Consultation Document and this Decision Document, ComReg maintains its views regarding the price control measures for SB-WLR in the FACO market (Market 2) and in the WBA market (Market 5) with regard to SABB Outside the LEA.

14.131 For SB-WLR in Market 2, we remain of the view that SB-WLR prices should be set on the basis of cost orientation. ComReg considers that a national SB-WLR price based on the higher of the combined BU-LRAIC+ and Eir's Indexed RAB inside the Modified LEA or nationally Eir's Actual Costs Adjusted for Efficiencies (with the BU-LRAIC+ costs for active equipment i.e., line card), maintains the correct build-or-buy signals in the Modified LEA (where it is most relevant) and ensures that Eir does not under-recover its actual efficiently incurred costs (plus a reasonable rate of return) nationally for the provision of SB-WLR. Please refer to Chapter 6, paragraphs 6.114 to 6.125 for further details.

14.132 For SABB Outside the LEA in Market 5, the objective is not to stimulate alternative operator investment where it is clear no commercial operator might invest, the need for build-or-buy signals are less relevant in this area. Instead Eir's Actual Costs Adjusted for Efficiencies (combined with the BU-LRAIC+ costs for active equipment) ensures that there is no over or under recovery of costs by Eir for the provision of SABB Outside the LEA. Please refer to Chapter 7, paragraphs 7.16 to 7.29, for further details.

14.133 With regard to the retail margin squeeze test for SB-WLR in Market 2, we consider that the test should be based on EEO retail costs and assessed based on the ATC minus fixed indirect costs and common costs nationally. ComReg considers that the consistent growth in demand for SB-WLR since 2008 indicates that the 2008 SB-WLR Price Decision, which is based on an EEO cost-standard, is delivering benefits to consumers in terms of contributing to competition in the provision of WLR. The EEO costs are also consistent with a cost orientation obligation as they ensure cost recovery for Eir i.e., EEO costs are based on Eir's Actual Costs Adjusted for Efficiencies (adjusted for efficiency). The retail margin squeeze principle of ATC minus fixed indirect and common costs reflects the fact that there are other large rival competitors in the market with sufficient scope and

⁶⁶² <http://www.comreg.ie/fileupload/publications/ComReg14126.pdf>

scale. However, as SB-WLR is the anchor product when sold in a bundle with other services we consider that if Eir decides to only recover ATC less fixed indirect costs and common costs in the context of standalone retail line rental then those fixed indirect costs and common costs should be recovered elsewhere, e.g., when retail line rental is sold in bundles, so that retail costs including fixed indirect and common costs are recovered from within the retail portfolio. Please refer to paragraphs 10.43 to 10.82 in Chapter 10.

14.134 For the wholesale margin squeeze test in Market 2, our main consideration is the likely cost base of the investment in Managed VoB as well as the assumed market share of the Managed VoB operator. The REO cost base should be applied as the investment in Managed VoB is based on a hypothetical investment by alternative operator and not based on an investment by Eir. In addition, the assumed OAO market share of 25% seems reasonable given that it is a target market share that should be achieved by OAOs in the medium term. Please refer to paragraphs 10.128 to 10.141 in Chapter 10.

14.135 ComReg considers that the pre-notification / pre-clearance process for a new/revised retail price for retail line rental in Market 2 is appropriate as it provides a prima facie submission made by Eir to ComReg to ensure that the new/revised Eir retail line rental price is compliant with its obligations not to cause a margin squeeze. Please refer to paragraphs 10.98 to 10.105 in Chapter 10.

14.136 In the context of SB-WLR, SABB Outside the LEA and the margin squeeze tests we consider that this Decision Document achieves the following:

- a) **Price stability and predictability:** The obligation of cost orientation for SB-WLR ensures that Eir's price is set with reference to the higher of the combined BU-LRAIC+ and Eir's Indexed RAB inside the Modified LEA or nationally Eir's Actual Costs Adjusted for Efficiencies with the BU-LRAIC+ costs for active equipment (i.e., line card) for the provision of SB-WLR. This approach should give Eir certainty that any money invested in maintaining or upgrading the network can be recovered.

For SABB Outside the LEA, Eir's price is set by reference to Eir's Actual Costs Adjusted for Efficiencies and the BU-LRAIC+ methodology for active equipment, for the provision of SABB Outside the LEA. Similar to SB-WLR, it should allow Eir to recover any money it invests in its network (in this case Outside the LEA).

Eir should not increase the price or introduce a new price for SB-WLR nationally and / or SABB Outside the LEA without demonstrating to ComReg that any revised (or new) prices are in line with the specified cost orientation obligation. This gives a level of certainty / predictability

to other operators and should help OAOs in terms of likely investment decisions, especially in the Modified LEA.

The retail margin squeeze tests should ensure that there is sufficient margin between retail line rental and wholesale line rental so that OAOs can replicate Eir's retail service and still make a margin – this gives certainty and predictability to OAOs.

The wholesale margin squeeze test should ensure a sufficient economic space between the price of POTS based VUA and the price of standalone NGA Bitstream / VUA (including a contribution towards Managed VoB). This should provide certainty to operators considering investment in alternative voice platforms.

- b) **Promotes investment:** The obligation of cost orientation (with reference to Eir's Actual Costs Adjusted for Efficiencies) should help operators' investment plans.

For SB-WLR this should allow Eir to recover any money invested efficiently in maintaining or upgrading its network on the basis that Eir will have the assurance that what it spends can be recouped over the Price Control Period. On the other hand it should send the appropriate investment signals to operators in the Modified LEA.

For SABB Outside the LEA, Eir's Actual Costs Adjusted for Efficiencies and the BU-LRAIC+ methodology for active equipment, Outside the LEA should also give Eir the assurance that what it spends can be recouped. The build or buy signals are not relevant in this area, absent state funding, therefore the key objective is cost recovery.

The wholesale margin squeeze test for POTS based VUA should encourage OAOs to invest in their own Managed VoB platform either currently or prospectively.

- c) **Consistency of approach across networks:** We have taken utmost account of the 2013 Recommendation as discussed in Chapter 4 of the Consultation Document. While the 2013 Recommendation is not specifically relevant to Market 2 (SB-WLR) ComReg considers that the objectives of the 2013 Recommendation are equally important in the context of SB-WLR i.e., to ensure that "*operators can cover costs that are efficiently incurred and receive an appropriate return on invested Capital*" and also to ensure that "*the appropriate 'build-or-buy' signal strikes an appropriate balance between ensuring efficient entry and sufficient incentives to invest*". This is reflected in the pricing approach for SB-WLR as discussed in Chapter 6.

For SABB Outside the LEA we consider that the build or buy signals are not appropriate in this area as no commercial operator would invest absent state funding (or the NBP). In addition, the pricing approach for SABB Outside the LEA is consistent with the WBA Pricing Decision.

The margin squeeze tests are consistent with other wholesale / retail margin squeeze tests, including NGA and current generation Bitstream.

- d) **Ensures retail margin for operators competing with Eir:** The retail margin squeeze test in Chapter 10 should ensure that competitors have sufficient retail margin for line rental and be in a position to replicate the retail offers of Eir. This should be good for competition and innovation.
- e) **Ensures sufficient economic space for operators using alternative technologies:** At the wholesale level ComReg considers in Chapter 10 that there should be sufficient economic space between the price for POTS based VUA and the price for standalone VUA / NGA Bitstream (including a contribution towards the cost of Managed VoB) so that an operator is incentivised to move to alternative technologies as appropriate. This should also ensure technological neutrality.

Chapter 15

15 Points raised on Draft Decision Instruments

15.1 Introduction

- 15.1 In Annex 1, 2 and 3 of the Consultation Document, we set out the draft Decision Instruments relating to the price control obligation for current generation access services in the WPNIA market, WBA market and FACO market.
- 15.2 The respective discussion is considered under the following headings:
- Decision Instrument for WPNIA market;
 - Decision Instrument for WBA market; and
 - Decision Instrument for FACO market.

15.2 Decision Instrument for WPNIA Market

15.2.1 Submissions to the Consultation Document

- 15.3 Enet believed that “...*the draft text of the proposed Decision Instrument for Market 4 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed.*” while Vodafone agreed.
- 15.4 Eir, BT and ALTO raised a number of points on the draft text of the Decision Instrument for Market 4. Eir, BT and ALTO’s submissions have been categorised and dealt with under separate headings in turn below.

Definitions:

- 15.5 ALTO and BT suggested a change to the definition of ‘*Fibre to the Cabinet*’. BT stated that the word ‘*the*’ should be replaced with ‘*a*’ in the third line of the definition. BT stated that “*The reason being that there are normally two street cabinets, one which is the copper primary connection point and the other houses the NGA electronics....*”⁶⁶³

⁶⁶³ BT Response to Consultation 15/67, page 12/13.

- 15.6 With regard to section 4.9, ALTO noted that “...ComReg uses the term ‘plus a reasonable rate of return’..... ComReg should define what it means’.”⁶⁶⁴
- 15.7 Eir suggested the following with regard to the definition of ‘Access Reference Offer’
- (i) “...this definition should refer to the current version of the offer from time to time and not the latest version as it is the version which is current when compliance is required, not a subsequent version when compliance may be checked or confirmed.”⁶⁶⁵
 - (ii) “...references to the WPNIA market are shortly to be replaced by ComReg’s review of the 2014 Recommendation, Markets 3a and 3b, this reference too should be updated.”⁶⁶⁶
 - (iii) “The second sentence should read ‘For the avoidance of doubt the ARO includes the documents which are expressly referred to in the ARO as being part of the ARO.’”⁶⁶⁷
- 15.8 Eir stated that the definition of Revised Copper Access Model “...should be more precise...any amendments should be agreed the wording it would propose is “the model, as amended from time to time by agreement between eircom and ComReg...”⁶⁶⁸
- 15.9 Eir suggested that in the definition of ‘Shared Sub-Loop Unbundling’ and ‘Sub-Loop Unbundling’ “the requirements of ‘appropriate handover’ should be specified, including where that handover should take place, including the distance from any eircom cabinet which is regarded as appropriate. Otherwise the terminology is too imprecise.”⁶⁶⁹
- 15.10 Eir also stated that “The definition of what constitutes unbundled access to the fibre loop should be clear...The extent to which eircom is required to invest in technology capable of unbundling must be clear, as must where the cost of that investment is to be recovered. ComReg should provide clarity as to how the obligation relates to technical feasibility to meet expectations.”⁶⁷⁰

⁶⁶⁴ ALTO Response to Consultation 15/67, page 19.

⁶⁶⁵ Eir Response to Consultation 15/67, page 45.

⁶⁶⁶ Eir Response to Consultation 15/67, page 45.

⁶⁶⁷ Eir Response to Consultation 15/67, page 45.

⁶⁶⁸ Eir Response to Consultation 15/67, page 45.

⁶⁶⁹ Eir Response to Consultation 15/67, page 45.

⁶⁷⁰ Eir Response to Consultation 15/67, page 46.

Pricing obligations:

- 15.11 BT stated that for section 5.4 *“The language is too loose and we propose ‘backhaul’ should be changed to ‘backhaul data costs’...”*⁶⁷¹ BT recognised that this point was *“...outside of the scope of this price control...”*⁶⁷²
- 15.12 ALTO also made similar comments to that of BT with regard backhaul.
- 15.13 Eir disagreed with ComReg regarding the draft text of Decision Instrument for Market 4 and suggested that it *“... would be clearer and more precise if the Decision Instrument did not amend a series of other documents and just set out, in consolidated form, what is to apply now.”*⁶⁷³ In particular with regard to section 4.1, Eir stated that *“This amendment is unclear...It would be helpful for a consolidated text to be made available.”*⁶⁷⁴
- 15.14 For section 4.2, Eir stated that the *“...drafting is unclear.”* adding that it understands *“(a) a price equal to the costs incurred by an efficient operator providing SLU nationally”...to mean that the price is to be based on nationally averaged costs as calculated in the model (rather than using the figures calculated for LEA or non-LEA)...*⁶⁷⁵
- 15.15 In addition for section 4.2 (a) where it is stated that *“...Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and Top-Down HCA costing methodology...”* Eir considered this text *“...is unclear [as to] whether any amendments are required to contain exactly the same combination or another combination of methodologies, and whether the BU-LRAIC+ are costs required to be updated every time the HCA costs are updated and in the same manner?”*⁶⁷⁶ Eir added that the comments for section 4.2 apply to all instances of the use of such terminology in the Decision Instrument.
- 15.16 With regard to section 4.2 (c) relating to the revised SLU charge derived by the application of the Margin Squeeze Test between the VUA monthly charge and the SLU monthly charge Eir stated that the original NGA margin squeeze model *“.... assumes a copper sub-loop is always required for NGA because it only contemplates FttC, and therefore does not properly deal with FttP. It must therefore be amended to reflect increasing prospects of significant FttP rollout...”*⁶⁷⁷

⁶⁷¹ BT Response to Consultation 15/67, page 12.

⁶⁷² BT Response to Consultation 15/67, page 12.

⁶⁷³ Eir Response to Consultation 15/67, page 44.

⁶⁷⁴ Eir Response to Consultation 15/67, page 46.

⁶⁷⁵ Eir Response to Consultation 15/67, page 46.

⁶⁷⁶ Eir Response to Consultation 15/67, page 46.

⁶⁷⁷ Eir Response to Consultation 15/67, page 46.

- 15.17 Eir further stated that the comments in relation to section 4.2 also apply to section 5.3.
- 15.18 With regard to section 4.4, Eir stated that it “...*makes little sense given that the SLU charge is not applied in practice.*”⁶⁷⁸
- 15.19 For section 4.5, Eir stated that “...*it should be specified where eircom is to ascertain the incremental costs associated with the provision of Line Share. If the CAM sets out a charge of €0.77 per month... then there needs to be a mechanism for that charge to change as costs change... It is not clear to us that an absolute cap for all time can be justified by ComReg.*”⁶⁷⁹
- 15.20 In relation to section 4.7, Eir stated that it should be specified “...*whether the combination of a BU-LRAIC+ costing methodology and a Top-Down HCA costing methodology can change and what might cause a change – e.g. use of civil engineering infrastructure for the NBP.*”⁶⁸⁰ Eir stated that the same comment applied to section 4.8 and 5.1.
- 15.21 For section 4.8, Eir considered that the text “...*should be clarified that this section only applies to the price for dark fibre when duct or pole access is not available and not otherwise.*”⁶⁸¹ Eir considered that the same comment applied to section 5.2.
- 15.22 With regard to section 4.9 Eir stated that ComReg “...*should specify whether the draft CAM sets out what is an appropriate adjustment for efficiencies and a reasonable rate of return and whether the extent of such adjustments are able to change with changes to actually incurred costs.*”⁶⁸² Eir added that this comment also applied to section 5.5.
- 15.23 In section 4.10 and 5.6 Eir suggested that the last line should be amended to read as follows: “*charge the Undertaking a one-off per event fault charge of no more than 100.*”⁶⁸³

⁶⁷⁸ Eir Response to Consultation 15/67, page 46.

⁶⁷⁹ Eir Response to Consultation 15/67, page 46.

⁶⁸⁰ Eir Response to Consultation 15/67, page 46.

⁶⁸¹ Eir Response to Consultation 15/67, page 47.

⁶⁸² Eir Response to Consultation 15/67, page 47.

⁶⁸³ Eir Response to Consultation 15/67, page 47.

- 15.24 With regard to section 4.10 and 5.6 of the Decision Instrument for Market 4, BT stated that it had “...serious concerns about how fault codes change status as clear codes and the reason for a fault...”⁶⁸⁴ BT added that “An industry discussion is expected to commence on these types of issues as part of the No Faults Found work and we consider it premature to have regulation proposed given the current unclear situation around fault codes and fault clear codes. We would strongly challenge and object to paying for many faults and this piece of regulation is likely to stimulate a stream of unhelpful disputes. The fault would have to be proven – Eir Group fault and clear codes are not good enough at this time.”⁶⁸⁵
- 15.25 For section 5.4 Eir stated that “..ComReg appear to be saying that fibre backhaul costs should be cost regulated in accordance with the revised CAM...To the extent that ComReg is seeking to impose cost regulation on fibre backhaul this is inappropriate...”⁶⁸⁶ Eir also stated that the same comment applied to section 5.5 to the extent that such ancillary services are not the same as the ancillary services for current generation WPNIA products.
- 15.26 With regard to section 6.1, Eir suggested that when notifying price changes to ComReg the last two lines should read as follows:

*“...that the price amendment [€] [or] new price is consistent with the then current version of the Revised Copper Access Model.”*⁶⁸⁷

Other points:

- 15.27 ALTO stated that “...Commission Recommendations are not in-fact binding.... ComReg should bear this in mind in arriving at any decisions that it later may opt to make on foot of this consultation.”⁶⁸⁸
- 15.28 Eir stated that “The Decision Instruments refer to Markets 2, 4 and 5 which are no longer the correct markets under the current Recommendation and Market 2 is no longer on the list of relevant markets. It would be more practical to include a reference to the current markets as well as those old markets which ComReg is still continuing to review.”⁶⁸⁹
- 15.29 In addition, Eir stated that “...the controls largely relate to the old Market 1 rather than Markets 2 and 5. Market 1 is, of course, no longer on the list of relevant markets.”⁶⁹⁰

⁶⁸⁴ BT Response to Consultation 15/67, page 12.

