Commission for
Communications Regulation

Eircom's wholesale access services

Responses to ComReg Document No 15/67

Submissions to Consultation 15/67

Reference: ComReg 15/67s

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Submissions Received from Respondents

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Content

Section

1: ALTO

alto

alternative operators in the communications market

Consultation: Current Generation Wholesale Access Services (Price Control Obligations Markets 4 & 5: Extension Market 2) - Ref: 15/67

Submission By ALTO

Date: September 25th 2015

ALTO is pleased to respond to the Consultation: Current Generation Wholesale Access Services (Price Control Obligations Markets 4 & 5: Extension and Further Specification of Price Control Obligations to Market 2) - Ref: 15/67.

ALTO welcomes this opportunity to comment on this timely and important consultation.

As you are aware, ALTO is the leading representative group representing the interests of 9 of the alternative telecommunications companies' interests within the State. Those alternative telecommunications companies operate in the business, consumer and international carrier sectors and have done so successfully for quite some time now.

ALTO generally welcomes the important reforms proposed by ComReg in this Consultation, ALTO also commends ComReg for the quality and robustness of the document as presented to industry and for consultation on 3 July 2015. The author or team of authors should be commended for a very cogent piece of work.

Preliminary Remarks

ALTO has previously engaged with ComReg to request the types of reforms for price control contemplated within this consultation document. Should ComReg implement the reforms as proposed, it appears that greater certainty will be given to operators who have already invested in Current Generation Access – CGA, offerings and as appears from an assessment of the pricing model, there may be some financial incentives for operators contemplating migration to Next Generation Access – NGA, offerings in the medium to long term.

ALTO submitted a request for access to the cost and price model that was facilitate by ComReg in the past number of weeks. It is clear that certain of the inputs and treatment of costs within the model, give rise to issues that will suit certain ALTO

members commercial interests, and others that simply will not. To that extent, ALTO proposes to deal with questions requiring detailed input from individual members in a generic manner.

ALTO notes that ComReg has taken utmost account of a certain EU Commission Recommendation throughout the course of this Consultation and the proposed Decision Instruments. ALTO makes various remarks about the appropriateness of reliance on EU Commission Recommendations, versus Directives. ALTO's points on this are submitted in order that ComReg seek the requisite legal advice in advance of making any Decisions that may be challenged or challengeable on foot of such Recommendations.

ALTO has continued and on-going obligations to conform with Competition Law and required regulatory standards when responding to ComReg and other regulators' consultation process where pricing and cost data arise for consideration.

One of the key issues ALTO members have identified within this consultation is the significant change in the proposed gap between SLU and LLU pricing from the current prices.

At present SLU is charged at €9.03 and LLU is charged at €9.91. Various ComReg decisions have noted the close link that ought to exist between SLU and LLU pricing and more importantly price movements i.e., if the price of one, either SLU and LLU, drops operators ought to see a drop in the price of the other. However, the newly proposed ceilings see a substantial fall in SLU pricing to €5.88 while the new ceiling for LLU is €10.19 (which was previously €12.41). The gap between these two ceilings would suggest a significant gap is now permissible between the pricing of the two services.
ALTO queries what if anything has changed? It appears that the answer is nothing – the costing methodology being proposed for both SLU and LLU is exactly the

same. ALTO thus queries as a matter of submission within the consultation why is there such a discrepancy between old and new pricing – ComReg has given no explanation as to what the newly proposed prices are (in fact for SLU ComReg does not even advise as to what the existing price is anywhere in the consultation document).

The implications of the significant drop in SLU pricing has all come too late for competition. ALTO members needed this price 3 – 4 years ago to allow operators enter this space. As eircom has now rolled out its FTTC network and it is vectoring enabled – thereby ring-fencing services and the market, with the consequence that the new lower ceiling is unlikely to provide any impetus to infrastructure investment. 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 – this is because SLU is a key component in the cost stack for SABB. ALTO members find this position quite problematic.

Response to Consultation Questions:

Q. 1 Do you agree with ComReg's preliminary view that the price control for SB-WLR should be amended from a retail minus to a cost orientation price control? Please provide reasons for your responses.

A. 1. ALTO agrees with ComReg's preliminary view that the price control for Single Billing – Wholesale Line Rental – SB-WLR, should be amended from retail minus to a cost orientation price control. The reasons for our support of this are as follows:

a. ALTO members have noted that eircom were able to reduce the price of SB-WLR by three Euros as part of its package to launch NGA and once the product had been established it was then able to act independently to increase the price by €3 per month per customer. This behaviour both demonstrated eircom's ability to act independently of the market and eircom

will do so. Moving to cost orientation will ensure eircom receive an adequate return for its investment, and will lessen its ability to control the market through its wholesale prices to competing retail providers i.e., with the eircom Retail pricing setting the eircom Wholesale pricing alternative operators will no longer be subject to the direct linkage to eircom Retail pricing. The three Euro discount and then the separate increase to the Standalone Broadband – SABB, (€2 price) increase earlier this year both highlighted eircom's ability to manipulate the wider market through its control of wholesale pricing. Cost orientation will remove this inappropriate market control and we support. ALTO members have noted that eircom has previously been promoting the availability of White Label services to other operators in the market, and it is believed that those operators may have been offered pricing within the margins previously existing for SB-WLR services.

b. **USO -** ALTO notes that ComReg is simultaneously consulting on the Universal Service Obligation – USO, and in particular dealing with Access at a Fixed Location – AFL, and that a national cost orientated price for SB-WLR could logically prevent an increase in the digital divide as others could offer an eircom WLR line for the USO.

c. **Innovation and new technologies –** with the advances of technology and the growth of VoIP based voice services are anticipated in the coming years and there is a concern, absent SB-WLR cost orientation that eircom would have the ability to distort the market through a manipulation of the price of traditional voice in the form of SB-WLR. ALTO notes that the eircom €2 Euro per month price increase in Standalone Broadband earlier this year coincided with the volume introduction of VoIP by a competitor in the market. ALTO also note the Vodafone presentation provided by ComReg as part of the consultation pack that highlights the significant detrimental impact the SABB price increase had on their attempts to use VoIP. Hence Eircom's

activity had the appear consequence of stifling investment by others in new technology as a significant perceived margin gain through using new technology was considerably cut.

d. **Historic Cost Accounting – HCA -** 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. We note other jurisdictions such as the UK that are more competitive in the voice market and have cost orientation for WLR.

Q. 2 Do you agree with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and the ancillary services for Market 4 and SB-WLR? Please provide reasons for your responses.

A. 2. ALTO agrees with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for Local Loop Unbundling – LLU, Sub Loop Unbundling – SLU, Line Share – LS, SABB Outside the Local Exchange Area – LEA, Civil Engineering Infrastructure – CEI, and the ancillary services for Market 4 and SB-WLR.

ALTO submits that as these services form the building blocks to enable competitors to compete with downstream eircom services such as bitstream and voice services. However, the cost orientation only works where eircom also has to internally trade at the same price on an Equivalence of Input – EOI, basis, otherwise eircom will always have a competitive advantage and no incentive to ensure cost orientation is updated in a timely way. Hence we support Cost orientation as it removes the ability of eircom to use price variations to unreasonably distort the market however eircom must also trade on an EOI basis to prevent a significant trading advantage being bestowed on eircom.

ALTO members are concerned that eircom appears to be trading bitstream services from its internal allocation of costs rather than the costs the services and

costs that are offered to industry. This approach stifles operators trying to climb the 'Ladder of Investment' as competitors are never obtaining the same cost advantage enjoyed by eircom. ALTO considers that true EOI should be mandated in the form of Functional Separation and either virtual or full auditable system separation so that it is absolutely clear that all are competing on the same basis.

Q. 3 Do you agree with ComReg's preliminary views that in general Eircom's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets? Please provide reasons for your response.

A. 3. ALTO agrees with the ComReg's preliminary views that in general Eircom's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets**.** ComReg's rational 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.

Q. 4 Do you agree with ComReg's preliminary view that for Reusable Assets we should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets? Please provide reasons for your response.

A. 4. ALTO agrees in principle with ComReg's preliminary view that for Reusable Assets the cost should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets.

ALTO considers this approach reasonable as those assets are exposed to the elements and will need to be replaced from time to time.

ALTO also agrees with ComReg that any such replacement costs should be predicable, as 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.

Q. 5 Do you agree with the proposed principles, inputs and assumptions of the Revised CAM, as set out above in Chapter 5? Please provide reasons for your response.

A. 5. ALTO agrees with ComReg's assessment of the proposed principles, inputs and assumptions of the Revised CAM, as are found in Chapter 5.