⁶⁸⁵ BT Response to Consultation 15/67, page 12.

⁶⁸⁶ Eir Response to Consultation 15/67, page 47.

⁶⁸⁷ Eir Response to Consultation 15/67, page 47.

⁶⁸⁸ ALTO Response to Consultation 15/67, page 19.

⁶⁸⁹ Eir Response to Consultation 15/67, page 44.

⁶⁹⁰ Eir Response to Consultation 15/67, page 44.

- 15.30 Eir referred to ComReg's Wholesale Fixed Voice Call Origination and Transit Markets (ComReg 15/82) and stated that "...the European Commission urges ComReg to review the retail access market without delay given eircom's relatively low retail market share and suggests that regulation in this market and the FACO market are no longer appropriate."⁶⁹¹ In addition, Eir stated that the European Commission "...notes that ComReg has presided over a highly complex regulatory setting in Ireland and calls on it to streamline the existing pricing remedies...These comments have not been heeded by ComReg in this consultation and in the draft Decision Instruments and eircom suggests that ComReg revisit its proposals in this consultation as a matter of urgency."⁶⁹²
- 15.31 Eir considered that "ComReg's s12 duties in relation to promoting competition include encouraging efficient investment in infrastructure and promoting innovation...eircom's ability to innovate is severely limited by the need to take into account a multiplicity of price controls, despite the acknowledged retail competition."⁶⁹³
- 15.32 Eir stated that it "...would be clearer and more precise if the Decision Instrument did not amend a series of other documents and just set out, in consolidated form, what is to apply now. As a legal, technical and practical matter that is why complicated legislation, such as this, is consolidated rather than there being a series of amendments of a number of unrelated decisions."⁶⁹⁴

15.2.2 ComReg's Position:

Definitions:

- 15.33 With regard to ALTO's and BT's views at paragraph 15.5 regarding the definition of FTTC in the draft WPNIA Decision Instrument, ComReg would like to clarify that 'FTTC' is not relevant to the current Decision Instrument as we are not addressing the pricing obligations for NGA services and therefore the definition has been removed.
- 15.34 In relation to ALTO's point at paragraph 15.6 that a 'reasonable rate of return' in the draft WPNIA Decision Instrument should be defined, ComReg considers that it is clear from Chapter 4 of the Consultation Document and Chapter 4 of this Decision that the reasonable rate of return is the fixed telecoms WACC rate of 8.18%. Please see paragraph 5.69.

⁶⁹¹ Eir Response to Consultation 15/67, page 44.

⁶⁹² Eir Response to Consultation 15/67, page 44.

⁶⁹³ Eir Response to Consultation 15/67, page 45.

⁶⁹⁴ Eir Response to Consultation 15/67, page 44.

15.35 With regard to Eir's submission at paragraph 15.7 in relation to the definition of 'Access Reference Offer' in the draft WPNIA Decision Instrument, ComReg has set out its view below.

- (i) In relation to Eir's point that the ARO definition should refer to the current version of the offer from time to time and not the latest version, for reasons of consistency of decision making ComReg does not agree, though in any event, we consider that the proposed change would have no legal effect. With respect to Eir's concern that in any enforcement action reference would be made to the latest version of the ARO rather than the ARO in place at the time of any alleged breach, ComReg can assure Eir that this is not ComReg's practice and hence there no basis for any such concern.
- (ii) In relation to Eir's point that references to the WPNIA market should be updated in line with the new 2014 market recommendation, ComReg considers that as this pricing Decision currently relies on the WPNIA market/ Market 4 analysis (consistent with the 2007 recommended markets) it is therefore appropriate that our pricing remedies continue to be based on the WPNIA market/ Market 4 at least until the new market review (Market 3a) is complete.
- (i) In relation to Eir's suggestion that the second sentence should read '*For the avoidance of doubt the ARO includes the documents which are expressly referred to **in the ARO** as being part of the ARO*' [**emphasis added**], ComReg agrees to include this suggested change.

15.36 Further to Eir's point at paragraph 15.8 that the definition of Revised Copper Access Model in the draft WPNIA Decision Instrument should be more precise and that any amendments to the model should be agreed between Eir and ComReg, ComReg does not agree. The obligation to ensure compliance with its pricing obligations, including the obligation to keep the Revised CAM up-to-date, resides with Eir. Therefore, no changes are required to the definition of Revised CAM.

15.37 In response to Eir's point at paragraph 15.9 that in the definition of 'Shared Sub-Loop Unbundling' and 'Sub-Loop Unbundling' the term 'appropriate handover' should be specified ComReg considers that there is no ambiguity in the current wording of these definitions and that no further specification is therefore necessary.

15.38 With regard to Eir's views at paragraph 15.10 that the definition of what constitutes unbundled access to the fibre loop in the draft WPNIA Decision Instrument should be clear, ComReg would like to clarify that 'unbundled access to the fibre loop' is not relevant to the current Decision Instrument as we are not addressing the pricing obligations for NGA services and therefore the definition has been removed.

Pricing obligations:

15.39 In relation to BT's point at paragraph 15.11 that for section 5.4 of the draft WPNIA Decision Instrument the language is too loose and 'backhaul' should be changed to 'backhaul data costs', ComReg would like to point out that the obligation regarding backhaul is a carry-over from the NGA Decision and is not a new obligation. The reason the obligation is repeated here is to take account of reference to the new "Revised CAM". Therefore, we consider that no change is required to the backhaul in the context of this Decision Document.

15.40 With regard to Eir's point at paragraph 15.13 that it would be helpful for a consolidated text to be made available, in particular with regard to the amendment at Section 4.1 of the draft WPNIA Decision Instrument, while ComReg will consider this request outside the scope of this Decision, ComReg notes that no such "consolidated" obligations would have any legal effect, and it would remain necessary to refer to the relevant original Decisions and Decision Instruments in order to identify all relevant obligations.

15.41 In response to Eir's point at paragraph 15.14 that the drafting of Section 4.2 part (a) of the draft WPNIA Decision Instrument is unclear with regard to the price for SLU being set based on nationally averaged costs, ComReg considers that the wording "... *the costs incurred by an efficient operator providing SLU nationally...*" indicates national costs. This is discussed in Chapter 6, paragraphs 6.94 to 6.105 of the Consultation Document. However, for additional clarity we have included the words "*average*" in the obligation at Sections 4.2 and 4.3.

15.42 Further to Eir's point at paragraphs 15.15 and 15.17 that Section 4.2 (a) and Section 5.3 (a) of the draft WPNIA Decision Instrument is unclear as to whether any amendments are required to contain exactly the same combination (BU costs and TD costs) and whether the BU costs are required to be updated every time the HCA costs updated, ComReg notes that the Revised CAM is based on forecasted volumes and costs for the Price Control Period. As set out in Chapter 12, the model would only be re-opened if material and sustainable changes occurred during the Price Control Period. In any event and as set out in Chapter 6 in the context of LLU and SLU, Eir has access to the entire cost model and should it consider that the underlying data and / or assumptions used to set the LLU / SLU prices requires amendment then this would be subject to ComReg's prior approval.

- 15.43 In relation to Eir's point at paragraphs 15.16 and 15.17 regarding Section 4.2(c) and Section 5.3(c) of the draft WPNIA Decision Instrument where Eir considers that the NGA margin squeeze model must be amended to reflect increasing prospects of significant FTTP rollout, ComReg would like to clarify that the NGA margin squeeze model in the NGA Decision relates to both FTTC and FTTH deployment. Please see Chapter 10 of the NGA Decision. Therefore, if Eir considers that any amendments are required to the data contained in the NGA margin squeeze model, it is important that Eir keeps the NGA margin squeeze model up-to-date to ensure compliance with its price control obligations.
- 15.44 With regard to Eir's submission at paragraph 15.18 where it considers that Section 4.4 of the draft WPNIA Decision Instrument makes little sense as the SLU charge is not applied in practice, ComReg disagrees. As set out in the NGA Decision, the SLU cost oriented price (Market 4 product) is currently the key cost input to the cost stack for VUA (Market 5 product) in the NGA margin squeeze model, given that it reflects the cost from the home to the cabinet. This approach ensures that copper and fibre based services are priced consistently relative to their cost of provision. Therefore, Section 4.4. ensures that where there is a reduction to the SLU by virtue of the margin squeeze test between SLU and VUA then this reduction should be consistently applied to the LLU price using the Revised CAM, as appropriate, to maintain price consistency between copper and fibre products.
- 15.45 We note Eir's point at paragraph 15.19 regarding Section 4.5 of the draft WPNIA Decision Instrument that it should be specified where Eir is to ascertain the incremental costs associated with the provision of Line Share and that there needs to be a mechanism for the line share charge of €0.77 to change as costs change as it is not clear how an absolute cap can be justified by ComReg. Firstly, ComReg considers that the incremental costs associated with the provision of Line Share are set out in Chapter 9, paragraphs 9.5 to 9.11 of the Consultation Document. Secondly, we agree that the Line Share charge of €0.77 should change as costs change and on that basis we have removed Section 4.6 (specifying the price of €0.77) from the final WPNIA Decision Instrument. Therefore, Eir are obliged to ensure compliance with their cost orientation obligation (i.e., incremental costs) and the onus resides with Eir to keep the Line Share charge under review. The Line Share charge of €0.77 allows Eir to reduce the charge in line with its cost orientation obligation so long as any changes are subject to ComReg's approval.
- 15.46 ComReg notes Eir's point at paragraph 15.20 regarding Section 4.7, 4.8 and 5.1 of the draft WPNIA Decision Instrument where it considers that it should be specified whether the combination of BU-LRAIC+ costs and TD HCA costs can change and what might cause a change. As set out in Chapter 12, Eir should review the Revised CAM annually but the model would only be re-opened if

material and sustainable changes occurred during the Price Control Period, which would be assessed on a case-by-case basis. Therefore, it is only changes where, to ComReg's satisfaction, that are significant and sustainable that would be considered. Please see paragraph 12.17. For poles, we consider that annually Eir should provide ComReg with an annual statement as part of its AFI, as discussed at paragraph 12.19.

- 15.47 In relation to Eir's point at paragraph 15.21 that in Section 4.8 of the draft WPNIA Decision Instrument it should be clarified that the price for dark fibre only applies when duct or pole access is not available and not otherwise, ComReg disagrees. ComReg considers that it is clear from the NGA Decision, at Section 6.2(ix) of the WPNIA Decision Instrument annexed to that Decision at Annex 1, that dark fibre only applies when duct and pole access is not available and where dark fibre is reasonably available, therefore it is not necessary to repeat this obligation as part of the current WPNIA Decision Instrument. Please also see clarification provided at paragraphs 8.100-8.104.
- 15.48 Further to Eir's point at paragraph 15.22 that Section 4.9 and Section 5.5 of the draft WPNIA Decision Instrument should specify whether the draft CAM sets out what is the appropriate adjustment for efficiencies and a reasonable rate of return, ComReg disagrees. Section 4.9 and Section 5.5 of the draft WPNIA Decision Instrument relates to ancillary charges which are not part of the Revised CAM but rather subject to a separate model / spreadsheet called the Ancillary Services Cost Model in the context of Market 4. As specified in Chapter 11 of the Consultation Document, the reasonable rate of return is consistent with the WACC rate, please refer to paragraph 11.10 of the Consultation Document. All other assumptions and efficiencies made in relation to the ancillary charge are set out in Section 11.2 of the Consultation Document. We consider that it is sufficient to explicitly set out the parameters and assumptions associated with the ancillary charges in the main body of the Decision Document rather than include the specific components of the charges in the Decision Instrument.
- 15.49 In response to Eir's view at paragraph 15.23 that Section 4.10 and Section 5.6 of the draft WPNIA Decision Instrument should be amended to include the words "per event" regarding the charge for one-off faults, ComReg disagrees. No justification was provided by Eir on why this change would be required. In addition, we consider that it would be necessary for Industry to understand the implications of such a change. Therefore, we consider that no change is currently required in this regard.

- 15.50 ComReg notes BT's point at paragraph 15.24 with regard to section 4.10 and 5.6 of the draft WPNIA pricing Decision Instrument where BT highlighted its serious concerns about how fault codes change status as clear codes and the reason for a fault and that this piece of regulation is likely to stimulate a stream of unhelpful disputes. ComReg would like to point out that the obligations at Section 4.10 and 5.6 are not new obligations but rather a carry-over from the NGA Decision so that all related pricing obligations for Market 4 are contained in the Decision Instrument at Annex 1 of this Decision Document. The obligations at Section 4.10 and 5.6 are already imposed by virtue of Section 4.8 of the Decision Instrument at Annex 1 of the NGA Decision. Therefore, we are not imposing new obligations with regards to faults.
- 15.51 ComReg notes Eir's submission at paragraph 15.25 that Section 5.4 of the draft WPNIA Decision Instrument appears to state that fibre backhaul costs should be regulated in accordance with the Revised CAM and if ComReg is seeking to impose cost regulation on fibre backhaul this is inappropriate. ComReg would like to clarify that the obligation of cost orientation regarding access to Backhaul in the context of NGA was already imposed in the NGA Decision. Therefore, this Decision Document is only replacing the words "Copper Access Model" in Section 11.10 of the WPNIA Decision Instrument in Annex 1 of the NGA Decision with the words "Revised CAM".
- 15.52 We also note Eir's point at paragraph 15.25 that the same comments as set out at paragraph 15.51 by Eir also relates to Section 5.5 of the draft WPNIA Decision Instrument relating to ancillary charges for NGA services. ComReg would like to clarify that the obligation of cost orientation has already been applied to the ancillary services in the context of NGA in the WPNIA Market. Please see Annex 1 (Section 11 of the WPNIA Decision Instrument) set out in the NGA decision. In this Decision Document we are further specifying that cost orientation for ancillary services in the WPNIA market means that Eir can recover no more than its actual incurred costs (adjusted for efficiencies) plus a reasonable rate of return associated with the provision of ancillary services to next generation WPNIA products and services in line with the Ancillary Services Cost Model. As set out in Chapter 11, paragraph 11.7 of the Consultation Document, this is consistent with Regulation 13(2) of the Access Regulations where operators should be allowed to recover the investment made as well as a reasonable rate of return on capital employed. The assessment of the relevant costs in the context of setting the charges for ancillary service in Market 4 is set out in Chapter 11, section 11.2 of the Consultation Document and in Chapter 11 paragraphs 11.12 to 11.17 of this Decision.
- 15.53 In response to Eir's point at paragraph 15.26 that Section 6.1 of the draft WPNIA Decision Instrument should be reworded to take account of "*the then current*

version of the Revised Copper Access Model' when notifying price changes to ComReg, please see paragraph 15.35(i).

Other points:

- 15.54 In relation to ALTO's submission at paragraph 15.27 that the European Commission Recommendations are not binding and that ComReg should bear this in mind in making its decision, ComReg has addressed this point at paragraph 14.114.
- 15.55 With regard to Eir's point at paragraph 15.28 that the Decision Instruments should make reference to the new current markets as well as those old markets which ComReg is still continuing to review, ComReg does not agree. This pricing Decision currently relies on market analysis decisions consistent with the 2007 recommended markets. Therefore, until such time as the current WPNIA Market Decision, the WBA Market Decision and the FACO Decision are reviewed under the 2014 recommended markets it is appropriate that our pricing remedies continue to be based on the 2007 recommended markets at least until the new market reviews are completed.
- 15.56 In relation to Eir's point at paragraph 15.29 that the controls largely relate to the old Market 1 rather than Market 2 and 5 and Market 1 is no longer on the list of relevant markets. ComReg does not agree that the controls relate largely to the old Market 1. In the FACO Decision SB-WLR was moved from Market 1 into Market 2. Therefore, Market 1 is not longer relevant in the context of SB-WLR. This Decision Document relates specifically to Market 2 for specifying the price control obligation for SB-WLR. In addition, this Decision further specifies the cost orientation obligation for current generation SABB Outside the LEA only in Market 5 and we further specify the cost orientation obligation for LLU, SLU, Line Share, CEI and dark fibre in Market 4.
- 15.57 ComReg notes Eir's submission at paragraph 15.30 that the European Commission has urged ComReg (as part of the FACO Decision) to review the retail access markets and suggests that regulation is no longer appropriate while also noting that ComReg has presided over a highly complex regulatory setting and calls on it to streamline the existing pricing remedies which Eir considers that ComReg has not heeded. Please refer to paragraphs 10.55-10.56.
- 15.58 In relation to Eir's point at paragraph 15.31 that its ability to innovate is severely limited by the need to take into account a multiplicity of price controls despite the acknowledged retail competition, ComReg does not agree. Market 4 is the wholesale physical network infrastructure access market where all associated price control remedies have been fully justified and reasoned by ComReg in the relevant pricing Decisions.

- 15.59 With regard to Eir's point at paragraph 15.32 regarding consolidated text, please see ComReg's position at paragraph 15.40.
- 15.60 In addition to the above, in the Consultation Document, the prices for LLU and SLU were described as being a "maximum" and in the Draft WPNIA Decision Instrument as requiring inter alia that respective prices be "no more than". In order to avoid any ambiguity and to provide clarity in terms of the pricing process for LLU and SLU we have removed reference to "maximum" and / or "no more than" with regard to the LLU and SLU prices. The pricing process for LLU and SLU is based on the fact that the Revised CAM currently determines the rental prices for LLU / SLU for each of the relevant years in the Price Control Period. In addition, Eir has the opportunity to reduce these prices subject to their cost orientation obligation (including justification of any changes by way of the Revised CAM) and subject to ComReg's approval. Therefore, as the pricing process allows Eir to propose reductions to the LLU / SLU prices we consider that it is clearer to just refer to the LLU / SLU prices (i.e., therefore price points).⁶⁹⁵

15.2.3 ComReg's Final Position:

- 15.61 The final Decision Instrument for the price control obligations and transparency obligations associated with LLU, SLU, Line Share, CEI, dark fibre and ancillary services in the WPNIA Market is set out at Annex 1.

15.3 Decision Instrument for WBA Market

15.3.1 Submissions to the Consultation Document

- 15.62 Vodafone stated that it "agrees"⁶⁹⁶ with the draft text of the proposed Decision Instrument for Market 5 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed.
- 15.63 ALTO raised the same points, as set out at paragraphs 15.6 and 15.27 regarding the European Commission Recommendation not being binding and the point on defining the reasonable rate of return.
- 15.64 Eir stated that it "...repeats and reiterates all of the general points made in response to question 29..."⁶⁹⁷

⁶⁹⁵ This clarification is consistent with the process for updating LLU / SLU prices pursuant to the NGA Decision, where Eir must charge the lower of (i) a specified price; or (ii) a maximum price determined by the relevant model (i.e., a price point).

⁶⁹⁶ Vodafone Response to Consultation 15/67, page 16.

⁶⁹⁷ Eir Response to Consultation 15/67, page 48.

- 15.65 In addition, Eir considered that “*ComReg should clearly set out all price control and transparency obligations in one place.*”⁶⁹⁸
- 15.66 With regards to section 4.1 Eir believed that for clarity the text should read as follows: “*Such costs shall be calculated using a Top-Down HCA costing methodology except for Active Assets the costs of which shall be calculated using a BU-LRAIC+ methodology.*”⁶⁹⁹
- 15.67 For section 4.3, Eir suggested that the words “*which is in eircom’s possession and related to costs Outside the LEA*”⁷⁰⁰ should be added after the words ‘seek further information’.
- 15.68 Eir considered that for section 4.4 the words “*(as such adjustments and rates of return are reflected in the Revised Copper Access Model)*” should be inserted after “*(plus a reasonable rate of return)*” so that there is no doubt as to what the adjustments and reasonable rates are.”⁷⁰¹
- 15.69 Eir stated that the amendments specified for section 4.4 should also be made to section 4.5.

15.3.2 ComReg’s Position

- 15.70 We note ALTO’s comments at paragraph 15.63 regarding the European Commission Recommendation not being binding and the point on the rate of return, please see paragraph 15.54 on the European Commission Recommendation and paragraph 15.34 on the rate of return.
- 15.71 With regard to Eir’s point at paragraph 15.64 that it repeats all of the general points made in relation to the draft WPNIA Decision Instrument, ComReg has addressed these points at paragraphs 15.35 - 15.58. However, in the specific context of the draft WBA Decision Instrument the comments made in relation to the draft WPNIA Decision Instrument are not relevant as the only product considered in the context of the WBA market is SABB Outside the LEA where the pricing approach is based predominantly on TD HCA costs unlike the combination of BU costs and TD costs for WPNIA services.

⁶⁹⁸ Eir Response to Consultation 15/67, page 48.

⁶⁹⁹ Eir Response to Consultation 15/67, page 48.

⁷⁰⁰ Eir Response to Consultation 15/67, page 48.

⁷⁰¹ Eir Response to Consultation 15/67, page 48.

- 15.72 Further to Eir's submission at paragraph 15.65 that ComReg should clearly set out all price control and transparency obligations in one place, while ComReg will consider this request outside the scope of this Decision, ComReg notes that no such "consolidated" obligations would have any legal effect, and it would remain necessary to refer to the relevant original Decisions and Decision Instruments in order to identify all relevant obligations.
- 15.73 In relation to Eir's point at paragraph 15.66 that Section 4.1 of the draft WBA Decision Instrument should read as follows: "*Such costs shall be calculated using a Top-Down HCA costing methodology except for Active Assets the costs of which shall be calculated using a BU-LRAIC+ methodology*", ComReg has amended the text to reflect Eir's suggestion on active assets.
- 15.74 ComReg notes Eir's point at paragraph 15.67 that Section 4.3 of the draft WBA Decision Instrument specifically relating to the request for further information by ComReg should include the words "*which is in eircom's possession and related to costs Outside the LEA*". ComReg does not agree. Section 4.3 relates to the provision by Eir of a detailed written submission demonstrating compliance with its pricing obligations where it notifies a new / increased price to Eir. Should ComReg require further information from Eir to assist it or inform it in its decision as to whether approval to implement the new or revised price should be given or withheld, then ComReg should not be restricted in what information it can request. What is considered as "further information" can only be assessed at that point in time when ComReg assess the data provided by Eir and therefore this needs to be done on a case-by-case basis.
- 15.75 With regard to Eir's point at paragraph 15.68 and 15.69 that in Section 4.4 and Section 4.5 of the draft WBA Decision Instrument relating to ancillary charges should incorporate the words "*(as such adjustments and rates of return are reflected in the Revised Copper Access Model)*" to ensure there is no doubt as to what the adjustments and reasonable rates are, please see paragraph 15.48.

15.3.3 ComReg's Final Position:

- 15.76 The final Decision Instrument for the price control obligations and transparency obligations associated with current generation SABB Outside the LEA and ancillary services in the WBA Market is set out at Annex 2.

15.4 Decision Instrument for FACO Market:

15.4.1 Submissions to the Consultation Document

- 15.77 Vodafone stated that it “agrees”⁷⁰² with the draft text of the proposed Decision Instrument for Market 2.
- 15.78 BT stated that it “generally agree[s] with the proposed decision subject to our concerns raised in our responses to the questions being resolved... the proposed decision reflects the discussion and a move to cost orientation for WLR.”⁷⁰³
- 15.79 ALTO stated that it “...agrees with the proposed decision subject to certain limited concerns with the cost modelling being resolved...the proposed decision reflects the discussion and a move to cost orientation for SB-WLR.”⁷⁰⁴
- 15.80 Eir stated that it “...repeats and reiterates all of the general points made...”⁷⁰⁵ with regard to the Decision Instruments for Market 4 and Market 5.
- 15.81 Eir, raised a number of points on the draft text of the Decision Instrument relating to Market 2. Eir’s submissions has been categorised and dealt with under separate headings in turn below.

Definitions:

- 15.82 Eir stated that “.....it notes for the record that the Market 2 referred to is no longer on the list of relevant markets.”⁷⁰⁶
- 15.83 Eir suggested that “the term ‘Authorised Undertaking’ should be defined.”⁷⁰⁷
- 15.84 Eir also stated that “...it would be helpful for the definition of “Next Generation Access” ... to make clear that eVDSL in Ireland clearly meets the criteria for NGA because, for NGA, the interconnection between the access network and the core network occurs at the Metropolitan Point of Presence (MPOP) rather than at the MDF. This means that the access network from the MPOP includes an optical element.”⁷⁰⁸
- 15.85 Eir considered that “...the definition of POTS perhaps needs to be changed in view of the number of homes in Ireland which either receive services from UPC or are mobile only...”⁷⁰⁹

⁷⁰² Vodafone Response to Consultation 15/67, page 16.

⁷⁰³ BT Response to Consultation 15/67, page 13.

⁷⁰⁴ ALTO Response to Consultation 15/67, page 21.

⁷⁰⁵ Eir Response to Consultation 15/67, page 49.

⁷⁰⁶ Eir Response to Consultation 15/67, page 49.

⁷⁰⁷ Eir Response to Consultation 15/67, page 49.

⁷⁰⁸ Eir Response to Consultation 15/67, page 49.

⁷⁰⁹ Eir Response to Consultation 15/67, page 49.

- 15.86 Eir also stated that *“The definition of the ‘Reasonably Efficient Operator’ should follow the definition in the Commission’s NGA Recommendation, which is “...the margin between the price charged to competitors on the upstream market for access and the price which the downstream arm of the SMP operator [or eircom] charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit” as the term ‘different basic cost function’ is fairly meaningless and imprecise.”*⁷¹⁰
- 15.87 Eir considered that *“The definition of a margin squeeze test should not assume failure and should be defined as a test to ensure that there is no failure.”*Eir added that the definition of retail margin squeeze test should read as follows: *“means the test as described ...Instrument which ensures that the setting of a retail price...allows another operator...margin as defined by the output of the Retail” ...Similar comments apply to the definition of the Wholesale Margin Squeeze Test.”*⁷¹¹
- 15.88 Furthermore, Eir stated that *“The definition of the margin squeeze model needs more precision so the second set of brackets should have the words “which model is” added at the beginning.”*⁷¹²
- 15.89 In addition, Eir suggested that *“The term ‘portfolio basis’ needs to be precisely defined.”*⁷¹³

Pricing obligations:

- 15.90 Eir suggested that *“...it would be clearer to withdraw the whole of section 12 of the Decision Instrument of D05/15 and set it out here.”*⁷¹⁴
- 15.91 With regard to section 4.1 of the Decision Instrument for Market 2, Eir stated that *“...given that there is only one Active Asset, it would be preferable just to refer to Line Cards.”*⁷¹⁵ In addition, Eir stated that *“Section (b) should presumably specify which each of the 2 costing methodologies should apply as in Section (a).”*⁷¹⁶
- 15.92 In relation to section 4.2 of the Decision Instrument for Market 2, Eir suggested that *“...there should be specific references to Paragraphs 10.10 and 10.11 of the SMP FACO decision or such paragraphs should be repeated here.”*⁷¹⁷
- 15.93 For section 4.3, Eir referred to its comments in the previous question where it considered that it is difficult to see what further information ComReg could

⁷¹⁰ Eir Response to Consultation 15/67, page 49.

⁷¹¹ Eir Response to Consultation 15/67, page 49/50.

⁷¹² Eir Response to Consultation 15/67, page 50.

⁷¹³ Eir Response to Consultation 15/67, page 50.

⁷¹⁴ Eir Response to Consultation 15/67, page 49.

⁷¹⁵ Eir Response to Consultation 15/67, page 50.

⁷¹⁶ Eir Response to Consultation 15/67, page 50.

⁷¹⁷ Eir Response to Consultation 15/67, page 50.

reasonably seek to request. With regard to section 4.8 Eir stated that *“This is not a reason to conduct a fishing expedition.”*, in particular Eir stated that for section 4.8(ii) the information *“...should be dependent on the information being in eircom’s possession, i.e. it cannot be asked for information it does not have or in a format it doesn’t have.”*⁷¹⁸

- 15.94 Eir questioned *“...whether it is appropriate when there is a cost orientated price for there to be a need for ComReg approval...eircom notes that other NRAs do not have this dual level of control and that it adds to the complication of the regulatory controls in Ireland.”*⁷¹⁹ Eir further stated that *“...the retail margin squeeze price control obligation is inappropriate and not required as there is cost orientation of the wholesale price...a “belt and braces” approach ensures that the regulatory controls in Ireland are not clear and transparent and are unnecessarily complicated. EU regulation clearly shows a preference for removing regulation at a retail level when cost oriented wholesale prices are in force. In this respect ComReg is failing to comply with the Framework and what we would expect to be comments from the Commission.”*⁷²⁰
- 15.95 In relation to section 4.7 Eir suggested that *“...the words ‘compliance and’ in line 5 should be deleted.”*⁷²¹ as *“The purpose of notification is to establish whether the new retail prices or amendments to existing retail prices comply with the margin squeeze test and nothing else.”*⁷²²
- 15.96 In addition, with regard to sections 4.8 (iii) and (iv), Eir stated that these sections *“...would not appear to be relevant to a request for information about a retail margin squeeze. This would appear to be a double jeopardy and if ComReg has concerns about the cost orientation of wholesale prices it should use its general powers or rely on Paragraph 4.3. Accordingly those sections should be deleted.”*⁷²³
- 15.97 Eir stated that section 4.9 *“...is not clear.”*⁷²⁴ Furthermore, Eir suggested that section 4.9 *“... should be limited to Promotions, Discounts and Bundles (all 3 of which terms need to be defined) to the retail price and the obligations should either be specified or related back to a retail price...would appear to be a hasty add-on, and obligations and procedures need to be spelt out.”*⁷²⁵

⁷¹⁸ Eir Response to Consultation, page 50.

⁷¹⁹ Eir Response to Consultation 15/67, page 50.

⁷²⁰ Eir Response to Consultation, page 50.

⁷²¹ Eir Response to Consultation, page 50.

⁷²² Eir Response to Consultation, page 50.

⁷²³ Eir Response to Consultation, page 50.

⁷²⁴ Eir Response to Consultation, page 50.

⁷²⁵ Eir Response to Consultation, page 50/51.

- 15.98 Eir suggested that *“Paragraphs 4.10 and 4.11 need to be deleted and to restate what is in Paragraphs 12.8, 12.9, 12.10 and 12.11 of the SMP FACO decision....by not doing this Paragraph 4.11 is completely unclear.”*⁷²⁶
- 15.99 In relation to section 12.9 of the Decision Instrument for Market 2, Eir stated that *“...12.9...is dependent on Paragraph 12.8. It would appear that there are intended to be 2 margin squeeze tests referred to in Paragraph 12.8 of the FACO SMP decision but ComReg should not leave this unclear.”*⁷²⁷
- 15.100 In addition with regard to section 4.11 Eir stated that *“...there should be an indication as to where the ‘contribution towards the cost of Managed VOB’ can be found. It should be possible for anyone, including all of eircom, ComReg and a judge to read these provisions without reference to separate cost models.”*⁷²⁸
- 15.101 With regard to section 5.1 Eir stated that *“...in the interests of transparency what eircom is required to do should be crystal clear and consistent. SB-WLR is an existing product already referred to in the wording of Paragraph 10.10. Inconsistent drafting is used, e.g. Paragraph 10.10 now says ‘unless otherwise determined by ComReg[’] and Paragraph 5.1 says ‘unless otherwise agreed by ComReg’.”*⁷²⁹
- 15.102 Eir suggested that *“Alternatively ComReg could carve out SB-WLR pricing from the existing language of Paragraph 10.10...[and]...clarify which time period relates to the SB-WLR element of an SB-WLR product, service or facility.”*⁷³⁰
- 15.103 Furthermore, Eir stated that the same comments apply to *“Paragraph 5.1[2]”* and that *“It would be far simpler to re-issue the Transparency provisions of the SMP FACO decision.”*⁷³¹

Other:

- 15.104 ALTO reiterated the points raised at paragraphs 15.6 and 15.27 regarding reliance on the European Commission Recommendations and also regarding the definition of a reasonable rate of return.

⁷²⁶ Eir Response to Consultation, page 51.

⁷²⁷ Eir Response to Consultation, page 51.

⁷²⁸ Eir Response to Consultation, page 51.

⁷²⁹ Eir Response to Consultation, page 51.

⁷³⁰ Eir Response to Consultation, page 51.

⁷³¹ Eir Response to Consultation, page 51.

15.105 Eir stated that with regard to Paragraph 1.2 it “... *would dispute that ComReg has taken into account the comments made by the European Commission... eircom supports the Commission’s call for ComReg to streamline the existing pricing remedies, to provide transparency and legal certainty for market players. The draft Decision Instruments attached to this consultation paper and draft Decision do not do so.*”⁷³²

15.4.2 ComReg’s Position

15.106 Further to Eir’s point at paragraph 15.82 that Market 2 is no longer on the list of recommended markets, ComReg would like to point out that this Decision in the context of the FACO market relies on market analysis decision consistent with the 2007 list of recommended markets. Therefore, at least until such time as the current FACO Decision is reviewed under the 2014 recommended markets it is appropriate that our pricing remedies continue to be based on the 2007 recommended markets.