In particular, ALTO has reviewed the specific choices set out by ComReg and supports those choices (in conjunction with a review of the cost model). Those choices are:

> 5.208 *"Option 1 assumes that revenues are realised the same time as investments are made; therefore the assumption is that a network is instantaneously built and operational"*
> 5.219 *"Option 2: The annual depreciation cost is based on the CCA financial capital maintenance ('FCM')"*
> 5.261 *"Option 2: Divide by the total number of retail and wholesale lines and apply the same value to all services."*

Q. 6 Do you agree 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? Please provide reasons for your response.

A. 6. ALTO agrees 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.

Q. 7 Do you agree with ComReg's preliminary view that an average price per

service over the price control period is appropriate? Please provide reasons for your response.

A. 7. ALTO agrees with ComReg's preliminary view that an average price per service over the price control period is appropriate, 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.

Q. 8 Do you agree with ComReg's preliminary view that the monthly rental charge for LLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets in the LEA? Please provide reasons for your response.

A. 8. ALTO agrees with ComReg's preliminary view that the monthly rental charge for LLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets in the LEA.

Q. 9 Do you agree with ComReg's preliminary view that the LEA footprint should be locked-in for the purposes of setting the LLU monthly rental price? Please provide reasons for your response.

A. 9. ALTO agrees with ComReg's preliminary view that the LEA footprint should be locked-in for the purposes of setting the LLU monthly rental price.

Q. 10 Do you agree with ComReg's preliminary view that the maximum monthly rental charge for SLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets nationally, while lines longer than 1km should be excluded from the calculation? Please provide reasons for your response.

A. 10. Based on the Consultation document, ALTO agrees with ComReg's

proposed approach.

Q. 11 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally (with active equipment based on BU-LRAIC+ costs) or the 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? Please provide reasons for your response.

A. 11. ALTO agrees with ComReg and its consideration of three possible solutions of a straight national price, LEA vs. Non-LEA and finally that option C that appears to be a workable compromise.

ALTO agrees that setting a straight national price (Option A) based on a bottom up model – i.e., akin to current cost accounting could allow eircom to over-recover. Similarly, Option B will further drive the digital divide in Ireland creating further difficulties for rural communities.

ALTO agrees with ComReg's view that the bottom up model should be adjusted for efficiency as many of the assets have bee written down and still have a considerable working life ahead – hence to apply CCA would overvalue those assets.

Furthermore, ALTO 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 the 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.

Q. 12 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR ISDN PRA and FRA services should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of

SB-WLR ISDN FRA and PRA nationally (with active equipment based on BU-LRAIC+ costs) or the 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 ISDN FRA and PRA services in the LEA? Please provide a reason for your response.

A. 12. ALTO agrees that the same principles apply as outlined in our response for question 11 and agree that for SB-WLR ISDN FRA and PRA the same solution should be adopted.

Q. 13 Do you agree with ComReg's preliminary view that the monthly rental price for SABB Outside the LEA should be based on Eircom's Actual Costs Adjusted for Efficiencies with the active equipment based on the BU-LRAIC+ methodology for the provision of SABB Outside the LEA? Please provide reasons for your response.

A. 13. ALTO does not agree with ComReg's preliminary view in this matter as a service. ComReg highlights at 7.40 that this must be greater than the national price of SB-WLR plus the port charge for BMB. We note 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. ComReg should consider this point carefully.

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Q. 14 Do you agree with ComReg's proposed approach for setting the price per pole? Please provide reasons for your response. If respondents have any alternative views regarding any of the assumptions used for setting pole access prices please substantiate your response with evidence, where appropriate.

A. 14. ALTO agrees with the general approach adopted by ComReg to price on a national basis.

ALTO members experiences with eircom continually attempting to set cost

orientated duct access prices has been frustrating, and gives the market no confidence that the prices eircom were offering were cost orientated. ComReg's Option 2 proposal is straightforward and most appropriate.

Q. 15 Do you agree with ComReg's preliminary view that price per meter of sub-duct should be used for setting duct access prices? Please provide reasons for your response.

A. 15. ALTO suggests that the sub-duct approach appears plausible on its face ComReg appears to have not stated how it is going to deal with usage. 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.

Q. 16 Do you agree with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas? Please provide reasons for your response.

A. 16. ALTO agrees with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas. ComReg should assess the charging and pricing principles applied more widely by querying pricing from regional sub-contractors.

Q. 17 Do you agree with ComReg's preliminary view that national price per meter is appropriate for setting dark fibre prices? Please provide reasons for your response.