15.107 In response to Eir’s point at paragraph 15.83 that the term ‘Authorised Undertaking’ should be defined, ComReg refers to the definition of ‘Undertaking’ contained in Regulation 2 of the Framework Regulations and as set out in the FACO Decision Instrument at Annex 3.

15.108 ComReg notes Eir’s point at paragraph 15.84 that the definition of NGA should make it clear that EVDSL in Ireland clearly meets the criteria for NGA. This point will be considered as part of the ongoing market analysis for Market 3a/ 3b. For now we consider that the definition of NGA does not require any amendment in light of EVDSL services. Please see also Information Notice 15/85.

15.109 In relation to Eir’s submission at paragraph 15.85 that the definition of POTS may need to be changed in view of the number of homes in Ireland which either receives services from UPC or are mobile only, ComReg disagrees. POTS has been fully considered as part of the FACO Decision and therefore no changes are required to the definition as part of this Decision.

15.110 Further to Eir’s point at paragraph 15.86 that the definition of REO should follow the definition of the Commission’s NGA Recommendation, ComReg disagrees. The REO definition is a working definition which ComReg considers is clear to Industry. The REO recognises that OAOs in the market have not achieved the same economies of scope and scale as the SMP operator and this difference in scale and scope needs to be reflected in the margin squeeze test. This is clearly set out in paragraph 10.23 of the Consultation Document and at paragraph 10.136 of this Decision Document.

- 15.111 In response to Eir's point at paragraph 15.87 that the definition of a margin squeeze test should not assume failure and should be defined as a test to ensure that there is no failure, ComReg considers that it is perfectly clear from the wording used to describe and define the margin squeeze tests in the FACO Decision Instrument exactly what test will be applied by ComReg in this regard. Therefore, ComReg is satisfied that there is no ambiguity, no lack of clarity and no possible cause for misunderstanding in this regard.
- 15.112 With regard to Eir's point at paragraph 15.88 that the definition of the retail line rental margin squeeze model needs more precision and the words "which model is" should be added at the beginning of the second set of brackets containing reference to EEO cost base, etc., ComReg agrees to add the suggested wording in order to provide Eir with the required clarity.
- 15.113 ComReg notes Eir's submission at paragraph 15.89 that the term portfolio should be precisely defined. ComReg agrees to define the term portfolio in the context of the retail line rental margin squeeze obligation in the FACO market in this Decision as:

Portfolio means the standalone line rental products on offer or on sale by Eir to End-Users nationally.

Pricing obligations:

- 15.114 In response to Eir's point at paragraph 15.90 that it would be clearer to withdraw Section 12 of the Decision Instrument of D05/15 and set it out in Section 4 of the draft FACO Decision Instrument, ComReg disagrees. In this Decision we are only withdrawing and replacing Section 12.6 and 12.7 of the Decision Instrument contained in ComReg Decision D05/15 regarding SB-WLR. Therefore, it is not necessary to withdraw the entire Section 12 and replace it here as the other parts of Section 12 are not relevant to this Decision with the exception of the margin squeeze obligation at Section 12.8 of ComReg Decision D05/15 as discussed in Chapter 10.
- 15.115 We note Eir's point at paragraph 15.91 that as Section 4.1 of the draft FACO Decision Instrument has only one active asset that it would be preferable just to refer to line cards. ComReg does not agree. The definition of Active Assets in the FACO Decision Instrument clearly specifies that "*in the context of this Decision means the line card associated with the provision of SB-WLR.*" Therefore, we consider that it is clear that active asset means line card and therefore no changes are required.

- 15.116 In relation to Eir's submission at paragraph 15.91 that Section 4.1 (b) of the draft FACO Decision Instrument should presumably specify each of the two costing methodologies that should apply as in Section 4.1(a), ComReg does not agree. The combination of costs used to set the SB-WLR price in the Modified LEA differs from the combination used for setting the national SB-WLR price. The Modified LEA SB-WLR price is based on BU costs for Non-reusable Assets and active assets while TD costs is used for Reusable Assets only whereas the national SB-WLR price is based on TD costs for Non-reusable Assets and Reusable Assets with BU costs only used for active assets. This is set out in Chapter 6, subsection 6.6.3 of the Consultation Document and at paragraph 6.123 of this Decision. Therefore, we consider that no changes are required as the combination of costs relevant to each specific area is clearly set out in the main body of the Decision.
- 15.117 In response to Eir's point at paragraph 15.92 that in Section 4.2 of the draft FACO Decision Instrument there should be specific reference to paragraphs 10.10 and 10.11 of the SMP FACO Decision or such paragraphs should be repeated here, ComReg acknowledges the point and Section 4.2 of the FACO Decision Instrument at Annex 3 now refers to Sections 10.10 and 10.11 of the SMP FACO Decision.
- 15.118 Further to Eir's point at paragraph 15.93 regarding its view that at Section 4.3 and Section 4.8 (ii) of the draft FACO Decision Instrument it is difficult to see what further information ComReg could reasonably seek to request, ComReg refers to paragraph 15.74.
- 15.119 ComReg also notes Eir's submission at paragraph 15.94 on whether it is appropriate when there is a cost oriented price for there to be a need for ComReg approval. ComReg considers that an approval process is necessary in order to allow ComReg sufficient time to understand any proposed price changes or new proposed prices and to assess whether these new / amended prices are consistent with the cost orientation obligation specified by ComReg. It also allows OAOs to assess the likely impact of the changes in terms of its business case and to allow the OAOs time to notify its customers of a price change, where appropriate. However, for the avoidance of doubt, approval in this context means that ComReg is of the view (based on the information provided to it by Eir) that the notified national price for SB-WLR does not appear to breach the obligations set out in any final decision. The granting of approval does not amount to a definitive finding by ComReg that the national SB-WLR product is compliant, or will remain compliant in the future, with the cost orientation obligations set out in this Decision. It should be noted that the granting of approval is strictly without prejudice to ComReg's right to take action (whether pursuant to any final decision and/or pursuant to any of its relevant statutory enforcement powers) in respect of any national SB-WLR product that it believes may be non-compliant with Eir's

regulatory or competition law obligations. It is incumbent on Eir to ensure that the national SB-WLR product remains compliant with this Decision at all times.

15.120 ComReg notes Eir's point at paragraph 15.94 that a dual level of control adds to the complication of regulatory controls in Ireland and a "belt and braces" approach ensures that the regulatory controls in Ireland are not clear and transparent and are unnecessarily complicated. Furthermore, Eir stated that ComReg is failing to comply with the Framework and comments from the Commission. ComReg disagrees. Firstly, the justification for a cost orientation obligation for SB-WLR is set out in Chapter 4, subsection 4.2.5 of the Consultation Document and in paragraph 4.49 to 4.66 in this Decision Document. In addition, the reasons for a margin squeeze test associated with SB-WLR are set out in Chapter 10, subsections 10.2.1 and 10.2.2 and in paragraphs 10.44 to 10.46 of this Document Document.

15.121 Secondly, with regard to compliance with the Framework and taking account of comments from the European Commission, ComReg considers that it has complied with Regulation 13 and 14 of the Framework Regulations. Regulation 13 and 14 of the Framework Regulations specifies that the NRA must notify the draft measure and the reasoning on which the measure is based to the European Commission, BEREC and the national regulatory authorities ('NRAs') on other EU member and to take utmost account of any comments made by these parties. ComReg has notified the draft measures set out in this Decision Document and it will take utmost account of any comments received from the European Commission.

15.122 Further to Eir's point at paragraph 15.95 that in Section 4.7 of the draft FACO Decision Instrument the words "compliance and" should be deleted as the purpose of the notification is to establish whether the new retail prices or amendments to existing retail prices comply with the margin squeeze test, ComReg acknowledges Eir's point. We have revised the text at Section 4.7 of the draft FACO Decision Instrument to read as follows:

"For the purposes of new retail prices or amendments to existing retail prices for the Retail Line Rental product, Eircom shall furnish to ComReg, at the same time as it notifies ComReg in accordance with ... of this Decision Instrument, a detailed written statement of compliance demonstrating Eircom's [~~compliance and~~] proposed compliance with the price control obligation, as more specifically referred to in ..."

15.123 With regard to Eir's point at paragraph 15.96 that Sections 4.8 (iii) and (iv) of the draft FACO Decision Instrument would not appear to be relevant to a request for information about a retail margin squeeze and should be deleted, ComReg does not agree. The obligations at Sections 4.8 (iii) and 4.8 (iv) of the draft FACO Decision Instrument are compliance monitoring obligations which clearly set out the procedure in the case where Eir do not comply with the retail line rental margin squeeze test. Therefore, these obligations continue to be relevant and should not be removed from the Decision Instrument

15.124 ComReg notes Eir's submission at paragraph 15.97 that Section 4.9 of the draft FACO Decision Instrument is not clear and that the terms Promotions, Discounts and Bundles should be defined. Furthermore, Eir stated that this obligation should be limited to the retail price and the obligations should either be specified or related back to the retail price as it would appear to be a "hasty add-on".

15.125 Firstly, ComReg considers that the terms Promotions, Discounts and Bundles are common terms that are readily understood by Eir and the Industry. In the various regulated markets Eir has previously notified promotions and discounts associated with various headline services and therefore there are no misapprehensions around these specific concepts which in our view do not need to be defined. It is also worth noting that the same concepts are used in the margin squeeze obligations contained in the NGA Decision and in the WBA Pricing Decision and these terms are not defined.

15.126 Secondly, while we consider that it is clear from the obligation at Section 4.9 of the draft FACO Decision Instrument that any promotions, discounts and bundles relating to standalone retail line rental should comply with the requirements of the margin squeeze test specified in Section 4 of the draft FACO Decision Instrument we acknowledge Eir's point that the obligation at Section 4.9 should be linked more specifically to the retail price and on that basis we have included specific reference to the retail price as follows:

"For the purposes of Promotions and Discounts and Bundles, the obligations contained in Section 4.4 to 4.8 above shall apply in respect of the retail price of new and existing Retail Line Rental products and any equivalent Wholesale product(s)."

15.127 ComReg notes Eir's point at paragraph 15.98 that Sections 4.10 and 4.11 of the draft FACO Decision Instrument should be deleted and replaced by Sections 12.8-12.11 of the FACO Decision. In addition, we also note Eir's submission at paragraph 15.99 that Section 12.9 of the SMP FACO Decision is dependent on Section 12.8 and that there appears to be two margin squeeze tests referred to in Section 12.8 but ComReg should not leave this unclear.

- 15.128 Firstly, ComReg would like to point out that the margin squeeze test specified at Section 12.8-12.11 of the FACO Decision relates to a margin squeeze test between FACO and switchless voice ('SV') which is not relevant to this Decision. Therefore, it is not appropriate to delete 4.10 and 4.11 (which further specifies the wholesale margin squeeze test between the price for POTS based VUA and standalone NGA Bistream / VUA including a contribution towards the costs of managed VOB as discussed at) and to replace it with 12.8-12.11.
- 15.129 Secondly, in this Decision we are further specifying the general obligation not to cause a margin squeeze pursuant to Section 12.8 of the FACO Decision both in terms of (1) a retail margin squeeze test between price for retail line rental and SB-WLR as discussed at Chapter 10 and (2) a wholesale margin squeeze test between the price for POTS based VUA and standalone NGA Bistream / VUA including a contribution towards the costs of managed VOB as discussed at Chapter 10. Therefore, the draft FACO Decision Instrument correctly refers to the overriding margin squeeze obligation at Section 12.8 of the FACO Decision given that we are further specifying that margin squeeze obligation in this Decision. As noted at paragraph 15.128 Section 12.9 is not relevant to this Decision and therefore no additional clarity is required in this Decision Document in that regard.
- 15.130 Further to Eir's point at paragraph 15.100 that in Section 4.11 of the draft FACO Decision Instrument there should be an indication as to where the '*contribution towards the cost of Managed VOB*' can be found without reference to separate cost models, ComReg does not agree. ComReg considers that it is more appropriate to set out the components of the margin squeeze test in a model. Please see paragraph 10.58 of the Consultation Document on how the contribution towards the cost of Managed VOB has been determined.
- 15.131 In relation to Eir's points at paragraphs 15.101 - 15.103 that there should be consistency between Section 10 of the FACO Decision and the wording in Section 5 of the draft FACO Decision Instrument and that it would appear far simpler to re-issue the transparency provisions of the SMP FACO Decision, for reasons similar to those mentioned in paragraph 15.72 above, ComReg considers its current approach to be more appropriate. ComReg also considers that the amendments to Section 10 of the Decision instrument annexed, at Appendix H, to ComReg Decision D05/15, contained in Sections 5.1 and 5.2 of the FACO Decision Instrument annexed to this Decision are clear and unambiguous.

Other:

- 15.132 In relation to ALTO's point at paragraph 15.104 regarding reliance on the European Commission Recommendation and defining what reasonable rate of return means, we refer to paragraph 14.114.

15.133 With regard to Eir's point at paragraph 15.105 that Eir would dispute that ComReg has taken into account the comments by the European Commission, ComReg does not agree. In the context of this Decision we will take utmost account of any comments received from the European Commission related to the draft measures notified herein. See also paragraphs 15.120-15.121.

15.4.3 ComReg's Final Position:

15.134 The final Decision Instrument for the price control obligations and transparency obligations associated with SB-WLR in the FACO Market is set out at Annex 3.

Annex: 1 Decision Instrument – WPNIA Market

Please see separately attached document entitled “**Annex 1 to 3 of Appendix A**”.

Annex: 2 Decision Instrument – WBA Market

Please see separately attached document entitled “**Annex 1 to 3 of Appendix A**”.

Annex: 3 Decision Instrument – FACO Market

Please see separately attached document entitled “**Annex 1 to 3 of Appendix A**”.

Annex: 4 Legal basis

- A 4.1 By ComReg Decision D05/10, and pursuant to Regulations 25 and 26 of the Framework Regulations, ComReg designated Eir as having SMP on the market for Wholesale (Physical) Network Infrastructure access, as identified by the European Commission in the 2007 Recommendation and as defined by ComReg in ComReg Decision 05/10 (the “WPNIA” market).
- A 4.2 By ComReg Decision D06/11, and pursuant to Regulations 25 and 26 of the 2011 Framework Regulations, ComReg designated Eir as having SMP on the market for Wholesale Broadband Access (“WBA”), as identified by the European Commission in the 2007 Recommendation and as defined by ComReg in ComReg Decision D06/11 (the “WBA” market).
- A 4.3 By ComReg Decision D05/15 (SMP FACO Decision), and pursuant to Regulations 25 and 26 of the 2011 Framework Regulations, ComReg designated Eir as having SMP on the market for call origination on the public telephone network provide at a fixed location (the “FACO” market).
- A 4.4 Pursuant to Regulation 8 of the Access Regulations, where an operator has been designated by ComReg as having significant market power on a relevant market as a result of a market analysis carried out by ComReg in accordance with Regulation 27 of the 2011 Framework Regulations, ComReg shall impose on such operator such obligations set out in Regulations 9 to 13 of the Access Regulations as ComReg considers appropriate. Among others, the following obligations were imposed on Eir in the WPNIA market, the WBA market and the FACO market: (i) obligations of transparency pursuant to Regulation 9 of the 2011 Access Regulations; and (ii) obligations relating to price control and cost accounting pursuant to Regulation 13 of the 2011 Access Regulations.
- A 4.5 Pursuant to Regulation 18 of the Access Regulations, the Regulator may, for the purpose of further specifying requirements to be complied with relating to an obligation imposed by or under these Regulations, issue directions to an operator or undertaking to do or refrain from doing anything which the Regulator specifies in the direction.
- A 4.6 The amendment, imposition, withdrawal and further specification of SMP obligations in relation to the WPNIA market, the WBA market and the FACO market is more particularly set out in the Decision Instrument contained in Annex 1 (for WPNIA market), Annex 2 (for WBA market) and Annex 3 (for FACO market) of this Decision.

Consultation requirements:

A 4.7 Regulation 12(3) of the 2011 Framework Regulations provides that, except in cases falling within Regulation 13(8) (i.e. exceptional cases involving urgency), before taking a measure which has a significant impact on a relevant market, ComReg must publish the text of the proposed measure, give the reasons for it, including information as to which of ComReg's statutory powers gives rise to the measure, and specify the period within which submissions relating to the proposal may be made by interested parties. Regulation 12(4) states that ComReg, having considered any representations received under Regulation 12(3), may take the measure with or without amendment. Regulation 12 implements Article 6 of the Framework Directive.

A 4.8 Regulation 13(3) of the 2011 Framework Regulations provides that, upon completion of the consultation provided for in Regulation 12, where ComReg intends to take a measure which falls within the scope of Regulation 26 or 27 of the Framework Regulations, or Regulation 6 or 8 of the Access Regulations, and which would affect trade between Member States, it shall make the draft measure accessible to the European Commission, BEREC and the NRAs in other Member States at the same time, together with the reasoning on which the measure is based. Regulation 13 implements Article 7 of the Framework Directive.

Annex: 5 Glossary of Terms

The glossary is for guidance purposes. It is intended to help the reader in understanding this Draft Decision document, but is not intended to be a legal or other interpretation of acronyms and terms.

<u>Acronym</u>	<u>Full Title</u>	<u>Description</u>
ABC	Activity based costing	A method of allocating costs to products and services.
Access Directive	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	Establishes a regulatory framework, in accordance with internal market principles, for the relationships between suppliers of networks and services that will result in sustainable competition, interoperability of electronic communications services and consumer benefits. It establishes rights and obligations for operators and for undertakings seeking interconnection and/or access to their networks or associated facilities. It sets out objectives for national regulatory authorities with regard to access and interconnection, and lays down procedures to ensure that obligations imposed by national regulatory authorities are reviewed and, where appropriate, withdrawn.
Access Regulations	The European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003	They transpose 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, in to Irish law.
ADSL	Asymmetric Digital Subscriber Line	A data communications technology that enables faster data transmission over copper telephone lines than a

			conventional voiceband modem can provide.
ADSL2 Plus	Asymmetric Subscriber Line 2 Plus	Digital	ADSL2 Plus is the next generation ADSL. It offers high bandwidth using the same copper lines. It can offer up to 24 Mbps but this depends on a number of parameters.
ARCEP	L'Autorité de Régulation des Communications Électronique et des Postes		National regulatory agency for France.
Arcor	Arcor AG & Co.		A German operator in the fixed line market, of that name. Also the name of a preliminary reference case heard before the ECJ.
ARO	Access Reference Offer		A contract containing the various prices and terms and conditions that in Ireland, Eir offers to OAOs for access to its network.
Backhaul	Backhaul		Infrastructure that enables the transmission of voice and data traffic from a remote site to a central site.
Bitstream	Bitstream		A system whereby wireline incumbent installs a high speed access link to the customer's premises (e.g., by installing ADSL equipment in the local access network) and then makes this access link available to third parties, to enable them to provide high speed services to customers. This type of access does not entail any third party access to the copper pair in the local loop.
Broadband	Broadband		Telecommunication in which a wide band of frequencies is available to transmit information. Because a wide band of frequencies is available, information can be multiplexed and sent on many different frequencies or channels within the band concurrently,

		allowing more information to be transmitted in a given amount of time.
BU-LRAIC plus	Bottom Up Long Run Average Incremental Cost Plus	BU-LRAIC plus is the costing methodology used to estimate the "LRAIC plus" of an efficient operator which is derived from an economic and/or engineering model of an efficient network. The LRAIC plus costs are the average efficiently incurred directly attributable variable and fixed costs, plus an appropriate apportionment of joint and common costs.
Cable	Cable	A system of providing television to consumers via radio frequency signals. It is transmitted to televisions through fixed optical fibres or coaxial cables as opposed to the over-the-air method used in traditional television broadcasting (via radio waves) in which a television antenna is required.
CCA	Current cost accounting.	An accounting approach that recognises and incorporates the effects of changing asset prices over time by valuing assets based on their replacement cost rather than their initial transaction value.
ECJ	European Court of Justice.	The highest court in Europe. The ECJ is sometimes called upon by referring national courts, to interpret points of law. This is known as a preliminary reference. (Arcor is an example).
	Cost Orientation	A form of price control whereby prices are set by reference to associated costs.
ComReg	Commission for Communications Regulation.	National regulatory agency for Ireland.

CPI	Consumer price index	The measurement of the average price of consumer goods and services purchased by households.
CVR	Cost volume relationship	A cost driver is the factor or event that causes a cost to be incurred. A CVR describes how costs change as the volume of the cost driver changes. The aim of identifying a CVR is to be able to demonstrate how costs change as the volume of the cost driver is altered.
DCENR	The Department of Communications, Energy and Natural Resources	The department of central Government in Ireland of the same name. The immediate predecessor of the DCENR was the Department of Communications, Marine and Natural Resources.
Download	Download	To bring files down from the internet and put them on a hard drive so they can be worked on locally.
DP	Distribution Point	A point within a network where the cable or fibre terminates prior to distribution to end customers.
Drop Wire	Drop Wire	Connecting cable from DP to customer premises. This can be overhead and/or underground.
D-side	Distribution side	Access network from street cabinet to the DP.
DSL	Digital subscriber line	A family of technologies that provide digital data transmission over the wires of a local telephone network.
DSLAM	Digital Subscriber Line Access Multiplexer	Allows telephone lines to make faster connections to the Internet. It is a network device, located near the customer's location, which connects multiple customer Digital Subscriber Lines (DSLs) to a high-speed Internet backbone line where multiple data

			streams are combined into one signal over a shared medium.
Ducts	Ducts		Underground infrastructure through which cables can be deployed.
ERG	European Group	Regulators	Established by the European Commission to provide a suitable mechanism for encouraging cooperation and coordination between national regulatory authorities and the Commission, in order to promote the development of the internal market for electronic communications networks and services, and to seek to achieve consistent application, in all Member States, of the provisions set out in the Directives of the new regulatory framework.
	Economic Depreciation		With economic depreciation an exercise is undertaken to estimate, amongst other things, future demand and operating costs and then the cost of the asset is allocated so that cost recovery in each period is proportional to the ratio of the output of the asset in that period relative to the total output through the assets life.
E-side	Exchange side		Access network between the street cabinet and local exchange.
FAC	Fully attributed costs		An accounting method to distribute all costs among a firm's various products and services; hence, the FAC may include some common costs not directly associated with a particular product or service
FCM	Financial Maintenance	Capital	Under CCA, FCM is a concept that considers the financial capability of the operator is maintained. Surpluses or deficits on the restatement of net assets

		to current cost are put in the income statement.
FDC	Fully distributed costs	See “FAC” Fully attributed costs.
Fibre	Fibre	Optical fibre is a glass or plastic fibre designed to guide light along its length. Optical fibres are widely used in fibre-optic communication, which permits transmission over longer distances and at higher data rates than other forms of communication. Fibres are used instead of metal wires because signals travel along them with less loss, and they are immune to electromagnetic interference
Framework Directive	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 EU Directive which establishes a harmonised framework for the regulation of electronic communications services, electronic communications networks, associated facilities and associated services. It lays down tasks of national regulatory authorities and establishes a set of procedures to ensure the harmonised application of the regulatory framework throughout the Community.
FTTH	Fibre to the home	A form of fibre optic communication delivery in which the optical signal reaches the end user's living or office space.
FWA	Fixed wireless access	The use of radio links for the transmission of voice and data communications.
GRC	Gross replacement cost	The value of a brand new asset providing the same level of functionality and capacity as the existing asset.
HCA	Historical cost accounting	A cost accounting approach that uses historical information sourced from statutory accounting systems, in which

		transactions are recorded at their initial transaction value.
Incumbent	Incumbent	Existing companies often first established as regulated monopolies.
IP	Internet Protocol	Method for moving information from one network to another on the internet.
ISDN	Integrated services digital network	Provision of dial up services at twice the speed of standard telephone connections.
Jumpering	Jumpering	Physically cross-connecting OAO and incumbents equipment using copper or fibre cables, within an exchange (copper wire pairs on the MDF –main dist frame, Co-Ax cable on the DDF-digital distribution frame , Optical jumpers on the ODF (optical dist frame), or within a street cabinet.
Last Mile	Last mile	The last mile is the final leg of delivering connectivity from a communications provider to a customer. Usually referred to by the telecommunications and cable television industries, it is typically seen as an expensive challenge because “fanning out” wires and cables is a considerable physical undertaking.
LLU	Local loop unbundling	The regulatory process of allowing multiple telecommunications operators’ use of connections from the incumbent’s telephone exchange’s to the customer’s premises.
Local Loop	Local loop	The physical circuit connecting the network termination point at the subscriber’s premises to the main distribution frame or equivalent facility in the fixed public telephone network provider’s network.
Line Share	Line share	Line share provides OAOs with shared use of a metallic path between an Eir

		exchange facility and a customer's premises. Eir retains the voice-band frequency spectrum of the circuit and continues to provide voice services and the OAO is able to use the remainder of the frequency spectrum.
Margin Squeeze	Margin Squeeze	A margin or price squeeze occurs when the difference between the wholesale price and the retail price of the final good or service does not give an efficient downstream firm a reasonable profit margin.
MDF	Main distribution frames.	A signal distribution frame for connecting equipment (inside an exchange) to cables and subscriber carrier equipment (outside an exchange).
Naked-DSL	Naked Digital Subscriber Line	SABB, (stand-alone broadband) provides a standalone DSL (Digital Subscriber Line) broadband service over the Local Loop, without a Public Switched Telephone Network (PSTN) service.
Narrowband	Narrowband	Telecommunication that carries voice information in a narrow band of frequencies.
NBP	National broadband plan	Government initiative to develop broadband infrastructure in the more rural towns and villages in Ireland to give access to high-speed broadband.
NBS	National broadband scheme	Provision of broadband services to certain target areas in Ireland in which broadband services are not available or are unlikely to be available in the foreseeable future.
NGA	Next generation access	Next Generation Access means wired access networks which consist wholly or in part of optical elements and which are

			capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over already existing copper networks. In most cases NGAs are the result of an upgrade of an already existing copper or co-axial access network.
NGN	Next generation networks		The creation of an all IP environment (sometimes referred to as “Next Generation core networks”) and the introduction of high-speed high-bandwidth access networks (often called “Next Generation access networks or NGA networks”).
Node	Node		A point of connection on a network.
NRA	National regulatory agency		A state or government agency which regulates businesses in the public interest.
NRC	Net replacement cost		Value of another asset (of the same age) providing the same level of functionality and capacity as the existing asset.
NTU	Network termination unit		Terminating equipment which is placed in the customer’s premises which presents the physical circuit interface to the customer and to which the customer connects their equipment
OAO	Other authorised operator(s)		A fixed operator other than the incumbent, providing telecommunication services.
OCM	Operating Capital Maintenance		Under CCA, OCM is a concept that considers the operating capability of the operator is maintained. Surpluses or deficits on the restatement of net assets to current cost are put in the balance sheet in the current cost reserve.

OFCOM	Office of Communications.	National regulatory agency for the United Kingdom.
POTS	“Plain old telephone service”	Standard telephone service that most homes use. In contrast, telephone services based on high-speed, digital communications lines are differentiated by speed and bandwidth.
	Predatory pricing	Predatory pricing takes place when a dominant firm sells a good or service below costs of production for a sustained period of time, with the intention of deterring entry, or putting a rival out of business, enabling the dominant firm to further increase its market power and later its accumulated profits
PSTN	Public switched telephone network	PSTN refers to the international telephone system based on copper wires and carrying analogue voice data. This is in contrast to newer telephone networks based on digital technologies such as ISDN.
	Retail Minus	This is a form of price control whereby the SMP’s wholesale price is set by reference to its retail price minus an appropriate margin to enable OAOs to cover their retail costs and compete with the SMP.
SABB	Stand Alone Broadband	ADSL/SDSL2plus service delivered over a 2-wire copper pair without a PSTN voice telephony switch.
SAC	Standalone costs	SAC is a cost standard that measures the cost of providing a service by the operator in isolation to other services of the company. SAC comprises all directly attributable costs and all shared cost categories related to production of the service, thus it includes direct variable costs, direct fixed costs, common and joint costs. Under this allocation method, the shared costs are totally

			supported by the service that is to be provided in isolation.
SB-WLR	Single Billing Wholesale Line Rental		Single Billing through Wholesale Line Rental means that the customer has no relationship with Eir, and all of the interfaces (ordering, billing, and fault repair) are with the Carrier Pre Select Operator (CPSO). The CPSO and Eir have a separate contract for wholesale line rental. This product is only available in conjunction with Carrier Pre-Selection 'all calls'
Scorched earth	Scorched earth		A model that is based on an ideal network topology and not the existing network topology of the operator.
Scorched node	Scorched node		A model that takes as its starting point the existing network topology of the operator.
SLU	Sub loop unbundling		Process by which a sub-section of part of the local loop is unbundled.
SMP	Significant market power		A position which is equivalent to dominance of that market, that is to say a position of economic strength affording an undertaking the power to behave to an appreciable extent, independently of its competitors, customers, and, ultimately, consumers.
	Standard Annuities		This approach calculates, over time, an increasing depreciation charge and a decreasing cost of capital resulting in a constant annualised charge and price stability given stable asset prices and demand.
	Sunk Costs		A cost which has already been incurred and cannot be recovered.
The Framework Regulations	The European Communities (Electronic Communications Networks		They transpose Directive 2002/21/EC of the European Parliament and the Council of 7 March 2002 on a common

	and (Framework) Regulations 2003	Services) Regulations	regulatory framework for electronic communications networks and services, in to Irish law.
	Tilted Annuities		A tilted annuity incorporates a tilt in its formula which facilitates the calculation of annuities that evolve in line with asset price changes (it is therefore a current cost approach).
ULMP	Unbundled local metallic path		ULMP provides OAOs with exclusive use of a metallic path between the incumbents exchange facility and a customer's premises.
VoIP	Voice over internet protocol		The transport of voice traffic across the internet.
WBA Market	WBA Market		Wholesale Broadband Access Market – included in Market 5.
WPNIA Market	WPNIA Market		Wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location.

Annex: 6 TERA Report

Please see separately attached document entitled “**Annex 6 of Appendix A**”.

Annex: 7 Updated Competition Assessment in the access markets

Market 4:

The existing market definition, SMP designation and obligations:

1. A decision notice on the Wholesale Physical Network Infrastructure Access ('**WPNIA**') Market (formerly Market 4 under the 2007 Recommendation⁷³³, but now Market 3a under the 2014 Recommendation⁷³⁴) was published on 20 May 2010⁷³⁵ ('**WPNIA Market Decision**'). The WPNIA Market, which was defined as being national in its geographic scope, was found to include⁷³⁶:
 - Wholesale physical network infrastructure access provided over current generation copper network infrastructure and its associated facilities at a fixed location ('**Current Generation (CG) WPNIA**'); and
 - Wholesale physical network infrastructure access provided over next generation fibre network infrastructure and its associated facilities at a fixed location ('**Next Generation (NG) WPNIA**').
2. Eir's self-supplied physical network infrastructure access is included in the WPNIA Market.
3. ComReg considered that the conditions of competition in the upstream WPNIA market were sufficiently similar across Ireland to warrant the definition of a single nationwide market. The WPNIA geographic market is, therefore, national in scope.
4. WPNIA and Wholesale Broadband Access ('**WBA**') were found to fall within separate markets, due to differences in functionality and pricing (amongst other reasons).
5. ComReg considered whether potential WPNIA products provided over other platforms such as cable and Fixed Wireless Access ('**FWA**') networks warranted inclusion in the WPNIA product market. However, given the lack of demand and supply side substitutability and the weakness of indirect pricing constraints, ComReg concluded that potential wholesale physical access products provided over these other platforms did not warrant inclusion within the WPNIA market.

⁷³³ European Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (the '**2007 Recommendation**').

⁷³⁴ European Commission – Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (the '**2014 Recommendation**').

⁷³⁵ ComReg Document No 10/39 (ComReg Decision D01/10): Response to Consultation and Decision Document – Wholesale Physical Network Infrastructure Access (Market 4).

⁷³⁶ Please refer to the WPNIA Market Decision for a full explanation of the reasoning for the definition of the WPNIA Market.

6. Following an assessment of existing competition, potential competition and Countervailing Buyer Power ('**CBP**'), ComReg designated Eir as having Significant Market Power ('**SMP**') in the WPNIA Market.
7. Having regard to Eir's SMP position in the WPNIA Market and its ability and incentive to potentially engage in a range of anti-competitive behaviours, ComReg imposed a number of regulatory obligations on Eir with regard to Current Generation WPNIA. One such set of obligations imposed on Eir related to price control and cost orientation. In addition, ComReg specified that Eir should continue to comply with ComReg Decision D01/10⁷³⁷ ('**LLU Pricing Decision**') regarding the monthly rental price for Local Loop Unbundling ('**LLU**') and Sub-Loop Unbundling ('**SLU**').
8. ComReg also imposed specific obligations in principle with regard to NG WPNIA, although these services, with, ComReg signalling that it intended to engage in a subsequent consultation to further specify the detailed manner in which these obligations would be implemented.

Next Generation Access ('NGA') Remedies Decision:

9. In 2013, ComReg published its decision on remedies to be applied with respect to Next Generation WPNIA and WBA in ComReg Decision D03/13⁷³⁸ ('**NGA Remedies Decision**').
10. In the NGA Remedies Decision ComReg amended the LLU and SLU pricing obligations from the LLU Pricing Decision. However, the change made to the pricing obligations for LLU and SLU in the NGA Decision did not require an amendment to the overriding price control obligation of cost orientation. Rather, the changes related to the detailed specification and implementation of the price control obligation of cost orientation as specified in the WPNIA Market Decision. Please refer to Chapter 3 (subsection 3.4.1) in the Consultation Document for the changes.