A. 17. ALTO agrees with ComReg's preliminary view that national price per meter is appropriate for setting dark fibre prices as the approach is logical and consistent with actual deployment – i.e., it clearly relates to the actual distances in question.

Q. 18 Do you agree with ComReg's preliminary views that the incremental

cost methodology should remain in place for determining the appropriate monthly rental price for Line Share? Please provide reasons for your response.

A. 18. ALTO agrees with ComReg that pricing should be on an incremental basis, but we consider the incremental costs should actually be falling and the price should consequently reduce.

Q. 19 Do you agree with ComReg's preliminary views regarding the retail margin squeeze test between retail line rental and wholesale line rental and the associated inputs of the test? Please provide reasons for your response.

A. 19. ALTO considers the ComReg proposal regarding the retail Margin Squeeze Test – MST, needs further specification. Currently it does not define whether ComReg is taking a product-by-product approach or a basket approach, the industry requires that ComReg make their desired approach clear.

ALTO submits that it is possible to circumvent an MST basket by pricing low volume products high and high volume products low. Consequently, ALTO seeks more detail on the implementation of the MST before it could agree whether it is fit for purpose.

ALTO notes the considerable work of OXERA as part of previous consultations and the outcomes and resulting processes of this work should be referenced. ALTO remains concerned that the underlying principle aims of the MST can be circumvented with poorly described process. Given past the history of court activity - margin squeeze is a problem in Ireland and needs to be properly specified and carefully managed.

Q. 20 Do you agree with ComReg's preliminary views that pre-notification and pre-clearance is appropriate for the retail margin squeeze test between retail line rental and SB-WLR? Please provide reasons for your response. We

welcome the views of industry regarding the alternative approach of self-compliance as discussed above at paragraphs 10.45 to 10.48.

A. 20. ALTO considers that 5 working day notice is insufficient for ComReg to respond to eircom's submissions, particularly if pre-notice is not provided to ComReg. 5 days appears to be an impractically short period.

ALTO agrees in principle with the declaration of compliance, however there is now substantial evidence in the form of the recent eircom Governance report that this approach is not working – a link to the report can be found here: https://www.eir.ie/opencms/export/sites/default/.content/pdf/regulatoryinformation/regulatory_governance_model.pdf.

ALTO members have little confidence in eircom's compliance declarations given the lack of transparency of the process and the evident declarations in error as per the eircom governance report.

ALTO agrees that any notification should include promotions, discounts and bundles as we note that eircom has continued some promotions for considerable periods and well over a year. ALTO considers such long so called promotional periods or durations should be deemed to be permanent price changes, rather than unspecified and unclear promotions as such promotions can cause unnecessary uncertainty in the market. We consider ComReg must consider following Ofcom in that regards, mandating and directing that promotions are and should only be short in duration.

ALTO considers that the notice should be 15 working days, and that the penalties for any incorrect declaration should be such as to create the appropriate incentive for eircom to provide accurate and timely declarations.

Q. 21 Do you agree with ComReg's preliminary views regarding the wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs) and the associated inputs of the test? Please provide reasons for your

response.

A. 21. ALTO 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. We also note that the significant price increase of €2 per line, per month by eircom earlier in 2015 which we believe stalled business cases for deploying VoIP and impacted the market.

ALTO notes that the Vodafone presentation attached to the publication of this consultation also supports our view that the price hike stalled the introduction of VoIP.

Q. 22 Do you agree with ComReg's preliminary views regarding the ancillary charges for Market 4 products and services? Please provide reasons for your response.

A. 22. ALTO generally agrees with the assumptions and preliminary views expressed by ComReg in the consultation paper regarding the ancillary charges for Market 4 products and services. One area of concern is the issue of payment for power and facility services. ALTO considers that in a cost oriented economic environment, the price that the market should pay should only pay for what is reasonable, and what could be reasonably used with regard to power and facility services. To that end, the infrastructure costs should be aligned with those requirements. ALTO considers that the market has been over paying for power and cooling infrastructure and ComReg should stop this practice within the ambit of this consultation and later decision process.

Q. 23 Do you agree with ComReg's preliminary view that circa €0.50 per line per month is appropriate to take account of SB-WLR connection costs in the SB-WLR rental charge? Please provide a reason for your response.

A. 23. ALTO agrees that there has been a free connection promotion for a very considerable time and also that moving between service providers on eircom's

network does not incur a new physical connection. For these reasons we agree with ComReg's proposal to include the connection and presumably the exit fee in the line rental. This should also prevent eircom from using promotions for its own commercial aims.