Amendment to the LLU / SLU pricing methodology:

11. The WPNIA Market Decision sets out the overriding price control obligation of cost orientation, with this being further specified and or amended in the LLU Pricing Decision and in the NGA Remedies Decision.
12. With regard to the current amendment to the LLU/SLU pricing methodology, ComReg considers that this does not constitute a material change to the primary price control obligation of cost orientation obligation as specified in the WPNIA Decision. Rather, the change relates to the form of cost orientation, namely the methodology and implementation of the obligations specified in the LLU Pricing Decision and the NGA Remedies Decision. The change therefore does not require amendment of the primary price control obligation of cost orientation established in the WPNIA Market Decision.

⁷³⁷ ComReg Document No 10/10: Local loop unbundling (LLU) and sub loop unbundling (SLU) maximum monthly rental charges; 9 February 2010.

⁷³⁸ ComReg Document No 13/11: Next generation access ('NGA'): Remedies for next generation access markets; 31 January 2013.

13. The change to the pricing methodology is intended to better effect ComReg's regulatory objectives, which include the promotion of competition, by ensuring that there is no distortion or restriction of competition in the WPNIA and related downstream markets and by encouraging efficient investment in infrastructure. The change is consistent with, and falls within, the scope of the existing price control obligation of cost orientation. Please see Chapter 4 of this Decision Document as well as Chapter 14 on the RIA.

Amendment to civil engineering infrastructure ('CEI') and dark fibre:

14. The WPNIA Market Decision sets out that NG WPNIA products should be subject to a price control obligation, which would be subject to further consultation.

15. In the NGA Remedies Decision ComReg imposed a cost orientation price control obligation in Section 11.4 and 11.5 of the Decision Instrument contained in Annex A with regard to the NG WPNIA products including civil engineering infrastructure ('CEI') i.e., duct and pole access and for dark fibre. ComReg also further specified the cost orientation obligation for CEI and dark fibre as follows:

"With regard to Civil Engineering Infrastructure (including Duct Access) as referred to in Section 6.2 of this Decision Instrument, Eir shall base such charges on no more than BU-LRAIC plus costs in accordance with the Copper Access Model;

With regard to Dark Fibre as referred to in Section 6.2 of this Decision Instrument, Eir shall base such charges on no more than BU-LRAIC plus costs in accordance with the Copper Access Model, as adjusted, where appropriate, for fibre costs."

16. With regard to the current amendment for CEI and dark fibre pricing methodology, ComReg considers that this does not constitute a material change to the primary price control obligation (set out in the WPNIA Market Decision) or the primary cost orientation obligation (set out in the NGA Decision). Rather, the change relates only to the methodology of the existing price control obligation of cost orientation as established by ComReg in the WPNIA Market Decision and the NGA Remedies Decision, respectively. The existing cost orientation price control obligation does not, therefore, change.

17. The change to the pricing methodology (to a combined BU-LRAIC+ and Eir's Actual Costs Adjusted for Efficiencies as described in Chapter 4) is intended to better effect ComReg's regulatory objectives, which include the promotion of competition, by ensuring that there is no distortion or restriction of competition in the market and by encouraging efficient investment in infrastructure. Please see Chapter 4 and Chapter 8 of this Decision Document.

Preliminary high level market observation:

18. ComReg notes that **SIRO**, the joint venture ('JV') between the Electricity Supply Board ('ESB') and Vodafone has commenced offering certain virtual unbundled access ('VUA') wholesale services in a limited number of discrete geographic locations around the country and, over time, plans to increase its network footprint.⁷³⁹ The services offered by SIRO are not currently classed as WPNIA in

⁷³⁹ SIRO indicated to ComReg in May 2015 that it intended the SIRO network to pass 30 by the end of 2016. This plan was subsequently revised in 30. In February 2016, SIRO provided ComReg with an

the context of the WPNIA Market Decision. ComReg, as part of its ongoing review of markets 3a and 3b, expects to publish a consultation in Q2 2016 which, amongst other things will consider the relevance and competitive impact of SIRO's product offering. Without prejudice to this analysis, given the scale, coverage and timing of SIRO's network roll-out, in the short to medium term ComReg considers that Eir will continue to be the predominant WPNIA provider.

19. In addition, the Irish Government has announced plans for a new National Broadband Plan ('NBP') to provide broadband to rural areas, with rollout expected to commence in 2016. The NBP is intended to bring NGA broadband services to those geographic areas of the country that do not have such services available to them. In this context, Eir will not likely be providing retail NGA services in these areas and therefore does not face competition. Given the timing of the NBP award process and the subsequent consequential network roll-out, ComReg considers that the NBP is likely to have a limited impact on Eir's position as the SMP operator in the WPNIA market in the short to medium term.
20. ComReg considers that based on the current market definition as set out in the 2010 WPNIA Market Decision, Eir continues to have SMP in the WPNIA market. Therefore, the current remedies in the WPNIA Market remain valid at this time. As such, the decision to amend the pricing methodology remains equally valid. ComReg therefore considers that the continued imposition of the price control and cost orientation obligation in the WPNIA Market is consistent with ComReg's objectives as set out in the Access Regulations and that the price control and cost orientation obligation should remain in place. As noted above, ComReg, as part of its ongoing review of markets 3a and 3b, expects to publish a consultation in Q2 2016 which, amongst other things will further consider the competitive conditions in these markets.

Analysis of Wholesale Physical Network Infrastructure Access Market:

21. ComReg has commenced its review of the Wholesale Local Access Market (Market 3a) and we expect to issue a consultation in Q2 2016.

Market 5:

The existing market definition, SMP designation and obligations:

22. A decision notice on the Wholesale Broadband Access ('WBA') market (formerly Market 5 under the 2007 Commission Recommendation, but now Market 3b under the 2014 Recommendation) was published on 8 July 2011⁷⁴⁰ ('WBA Market Decision').
23. In the WBA Market Decision we concluded that the broadband market included retail broadband provided over DSL, cable, Fibre to the X ('FTTx') and Fixed Wireless Access ('FWA'). The retail broadband market did not include mobile broadband or broadband delivered over satellite.

updated plan, noting it had 30% by the end of 2015 and planned to increase its network coverage to 30%. Vodafone began providing Broadband services over the SIRO network in early 2016.

⁷⁴⁰ ComReg Document No 11/49: Market Review: Wholesale Broadband Access, dated 8 July 2011.

24. The definition of the wholesale market consists of WBA provided over extensive current and next generation infrastructure.
25. The WBA Market Decision defined the relevant geographic market as being national in scope. While evidence of structural change was identified in areas of overlapping cable and LLU infrastructure this was considered, at the time, to be relatively recent and unstable (absent regulation). ComReg also found little evidence of behavioural change that would distinguish one area from another. ComReg indicated that this issue would be monitored.
26. As part of the WBA Market Decision, ComReg identified the competition problems associated with the WBA market which included excessive pricing, exclusionary behaviour and as well as concerns around vertical leverage/ predatory practices.
27. Having regard to Eir's SMP position in the WBA Market and its ability and incentive to potentially engage in a range of anti-competitive behaviours, ComReg imposed a number of regulatory obligations on Eir with regard to Current Generation WBA. One such set of obligations imposed on Eir related to price control. The price control obligation imposed on Eir was a continuation of the 2006 Retail Minus Price Control pending any other decisions or directions by ComReg in relation to the appropriate price control. In addition, the obligation not to cause a margin squeeze was imposed on Eir.

Amendment to price control obligation for current generation WBA:

28. In 2014 ComReg issued a decision notice⁷⁴¹ regarding the price control obligation for current generation services in the WBA Market (known as '**WBA Pricing Decision**'). In the WBA Pricing Decision ComReg amended the retail minus price control obligation (from the WBA Market Decision) to a retail margin squeeze test. In addition, ComReg imposed a national cost orientation obligation with regard to Eir's current generation Bitstream services. The application of both pricing obligations differs somewhat between more urban and less urbanised areas. ComReg has previously defined a larger exchange area ('**LEA**') which comprises those exchange areas where there is the presence of cable infrastructure, LLU based competition, and prospectively, the potential for the rollout of NGA. Areas outside the LEA i.e., '**Outside the LEA**' are those areas which have less / no infrastructure based competition and where the wholesale broadband market is unlikely to become competitive prospectively. Outside the LEA, Eir are required to ensure that it recovers no more than the actual incurred costs (adjusted for efficiency, plus a reasonable rate of return) associated with the provision of current generation Bitstream services in the area Outside the LEA.
29. For current generation SABB Outside the LEA, in the WBA Pricing Decision ComReg imposed the obligation of cost orientation. This obligation is now further specified in this Decision Document, as discussed at Chapter 7. In this Decision Document we are further specifying the methodology that should apply to determine the current generation SABB price Outside the LEA only.

⁷⁴¹ ComReg Decision D11/14 (ComReg Document No 14/73R): Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream; 9 July 2014.

Preliminary high level market observation Outside the LEA:

30. Eir is currently the main provider of wholesale fixed broadband services Outside the LEA. While noting the recent entry of SIRO above, this is unlikely to materially change in the short to medium term and, over a longer time horizon absent state intervention.
31. Outside the LEA, ComReg considers that entry prospects are limited largely due to the less favourable cost and scale characteristics. In the area Outside the LEA there is currently little or no infrastructure competition.
32. As noted above at paragraph 18, the entry of SIRO to the market may create competition prospectively in markets 3a and/or 3b. However, the SIRO rollout of fibre is more of a 'regional' rollout rather than a rollout of fibre to rural parts of Ireland and is more likely to form part of the LEA.
33. The NBP is envisaged to cover a significant proportion of the exchanges Outside the LEA, which is due to start rolling out in 2016 and is to be completed by the end of 2020.

Analysis of WBA Market:

ComReg has commenced its review of the Wholesale Central Access Market (Market 3b) (formerly the WBA market under the 2007 Recommendation) and we expect to issue a consultation in this regard in Q2 2016 which, amongst other things will further consider the competitive conditions in the WCA market.

Annex: 8 Subsequent correspondence from operators

Please see separately attached document entitled “**Annex 8 of Appendix A**”.

Annex: 9 Other issues arising from the Consultation Document

A 9.1 As outlined in the Chapter 3, paragraph 3.23 the main points made by respondents to the Consultation Document are addressed in full in the main body of this document. Other points made in the responses are addressed in this Appendix.

Functional separation and EOI:

A 9.2 BT agreed with ComReg but highlighted the importance of equivalence of input (“EOI”) stating that: “*Absent functional separation, we believe cost based regulation only works where eir Group also has to internally trade at the same price on an Equivalence of Input (EOI) basis as offered to alternative providers, otherwise eir Group will always have a competitive advantage.*”⁷⁴² Both BT and ALTO considered that: “*...true EOI should be mandated in the form of functional separation and virtual (full) system separation so that it is absolutely clear that all are competing on the same basis.*”⁷⁴³

A 9.3 Sky stated that “*...the time has come for ComReg to consider a case for functional separation of Eircom starting with how and who in eircom has access to eircom’s wholesale cost models.*”⁷⁴⁴

ComReg’s view:

A 9.4 ComReg considers that the issues of functional separation and EOI are outside the scope of this Decision Document.

Bitstream services:

A 9.5 BT are concerned that “*eir Group is internally trading bitstream services from its internal allocation of costs rather than the published prices offered to industry.*”⁷⁴⁵

ComReg’s view:

A 9.6 ComReg note that, ComReg Decision D08/10⁷⁴⁶ on Accounting Separation and Cost Accounting requires Eir “*to account for transfer charges between its wholesale and retail arms or between it and its subsidiaries in a method which (where possible) most closely represents charges as if they were sold externally*”

⁷⁴² BT Response to Consultation 15/67, page 4.

⁷⁴³ BT Response to Consultation 15/67, page 4, ALTO Response to Consultation 15/67, page 7.

⁷⁴⁴ Sky Response to Consultation 15/67, page 7.

⁷⁴⁵ BT Response to Consultation 15/67, page 4.

⁷⁴⁶ Comreg Document 10/67: Accounting Separation and Cost Accounting Review of Eircom Limited; 31 August 2010. http://www.comreg.ie/_fileupload/publications/ComReg1067.pdf

to another operator. When accounting for a transfer charge Eircom will have to choose a price or a combination of prices from its published price lists that most closely reflects the technical capabilities of the service or product as if it were sold externally⁷⁴⁷.” Furthermore, in Chapter 4 of the “Primary Accounting Documentation” published as part of eir’s Historical Separated Accounts for 2015 the basis for calculating internal transfer charges for Bitstream services is described as follows: “Transfer charges are based on a direct wholesale equivalent – wholesale broadband service. There are essentially three distinct broadband products, Bitstream IP; Bitstream Managed Backhaul and NGA Bitstream Plus⁷⁴⁸.” The “Primary Accounting Documentation” defines a direct wholesale equivalent as: “When there is a directly equivalent service and a published Wholesale price, the IBU charge to eir Retail can be derived by applying the published Wholesale price to the measured retail volumes of these services. The Wholesale price also includes any discounts and/or promotional offerings that are available in the relevant period”⁷⁴⁹.

A 9.7 ComReg considers that this indicates that Eir Group is internally trading Bitstream services on the basis of the published prices of the equivalent wholesale services offered to industry rather than an internal allocation of costs. Therefore, Eir appears to be compliant with its obligations under ComReg D08/10 and BT’s concern that Eir Group may be gaining a potential competitive advantage arising from the internal trading of Bitstream services is unfounded.

White label services:

A 9.8 BT requested that “...ComReg continue to apply the price control obligations for eir Group White Label services.”⁷⁵⁰

ComReg’s view:

A 9.9 White label services are outside the scope of this Decision Document.

Availability of cost model:

A 9.10 BT stated that “ComReg should engage the industry earlier in the formation of the models and the models should be available at the start of the consultation to all interested parties to ensure equivalence.”⁷⁵¹

⁷⁴⁷ ComReg Document 10/67, para 1.18.

⁷⁴⁸ http://www.eircom.ie/bveircom/pdf/Final_Accounting_Documents_2015.pdf, section 4.21, para 3.

⁷⁴⁹ http://www.eircom.ie/bveircom/pdf/Final_Accounting_Documents_2015.pdf, section 4.1, para 2.

⁷⁵⁰ BT Response to Consultation 15/67, page 1.

⁷⁵¹ BT Response to Consultation 15/67, page 2.

ComReg's view:

A 9.11 ComReg would like to point that it made access available to the non-confidential models during the consultation process, to those parties likely to be affected by any final decision that ComReg may take. Please see Information Notice 15/96 and 15/100.

Eir offer:

A 9.12 Sky, in a letter dated 27 November, reiterated the need for a cost orientation obligation for SB-WLR stating that “...*the SMP operator in mid-November put a heavily publicised offer into the market that highlights the need and urgency for both a cost oriented WLR rate and a more stringent margin squeeze test...*”⁷⁵² Sky explained that “*The offer at its deepest discount level entails a €30 per month price point for quad play (line rental + talk, broadband, TV and mobile) for a 12 month period.*”⁷⁵³ Sky noted that “*Notwithstanding that the price increases to €92 in the second year, a comparison of the line rental and broadband variable costs alone in the first year shows* ∞⁷⁵⁴

A 9.13 Sky's stated that “...*excluding call costs associated with free minutes, the loss at this retail price point less variable costs for just WLR and BB would be* ∞.”⁷⁵⁵ Sky considered that “...∞...”⁷⁵⁶

ComReg's view:

A 9.14 ComReg would like to point out that the example highlighted by Sky relates to a bundled offer whereas the retail line rental margin squeeze imposed in this Decision Document relates to standalone retail line rental only and therefore it is not relevant to this Decision. Bundles are addressed in ComReg Decision D04/13 and a proxy NRT model is available to operators upon request to ComReg.

Eir's Separated Accounts:

A 9.15 Vodafone considered that “*The current lack of a direct linkage between wholesale pricing and wholesale costs, leads to a very damaging situation.*”⁷⁵⁷ Vodafone stated that “*This can be very clearly seen in the significant, and growing, over recovery of costs now being observed in eir's reported Wholesale Access Markets in Separated Accounts...*”⁷⁵⁸

⁷⁵² Sky Letter of 27 November 2015, page 2, at Annex 8.

⁷⁵³ Sky letter of 27 November 2015, page 2, at Annex 8.

⁷⁵⁴ Sky letter of 27 November 2015, page 2, at Annex 8.

⁷⁵⁵ Sky letter of 27 November 2015, page 2, at Annex 8.

⁷⁵⁶ Sky letter of 27 November 2015, page 2, at Annex 8.

⁷⁵⁷ Vodafone letter of 2 December 2015, page 4, at Annex 8.

⁷⁵⁸ Vodafone letter of 2 December 2015, page 4, at Annex 8.

ComReg's view:

A 9.16 ComReg refers to Annex 10, paragraph A 10.6.

Performance Improvements:

A 9.17 BT raised concerns around the LFI of an efficient network in the context of a BU model noting "*the relaxed requirements agreed between ComReg and Eir in the Performance Improvement Plans that were implemented without consultation with industry.*" BT suggested that "*ComReg should enforce the regulation that it set originally.*"⁷⁵⁹

ComReg's view:

A 9.18 ComReg considers that this point is outside the scope of this Decision Document.

Retail price constraints:

A 9.19 Vodafone noted ComReg's previous assertion that in areas where UPC are competing with Eir there is a retail price constraint on Eir. Vodafone stated that "*...Recent price increases at retail and wholesale levels by Eir and by UPC show the market has changed.*"⁷⁶⁰ Furthermore, Vodafone added that "*UPC have over the past 2 years increased their price and Eir have responded by reversing a 'discount' of €3 on SB-WLR and an increase on SABB of €2.*"⁷⁶¹ Vodafone considered that "*Both the discount and reverse of the discount are manipulations of the wholesale price to allow Eir to respond to a price threat from UPC.*"⁷⁶² Vodafone stated that these activities "*....undermine the confidence of investors like Vodafone who make decisions based on regulated wholesale prices into the future...*"⁷⁶³

ComReg's view:

A 9.20 ComReg would like to point out that in this Decision Document we are implementing a number of obligations on Eir.

A 9.21 Firstly, we are amending the price control for SB-WLR from a retail minus regime to a cost orientation obligation. Our pricing approach for SB-WLR, as discussed in Chapter 6, subsection 6.5, should create the appropriate balance between setting the build / buy signals in the Modified LEA while ensuring that Eir does not over / under recover its actual efficient costs nationally.

⁷⁵⁹ BT Response to Consultation 15/67, page 5.

⁷⁶⁰ Vodafone Response to Consultation 15/67, page 7.

⁷⁶¹ Vodafone Response to Consultation 15/67, page 7.

⁷⁶² Vodafone Response to Consultation 15/67, page 7.

⁷⁶³ Vodafone Response to Consultation 15/67, page 7.

- A 9.22 Secondly, we have taken on board the issues from industry regarding SB-WLR promotions and discounts and we have decided that the cost of SB-WLR connections should be built into the SB-WLR rental price. This is discussed in Chapter 12, subsection 12.5.
- A 9.23 Thirdly, we have implemented a retail margin squeeze test between retail line rental and SB-WLR to ensure that Eir cannot foreclose other operators from the market by virtue of its ability to leverage its SMP from the FACO market into downstream markets and in doing so foreclose competition in retail markets by eliminating competing service providers or discouraging entry by new service providers. This is discussed in Chapter 10, paragraphs 10.43 to 10.82.
- A 9.24 Lastly, we have also implemented a wholesale POTS based VUA margin squeeze test so as to encourage operators to use their own voice platforms and therefore to encourage infrastructure based competition. This is also discussed in Chapter 10, paragraphs 10.128 to 10.141.
- A 9.25 Therefore, ComReg considers that these changes should provide operators with certainty regarding Eir's wholesale pricing regimes and more generally in relation to wholesale price levels for key current generation wholesale products going forward.

Annex: 10 ComReg Response to correspondence from Vodafone

A 10.1 This Annex sets out points raised by Vodafone in a letter to ComReg on 13 December 2015 and on 16 December 2015 and ComReg's response. The Vodafone letters of 13 December and 16 December 2015 are contained in Annex 8. Each of the points raised in Vodafone's letter and ComReg's respective response are set out in this Annex under the relevant headings below.

Vodafone letter dated 13 December 2015:

- **Returns in Eir's Separated Accounts:**

A 10.2 Vodafone stated that *"The trends observed over the last few years of increasing Wholesale Returns has continued into eir's recently published Separated Accounts for the Year Ended 30th June, 2015. This is against a backdrop of a reduction in the Allowable Regulatory Weighted Average Cost of Capital (WACC) from 10.21% to 8.18%."*⁷⁶⁴

A 10.3 Vodafone noted in particular that *"...in the "Wholesale Access" markets there has been a significant improvement in the 2015 on the Return on Mean Capital Employed (ROCE) being earned over the Returns reported in 2014;*

- *The resulting overall ROCE for 2015 has been reported as 14%, a c.40% improvement over the 10% in FY14. And almost 6% or €70m over recovery when compared with the expected Regulatory Return (based on a WACC of 8.18%).*
- *We note that the key drivers of the increase in return for Wholesale Fixed Narrowband Access from 12.5% in 2014 to 17% for 2015 were:*
 - *As expected a general decline in operating costs driven by a general reduction in cost; and,*
 - *External Wholesale Access Revenues are up 14% compared to 2014. this uplift is driven primarily from volume and ARPU increases in fixed broadband access.*

*This represents an over-recovery against the Regulatory WACC for the overall Wholesale Access markets of c.€70m and was before the full effects of ...SB-WLR effective price increase of €3 per month per customer...and...Eir's NGA price increase of €2 per month..."*⁷⁶⁵

⁷⁶⁴ Vodafone letter of 13 December 2015, page 1, at Annex 8.

⁷⁶⁵ Vodafone letter of 13 December 2015, page 1/2, at Annex 8.

A 10.4 Vodafone stated that *“We again highlight that to encourage efficient capital and operating cost expenditure there needs to be a clear linkage between the wholesale prices and these efficiently incurred costs... With this clear evidence of material deviation between the pricing generated by the various ComReg whoelsale pricing models and Annual Separated Accounts, it is incumbent on ComReg to react to adjust the whoelsale prices to reflect the new realities.”*⁷⁶⁶

A 10.5 Vodafone also added that *“Eir is also reporting a decline in the Returns being reported against its Fixed Line Retail Businesses. This was evident in that the Retail Margin on Retail PSTN and ISDN had slide from a slight profit in 2014 to a negative return in 2015. This can only have happened as Eir Retail revenues were not sufficient to cover the Retail costs.”*⁷⁶⁷

ComReg’s Response:

A 10.6 ComReg considers that in general it is difficult to do a like for like comparison between Eir’s published historical cost accounts and the prices derived from cost models for a number of reasons. For example, in general cost models include some combination of BU costs and TD costs whereas the HCAs are reflective of TD costs only. In addition, the pricing obligations in some regulated markets are currently margin squeeze tests and in the case of SB-WLR the price control to date has been retail minus which we have now amended to cost orientation in this Decision. In any event, in the context of this Decision and in particular for SB-WLR Eir are required to provide ComReg with an annual reconciliation between its actual TD costs reported in its accounts for the provision of SB-WLR compared to the costs accounted for in the Revised CAM. Please see Annex 12 for further details.

Vodafone letter dated 16 December 2015:

- **Lack of transparency in the model:**

A 10.7 Vodafone stated that *“We are conscious that we have received a Non Confidential version of the Model but are surprised at a lack of transparency and traceability in the Models provided, for example, there is a lack of clear details*

⁷⁶⁶ Vodafone letter of 13 December 2015, page 2/3, at Annex 8.

⁷⁶⁷ Vodafone letter of 13 December 2015, page 3, at Annex 8.

*and justification of chosen material Model input cost, sources, assumption, drivers etc.*⁷⁶⁸

A 10.8 Vodafone requested ComReg to “...explain why the output Prices in the model provided are different than those in the consultation document (“Dashboard” sheet VS Consultation Document)?”⁷⁶⁹ and stated that “...the current modelling would appear to be overly weighted in the favour of delivering higher prices than is justifiable”⁷⁷⁰ Vodafone highlighted that “Within the Model there is a Common costs allocation mark-up of 29% on the network costs.”⁷⁷¹ But there is “...no justification for this level of mark-up provided.” Vodafone questioned whether there are “...other cost categories included here, other than the more general overhead of HR, Finance and General Management?”⁷⁷² Vodafone also questioned how the volume of active lines in the “Results” sheet of the CAM was derived as “...the total appears to be c.808k of active copper lines.”⁷⁷³ Vodafone noted that “...there are currently circa 1,356k of Copper Access Network volumes reported in the “Statement of Costs” in eir’s 2015 HCA’s”⁷⁷⁴ and it would like to “...understand the volume differences.”⁷⁷⁵

ComReg’s Response:

A 10.9 ComReg would like to point out that there is full traceability of the data contained in the non-confidential Revised CAM including visibility of all of the formulae used. The lack of transparency is due to the fact that the confidential data has been extracted from the model and replaced by non-confidential or dummy data, as highlighted by those cells in yellow. Therefore, we consider that there is no lack of transparency or traceability in the non-confidential Revised CAM provided other than the fact that the model has been replaced by non-confidential data and hence the values and results in the non-confidential Revised CAM differs from the confidential version that was consulted on in Consultation 15/67.

- **Differences between the BU and TD approach:**

A 10.10 Vodafone stated that the “Bottom Up (“BU”) Modelling of the Local Access Network can model higher costs than a Top Down (“TD”) Separated Accounting approach. This can be expected as use of BU may give higher costs due, in the main, to increasing labour costs. But as the Models w[ere] supplied to us, they report that the TD Historical Cost Accounts (HCA) approach returning higher costs than TD Current Cost Accounts (CCA), this would appear to imply

⁷⁶⁸ Vodafone letter of 16 December 2015, page 1, at Annex 8.

⁷⁶⁹ Vodafone letter of 16 December 2015, page 1, at Annex 8.

⁷⁷⁰ Vodafone letter of 16 December 2015, page 1, at Annex 8.

⁷⁷¹ Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁷² Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁷³ Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁷⁴ Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁷⁵ Vodafone letter of 16 December 2015, page 3, at Annex 8.

that CCA should return lower costs. For this to be the case then Bottom Up (in combination with CCA) should return lower costs as a result of the use of a revised more efficient network than is the case with costs in a Top Down Model. Therefore it is expected that BU CCA should be lower than a TD approach. Vodafone would welcome views from ComReg as to why the logic above does not appear to hold in the current modelling.”⁷⁷⁶ Vodafone also stated that there are additional costs with the BU approach which are not included in a TD approach but stated that “...it is possible that there is a double counting of costs with CCA-based depreciation and an addition to that depreciation costs of future investments...” Vodafone referred to “In the Dashboard sheet, changing from Bottom Up to Top Down CCA (with costs are set for 2016, for active lines, national level costs etc.) results in a reduction in the output Product Costings, for example, 21% for SB-WLR, and c.22% for LLU.”⁷⁷⁷

ComReg’s Response

A 10.11 Firstly, ComReg would like to point out that the main reason that the top-down CCA is lower than top-down HCA is due to the fact that Vodafone has access to a non-confidential version of the Revised CAM which includes some dummy data, as noted at paragraph A 10.9.

A 10.12 Secondly, it is important to point out that a BU model is different from a TD model with regard to two main areas: 1) there are lower operating costs in the BU model due to efficiencies and 2) there are higher capital costs in the BU model as assets are revalued at replacement costs while the TD model reflects fully depreciated assets.

A 10.13 Lastly, Vodafone appears to confuse the different methodologies for BU and TD models. The BU model is based on the CCA methodology while the TD model can be based on CCA or HCA. TD-CCA and TD-HCA are accounting methods where fully depreciated assets are equal to zero. BU CCA is an approach where all assets are valued as if they were new assets. This is discussed at Chapter 4, subsection 4.3 of the Consultation Document and at Section 6 of the TERA Report at Annex 6.

- **Reutilisation factors:**

A 10.14 Vodafone stated that “*Re-utilisation factors appear not to have been applied to the following classes of assets: cable (including fibre), joint, distribution point, NTU, street cabinet, MDF, termination.*”⁷⁷⁸ and it stated that “*While we are not suggesting that all of the assets are re-usable when it comes to Next Generation Products, it was surprising that these are not 100% re-usable for*

⁷⁷⁶ Vodafone letter of 16 December 2015, page 2, at Annex 8.

⁷⁷⁷ Vodafone letter of 16 December 2015, page 2, at Annex 8.

⁷⁷⁸ Vodafone letter of 16 December 2015, page 2, at Annex 8.

current generation products such as LLU and SB-WLR.”⁷⁷⁹ In addition, Vodafone stated that “The impact of applying a 100% re-utilisation for all the classes of assets (in the “Network Annual Costs” sheet) would appear to cause a reduction in the output pricing, for example a 37% reduction in SB-WLR; a similar reduction in LLU...”⁷⁸⁰ Vodafone considered that assuming that they had adjusted the model correctly that “Even when we apply the quoted Re-utilisation ratios from 92% and 95% for currently re-utilised assets (these include: chamber, duct, trench, pole, FD) to 100%. All the other classes of assets which are not reutilized in the model are left with as currently modelled (i.e., re-utilisation = 0%), then the impact was to also [tø] reduce the output pricing, for example an 11% reduction in SB-WLR; and again a similar reduction in LLU.”⁷⁸¹

ComReg’s Response:

A 10.15 Our approach with regard to Reusable Assets is consistent with the 2013 Recommendation i.e., only civil engineering assets (and not all assets) which can be reused for NGA purposes should be valued based on a TD approach when setting copper access prices. The more assets that are reused the lower the costs are as these assets are based on TD costs where some assets are in fact fully depreciated. In addition, it is not reasonable to assume a reutilisation rate of 100% since some of the civil engineering assets (poles and ducts) cannot be reused for NGA purposes e.g., directly buried cables, and therefore require replacement. Please see Chapter 4, subsection 4.4 of the Consultation Document and paragraphs 4.127 - 4.137 and 4.139 - 4.144 of this Decision Document for further details.

- **Workings of network rollout spreadsheet:**

A 10.16 Vodafone requested ComReg to “...explain the logic and workings of the sheet “Network roll-out over time”?”⁷⁸²

ComReg’s Response:

A 10.17 The “network roll-out over time” outlines the level of investments made each year by Eir with reference to the gross book values (‘GBVs’) recorded on the asset register but not the quantity of assets deployed each year. As prices change each year it is necessary to include a price factor to discount the historic GBVs into a present value equivalent. The discounted GBVs can then be used to estimate the history of investment in each MDF.

⁷⁷⁹ Vodafone letter of 16 December 2015, page 2/3, at Annex 8.

⁷⁸⁰ Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁸¹ Vodafone letter of 16 December 2015, page 3, at Annex 8.

⁷⁸² Vodafone letter of 16 December 2015, page 3, at Annex 8.

- **Cost reductions between 2014 and 2015:**

A 10.18 Vodafone noted that “...there has been a significant cost reduction between the eir reported Separated Accounts for 2014 and 2015, for example when combining the Cost Categories for “Copper Access Network”, “Repair” and “Provisioning” in the Statement of Costs” in eir’s 2015 HCA’s,...[of] 14%...in “Operating Costs”. And we would ask ComReg to explain how these reductions have been incorporated into the current Modelling?”⁷⁸³ Vodafone also stated that “....these cost reduction[s] have been flagged by eir in its Quarterly Investor relation presentation and we would expect to see these, and any future Operating Costs movements, to have been discussed in detail as part of the Modelling activities.”⁷⁸⁴

ComReg’s Response:

A 10.19 Please see Chapter 5, paragraphs 5.43 to 5.70.

⁷⁸³ Vodafone letter of 16 December 2015, page 3/4, at Annex 8.

⁷⁸⁴ Vodafone letter of 16 December 2015, page 4, at Annex 8.

Annex: 11 SLU: Allocation of common costs

A 11.1 In the BU model the fixed and common costs are allocated on the basis of an equi-proportionate mark-up ('EPMU') on other modelled costs. Running the BU model to calculate the cost of lines with capped line-lengths results in a network with fewer network costs than is the case when a full line-length network is modelled. This is because capping the line length means that the longer lines and the specific network costs associated with the longer lines are not modelled.

A 11.2 Consequently, in order to ensure that the all services continue to incur the appropriate share of fixed and common costs, the EPMU percentage mark-up needs to be consistent between the BU model which reflects capped line-lengths and the BU model that reflects full line-length. Hence, the EPMU % is first derived with reference to the costs of building the full network to serve all premises. This percentage mark-up is then applied to the modelled costs of all services including where the SLU lines have capped line lengths. This has resulted in a reduction to the costs associated with SLU as the model consulted on (in Consultation 15/67) included the full allocation of fixed and common costs to those lines capped at 1.5km instead of spreading those costs across all SLU lines.