Q. 24 Do you agree with ComReg's preliminary view that the price control period should be for three years but should remain in place any further notice by ComReg and that Eircom should review the inputs, costs and assumptions of the Revised CAM annually for material changes? Please provide reasons for your response.

A. 24. ALTO is concerned that ComReg has not defined 'material' in clause 12.7 when analysing the annual costs. For example would a cost reduction of 5, 10 or 15% be 'material' change. We consider ComReg should set a threshold and define the clause as requested here.

ALTO considers that three years is not a reasonable period for a price control to maintain stability in the market. ALTO suggests that reviews take place every 2 years.

Q. 25 Do you agree with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB Outside the LEA? Please provide reasons for your response.

A. 25. ALTO agrees with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB Outside the LEA. 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.

Q. 26 Do you agree with ComReg's preliminary view regarding the regulatory

approval mechanism and where Eircom should be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval? Please provide reasons for your response.

A. 26. ALTO agrees with ComReg's preliminary view regarding the regulatory approval mechanism and where eircom should be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval. Considering the various controls and also non-discrimination obligations, ALTO agrees with the possibility of reducing SB-WLR nationally or SABB outside the LEA.

Q. 27 Do you agree with ComReg's preliminary view that Eircom should not be allowed to give promotions / discounts with regard to SB-WLR connections? Please provide reasons for your response.

A. 27. ALTO agrees that the connection cost of SB-WLR connections should be built into the WLR rental.

While ALTO agrees with the concept of promotions and discounts, we consider these should be short term in nature and more in line with the traditional approach to promotions. In our view longer-term promotions should become price change and made permanent. By way of example, the €3 SB-WLR bundle discount that lasted some 18 months should have been a permanent price change as it had been in place for a considerable time and the market had factored the promotion into its pricing.

ALTO remains concerned 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.

Ofcom in the UK took this position many years ago to limited promotions to

relatively short periods otherwise the change should be a product/price change. We also consider that promotions should be treated in the same way as price changes, i.e., subject to notification, declaration and MST.

Q. 28 Do you have any comments on the Regulatory Impact Assessment and in your opinion are there other factors which ComReg should consider in completing its Regulatory Impact Assessment? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.

A. 28. ALTO agrees with the process engaged by ComReg in setting out its Regulatory Impact Assessment – RIA, within the consultation paper. ALTO has set out its views as to the most appropriate options arising in the Consultation paper in the answers supplied between questions 3 and 11, above.

ALTO notes that ComReg has taken utmost account of the EU Commission Recommendation dated 11 September 2013 on 'Consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment'.

ALTO submits that while this is an appropriate approach, Commission Recommendations are not in-fact binding.

Article 288 Treaty for the Functioning of the European Union – TFEU, defines the force and effect of the measures available to the institutions. Thus, *"a decision shall be binding in its entirety. A decision which specifies those to whom it is addressed shall be binding only on them"*. A recommendation on the other hand, like an opinion, "***shall have no binding force***". ComReg should bear this in mind in arriving at any decisions that it later may opt to make on foot of this consultation.

ALTO cautions ComReg to the extent that we have seen evidence of legal challenges to decisions where reliance on Commissions Recommendations that

have later been successfully challenged, see case reference [2013] IEHC 382.

Q. 29 Do you believe 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? Please explain your response and provide details of any specific amendments you believe are required.

A. 29. ALTO again submits that while the draft text of the decision instrument appears to adopt an appropriate approach, Commission Recommendations are not in-fact binding. Article 288 TFEU defines the force and effect of the measures available to the institutions. Thus, *"a decision shall be binding in its entirety. A decision which specifies those to whom it is addressed shall be binding only on them"*. A recommendation on the other hand, like an opinion, "***shall have no binding force***". Again, ComReg should bear this in mind in arriving at any decisions that it later may opt to make on foot of this consultation.

ALTO makes the following observations:

1. Reference 4.9 of the proposed decision and in the other proposed decisions:

   ALTO notes that ComReg uses the term 'plus a reasonable rate of return' and as is clear, that term is not defined in the consultation document. Given this weakness in what will be a legal document we consider ComReg should define what this means.

2. Reference clause 4.10 and 5.6 – last paragraph.

   ALTO has serious concerns about how fault codes change status as clear codes and the reason for a fault. For example, it is technically possible for a fault to be cleared whilst in the process of testing for the fault. In the case

we believe that eircom impose a write when tested clear code and the fault will be then declared an invalid fault.