Annex: 12 AFI: SB-WLR annual template

Template 1: Market variances by functional cost type

INCOME STATEMENT for the year ended ## #### ####	CY			PY			Var		
	Total	SB WLR PSTN Rental & Connections	SB WLR ISDN Rental & Connections	Total	SB WLR PSTN Rental & Connections	SB WLR ISDN Rental & Connections	Total	SB WLR PSTN Rental & Connections	SB WLR ISDN Rental & Connections
	€000	€000	€000	€000	€000	€000	€000	€000	€000
Revenue									
External revenue									
Internal revenue - Inter									
Internal revenue - Intra									
Total revenue									
Costs									
Cost of Sales									
Product development and management									
Marketing and sales									
Repair and maintenance									
Finance									
Installation/Provisioning									
Network support									
General management									
Accommodation									
Information Technology									
Transport									
Personnel and administration									
Other operating expenses									
Credit management and billing									
Depreciation									
Total HCA wholesale operating costs									
Transfer charges from Wholesale									
Exceptional (Gain) / Loss									
Total Operating costs									
Return									
Mean capital employed									
Return on capital employed									

Eir shall provide ComReg with a detailed review of the year on year movements for the different functional cost categories⁷⁸⁵ and depreciation costs reported within the Wholesale Fixed Narrowband Access market and as set out in Template 1. This review should distinguish between PSTN and ISDN services and outline the reasons for the significant variances arising each year together with the identification of the impact of what Eir consider to be “one-off” events on these variances. Cost information should be provided at an activity or asset category level.

⁷⁸⁵ The functional cost categories included in this template are based on the reporting structures contained within the 2015 HCAs and may change if these reporting structures are revised in future HCAs.

Template 2: Network Element variances by activity code

SB WLR PSTN Rental & Connections						
	Network Element 1	Network Element 2	Network Element 3	Network Element 4	Network Element 5	Network Element 6 ... Total
Input 1						
Input 2						
Input etc						
Cost of Sales						
Input 1						
Input 2						
Input etc						
Product development and management						
Input 1						
Input 2						
Input etc						
Marketing and sales						
Input 1						
Input 2						
Input etc						
Repair and maintenance						
Input 1						
Input 2						
Input etc						
Finance						
Input 1						
Input 2						
Input etc						
Installation/Provisioning						
Input 1						
Input 2						
Input etc						
Network support						
Input 1						
Input 2						
Input etc						
General management						
Input 1						
Input 2						
Input etc						
Etc.						
Total Operating Expenditure						

Eir shall provide ComReg with an analysis of the operating expenditure in the SB-WLR Fixed Access Narrowband market for both pay and non-pay costs. WLR PSTN and ISDN services should be shown separately and, if necessary, non-pay costs should separately identify the accommodation and transport elements within each activity to facilitate reconciliation with the functional cost analysis provided in Template 1. Prior year data should also be provided for comparison purposes.

Template 3: Provisioning cost analysis

	Physical Provides	Failed EEs	Other	Total
Direct costs				
Pay				
Contractor				
Stores				
Sub Total	<hr/>			
Support costs				
Provisioning control				
Other				
Sub Total	<hr/>			
Total				
Volume				
Average cost	<hr/>			

Eir shall provide ComReg with the analysis of the appropriated costs associated with PSTN and ISDN connections. This should identify the average cost of providing a PSTN and an ISDN connection in the year.

Template 4: Civil engineering assets by network element

	DUCT	DUCT	DUCT	Poles	Poles	Poles
	Current Year	Prior Year	Variance	Current Year	Prior Year	Variance
Copper Access Network						
NGA						
Fibre Access Network						
NGN						
Transmission						
Other						
Total Networks						

Eir shall provide ComReg with analysis of how the NBV costs of duct and pole assets are attributed across the network elements.

Template 5: Copper Access and Copper Repair allocations to market

Copper Access / Repair								
	Wholesale Fixed Narrowband Access	Wholesale Unbundled Access	Wholesale Broadband Access	Wholesale Leased Lines	Wholesale Access	Wholesale Other	Wholesale	Total
Input 1								
Input 2								
Input etc								
Cost of Sales								
Input 1								
Input 2								
Input etc								
Product development and management								
Input 1								
Input 2								
Input etc								
Marketing and sales								
Input 1								
Input 2								
Input etc								
Repair and maintenance								
Input 1								
Input 2								
Input etc								
Finance								
Input 1								
Input 2								
Input etc								
Installation/Provisioning								
Input 1								
Input 2								
Input etc								
Network support								
Input 1								
Input 2								
Input etc								
General management								
Input 1								
Input 2								
Input etc								
Etc.								
Total Operating Expenditure								

Eir shall provide ComReg with an analysis of the allocation of the operating expenditure associated with the Copper Access and Copper Repair network elements for both pay and non-pay costs across the various wholesale markets. If necessary, non-pay costs should separately identify the accommodation and transport elements within each activity to facilitate comparisons with the functional cost analysis provided in Template 1. Prior year data should also be provided for comparison purposes.

Annex: 13 AFI: Poles annual reconciliation template

Template 1: Pole investments

	<u>Number of poles</u>	<u>Actual pole investment</u>
Replacement of poles for NGA deployment		
Poles replaced for other network operational reasons		
Total pole additions		

Eir shall provide ComReg with analysis of the quantity and cost of poles invested in during the past year indicating if the investments were required to support NGA deployment or for other operational reasons such as replacing damaged or dangerous poles on an existing copper access route.

Template 2: Forecasts

	<u>Year 1</u>	<u>Year 2</u>	<u>Year3</u>
Number of poles			
Pole investments			

Eir shall provide ComReg with the latest available forecast of pole investments for the next three years.

Annex: 14 Modified LEA exchanges

	Site Name	County
1	Ashbourne	MEATH
2	Abbeyleix	LAOIS
3	Athboy	MEATH
4	Athgarvan	KILDARE
5	Arklow	WICKLOW
6	Athenry	GALWAY
7	Ardee	LOUTH
8	Ardrew	KILDARE
9	Askeaton	LIMERICK
10	Athlunkard	LIMERICK
11	Athlone	WESTMEATH
12	Athy	KILDARE
13	Navan	MEATH
14	Blarney	CORK
15	Barna	GALWAY
16	Ballymacahill Cross	CLARE
17	Beggars Bush	DUBLIN
18	Bailieboro	CAVAN
19	Bundoran	DONEGAL
20	Blanchardstown	DUBLIN
21	Balgriffin	DUBLIN
22	Baltinglass	WICKLOW
23	Birr	OFFALY
24	Ballyjamesduff	CAVAN
25	Ballina	MAYO
26	Ballyboden	DUBLIN
27	Bliary	WESTMEATH
28	Belcamp	DUBLIN
29	Blackrock	LOUTH
30	Ballymahon	LONGFORD
31	Ballincollig	CORK
32	Bandon	CORK
33	Ballymoneen	GALWAY
34	Ballybofey	DONEGAL
35	Ballinrobe	MAYO
36	Bray	WICKLOW
37	Balbriggan	DUBLIN
38	Ballinasloe	GALWAY
39	Blessington	WICKLOW
40	Bettystown	MEATH

41	Ballymote	SLIGO
42	Buncrana	DONEGAL
43	Bunclody	WEXFORD
44	Boyle	ROSCOMMON
45	Ballyspillane	KERRY
46	Cabra	DUBLIN
47	Clane	KILDARE
48	Cavan	CAVAN
49	Castlebellingham	LOUTH
50	Castlebar	MAYO
51	Clarecastle	CLARE
52	Carrickmacross	MONAGHAN
53	Carndonagh	DONEGAL
54	Clonee	DUBLIN
55	Celbridge	KILDARE
56	Crossagalla	LIMERICK
57	Carrigaline	CORK
58	Caherdavin	LIMERICK
59	Churchfield	CORK
60	Cahir	TIPPERARY SR
61	Carrigtwohill	CORK
62	Castleisland	KERRY
63	Cork Central	CORK
64	Carrickonshannon	LEITRIM
65	Nangor Road	DUBLIN
66	Coolock	DUBLIN
67	Clonmel	TIPPERARY SR
68	Clontarf	DUBLIN
69	Collooney	SLIGO
70	Claremorris	MAYO
71	Clones	MONAGHAN
72	Carrickonsuir	TIPPERARY SR
73	Cobh	CORK
74	Crown Alley	DUBLIN
75	Crumlin	DUBLIN
76	Courtown Harbour	WEXFORD
77	Carlow	CARLOW
78	Collins Lane	OFFALY
79	Cashel	TIPPERARY SR
80	Ceanannus	MEATH
81	Castletown	LOUTH
82	Castleblayney	MONAGHAN
83	Castletroy	LIMERICK
84	Curragh Camp	KILDARE

85	Customs Hs Docks	DUBLIN
86	Cahirciveen	KERRY
87	Clonakilty West	CORK
88	Donore Rd	LOUTH
89	Drogheda	LOUTH
90	Dolphins Barn	DUBLIN
91	Donabate	DUBLIN
92	Dundalk	LOUTH
93	Dundrum	DUBLIN
94	Dunboyne	MEATH
95	Donegal	DONEGAL
96	Douglas	CORK
97	Dunlaoghaire	DUBLIN
98	Duleek	MEATH
99	Dunleer	LOUTH
100	Droichead Nua	KILDARE
101	Donaghmede	DUBLIN
102	Dunshaughlin	MEATH
103	Dungarvan	WATERFORD
104	Dennehys Cross	CORK
105	Edenderry	OFFALY
106	Enfield	MEATH
107	Ennis	CLARE
108	Eastpoint	DUBLIN
109	Enniscorthy	WEXFORD
110	Ferrybank	WATERFORD
111	Farmleigh	DUBLIN
112	Fermoy	CORK
113	Finglas	DUBLIN
114	Foxrock	DUBLIN
115	Galway	GALWAY
116	Glanmire	CORK
117	Greystones	WICKLOW
118	Gorey	WEXFORD
119	Inch St Lawrence	LIMERICK
120	Knockboy	WATERFORD
121	Kingscourt	CAVAN
122	Killerisk	KERRY
123	Kill	KILDARE
124	Kilcullen	KILDARE
125	Kildare	KILDARE
126	Killarney	KERRY
127	Killaloe	CLARE
128	Kenmare	KERRY

129	Kilkenny	KILKENNY
130	Kilcock	KILDARE
131	Killorglin	KERRY
132	Kinsale	CORK
133	Kanturk	CORK
134	Lucan Ballydowd	DUBLIN
135	Little Island	CORK
136	Leghlinbridge	CARLOW
137	Leixlip	KILDARE
138	Loughrea	GALWAY
139	Listowel	KERRY
140	Dooradoyle	LIMERICK
141	Letterkenny	DONEGAL
142	Roches Street	LIMERICK
143	Lucan	DUBLIN
144	Longford	LONGFORD
145	Maynooth Business Campus	KILDARE
146	Muine Bheag	CARLOW
147	Midleton	CORK
148	Merrion	DUBLIN
149	Monaghan	MONAGHAN
150	Mullingar	WESTMEATH
151	Malahide	DUBLIN
152	Mallow	CORK
153	Mountmellick	LAOIS
154	Maynooth	KILDARE
155	Moate	WESTMEATH
156	Mitchelstown	CORK
157	Mounthawk	KERRY
158	Mucross	KERRY
159	Monasterevan	KILDARE
160	Mervue	GALWAY
161	Moycullen	GALWAY
162	Naas	KILDARE
163	Newtownmtkennedy	WICKLOW
164	North Main	DUBLIN
165	Nenagh	TIPPERARY NR
166	Newport	MAYO
167	New Ross	WEXFORD
168	Newport	TIPPERARY NR
169	Newtownforbes	LONGFORD
170	Nutley	DUBLIN
171	Newlands Cross	DUBLIN
172	Newcastle West	LIMERICK

173	Oughterard	GALWAY
174	Oranmore	GALWAY
175	Palmerstown	DUBLIN
176	Portarlinton	LAOIS
177	Portlaoise	LAOIS
178	Phibsboro	DUBLIN
179	Portmarnock	DUBLIN
180	Priory Park	DUBLIN
181	Prosperous	KILDARE
182	Quaker Road	CORK
183	Rathcoole	DUBLIN
184	Roscommon	ROSCOMMON
185	Rathluirc	CORK
186	Rathmines	DUBLIN
187	Rochestown	DUBLIN
188	Rockmount	CLARE
189	Roscrea	TIPPERARY NR
190	Roslevin	WESTMEATH
191	Robertstown	KILDARE
192	Rathedmond	SLIGO
193	Ratoath	MEATH
194	Rathangan	KILDARE
195	Rush	DUBLIN
196	Santry	DUBLIN
197	Shannon Airport	CLARE
198	Sixmilebridge	CLARE
199	Sligo	SLIGO
200	Shannon Town	CLARE
201	Ship Street	DUBLIN
202	Skibbereen	CORK
203	Shankill	DUBLIN
204	Skerries	DUBLIN
205	Shantalla	GALWAY
206	Sallins	KILDARE
207	Sandyford	DUBLIN
208	Sandyford Aeh	DUBLIN
209	Swords	DUBLIN
210	Summerhill	DUBLIN
211	Sutton	DUBLIN
212	Tubbercurry	SLIGO
213	Termonfeckin	LOUTH
214	Thurles	TIPPERARY NR
215	Tallaght	DUBLIN
216	Tullamore	OFFALY

217	Tyrrelstown	DUBLIN
218	Tullow	CARLOW
219	Templemore	TIPPERARY NR
220	Tipperary	TIPPERARY SR
221	Terenure	DUBLIN
222	Trim	MEATH
223	Tramore	WATERFORD
224	Thomastown	KILKENNY
225	Tuam	GALWAY
226	Tralee	KERRY
227	Tycor	WATERFORD
228	Virginia	CAVAN
229	Walkinstown	DUBLIN
230	Whitehall	DUBLIN
231	Wicklow	WICKLOW
232	Whitepark	CLARE
233	Wellington Road	CORK
234	Westport	MAYO
235	Waterford Central	WATERFORD
236	Wexford	WEXFORD
237	Youghal	CORK

Annex: 15 “Dublin” duct access prices relate to the listed exchanges / MDFs

NAVAN
BOHERMEEN
BEAUPARC
KILCARN
KILMESSAN
ROBINSTOWN
TARA
BALRATH
DUNDERRY
TRIM
BALBRIGGAN
COURTLOUGH BIZ PK
KILBRECK
NAUL
SKERRIES
STAMULLIN
ADAMSTOWN CASTLE
ARDCLOUGH
ADAMSTOWN STRATTON GR
ADAMSTOWN SQUARE
ADAMSTOWN THE PADDOC
BRITTAS
CELBRIDGE
GREENOGE
HEWLETT-PACKARD
INTEL
KILCOCK
LUCAN BALLYDOWD
LEIXLIP
LUCAN
MAYNOOTH BUSINESS CA
MAYNOOTH
PEAMOUNT LANE
RATHCOOLE
STRAFFAN
ASHBOURNE
BATTERSTOWN
DUNBOYNE
DUNSHAUGHLIN

GARRISTOWN
KILLEEN CASTLE
RATOATH
ADELAIDE ROAD
BEGGARS BUSH
BLANCHARDSTOWN
BALGRIFFIN
BALLYBODEN
BELCAMP
BALLYMOUNT
BALLYCOOLIN
BRAY
BALLYBOUGHAL
CABRA
COLDWINTERS
CLONEE
CLONSKEAGH
NANGOR ROAD
COOLOCK
CLONTARF
CENTREPOINT BIZ PARK
CAPPOGE BUS PK
CROWN ALLEY
CRUMLIN
CUSTOMS HS DOCKS
CHERRYWOOD
CITYWEST
DUBLIN AIRPORT
DOLPHINS BARN
DUBBER
DONABATE
DUNDRUM
DUNLAOGHAIRE
DONAGHMEDE
ENNISKERRY_KILGARRON
ENNISKERRY
EASTPOINT
FARMLEIGH
FINGLAS
FOXROCK
GLENCULLEN
GLENCREE
HEUSTON SOUTH QUARTER
IBMSITE
KILBRIDE
KILMACANOGUE

KILMACANOGE_TWO
MERRION
MALAHIDE
MITCHELSTOWN
NUTGROVE EP
NORTH MAIN
NUTLEY
NORTHWEST BUSINESS PK
NEWLANDS CROSS
OLDTOWN
PALMERSTOWN
PHIBSBORO
PARK WEST
PELLETSTOWN
PORTMARNOCK
PRIORY PARK
POWERSCOURT
QUARRYVALE
RATHMINES
ROCHESTOWN
RUSH
SANTRY
SHIP STREET
SHANKILL
SANDYFORD
SANDYFORD AEH
SWORDS
SUMMERHILL
SUTTON
TALLAGHT
TYRRELSTOWN
TERENURE
WALKINSTOWN
WHITEHALL
GREYSTONES
NEWTOWNMTKENNEDY
PRIESTSNEWTOWN
ROUNDWOOD
BLESSINGTON
CLANE
CARRAGH
JOHNSTOWN
KILL
NAAS
PROSPEROUS
RATHMORE

SALLINS
BRITTAS BAY BRIDGE
GLENDALOUGH
GLENEALY
KILBRIDE
MERRYMEETING
RATHDRUM
REDCROSS
WICKLOW