3. Reference 5.4 –

   The language must be tightened up and ‘backhaul’ should be changed to ‘backhaul data costs’. These charges are different to infrastructure costs.

Q. 30 Do you believe that 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? Please explain your response and provide details of any specific amendments you believe are required.

A. 30. ALTO restates its already submitted point about over reliance on EU Commission Recommendations, as set out in response to Q. 28 and 29, all references to reliance on Recommendations should be immediately referred to legal counsel for review and restatement (if appropriate) within the ambit of the Access and Framework Directives, as amended.

ALTO makes the following comments:

1. Definitions ‘*Fibre to the Cabinet*’ – we request that ComReg replace ‘the’ with ‘a’. Reason – there are normally two street cabinets, one that is the copper primary connection point and the other houses the NGA electronics. This will also align with the text in the ‘fibre to the node’ definition.
2. Clauses 4.9 – We note that ComReg constantly use the term ‘*plus a reasonable rate of return*’ but that this term is not defined. Given this weakness in what will be a legal document we consider ComReg should define what this means.

Q. 31 Do you believe that the draft text of the proposed Decision Instrument for Market 2 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain your response and provide details of any specific amendments you believe are required.

A. 31. ALTO restates its point about use and reliance on EU Recommendations, ComReg must refer any changes that are underpinned by Recommendations to legal Counsel for revision and replacement under the Access and Framework Directives. This will avoid any appeals.

ALTO agrees with the proposed decision subject to certain limited concerns with the cost modelling being resolved. ALTO consider the proposed decision reflects the discussion and a move to cost orientation for SB-WLR.

ALTO

25th September 2015

2: BT Communications Ireland Ltd.

BT Communication Ireland Limited ["BT"]

Response to ComReg's Consultation

Eircom's Wholesale Access Service

Further Specification and amendment of price control obligations in Market 4 and Market 5 and further specification of price control obligation in Market 2.

Issue 1 – 25th September 2015

1.0 Introduction

We welcome the opportunity to comment on this significant price control consultation for Current Generation prices. We welcome the key proposal of 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. However, we 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). We would also like to make the following key comments:

1. **Functional Separation** – We remain disappointed that ComReg has not implemented the European remedy of functional separation and not wholly implemented the standard remedy of EOI which we believe would create greater regulatory certainty and the confidence for further investment in the market. We believe these would have prevented the situation described in the Eircom Governance Report which we believe demonstrates that the current regulatory approach is dated and in need of urgent modernisation. Our comments in this response and the requirements for increased price controls are therefore against this disappointing regulatory background.

2. **White Label Services –** We note eir Group provides a substantial amount of wholesale services through its white label products and this price control regulation should explicitly address this eir Group Wholesale channel. Therefore we are requesting ComReg continue to apply the price control obligations for eir Group White Label services.

3. **Equivalence and treating the industry fairly**. We welcome the decision of ComReg to publish the correspondence between ComReg and eir Group in document 15/67B. Whilst we understand ComReg will need to seek data from eir Group to check it's modelling, it appears that the process of developing and testing the model with eir Group has bestowed on eir Group a knowledge and time advantage over the industry. We appreciate the efforts of ComReg in providing the models on request during the consultation however for future consultations, we consider 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.

4. **Modelling Assumptions:** We welcome ComReg's work to scientifically model the network to determine the pricing and we would like to offer the following comments:

   - **Exchange launched VDSL –** We consider the model needs to be updated to consider EVDSL as eir Group has indicated its intention to deploy this technology which will address a significant part of the NGA market (circa at least ✂ premises). This exchange launched technology is supported on ULMP/Line Share and it is known that an alternative operator to eir Group has already deployed EVDSL and BT Ireland is intending to deploy this solution.

   - **D-Side Distances –** The data rate threshold for the usable distance of VDSL is not clear in the model and we note ComReg is suggesting the usable distance for VDSL based services should be 1km. However, we note from the independent TNO Report[1] supporting the recent Copper Loop Frequency Management Plan (CLFMP) industry discussion, that cabinet downstream bitrate is still over 36Mbit/s at 1km and circa 30Mbit/s at 1.2km. As the Government's minimum target rate for the National Broadband Plan 2 (NBP2) is 30Mbit/s the ComReg model should at least consider this distance. However, the graph suggests a broadband service at 18 to 20Mbit/s is still viable at 1.5km and many customers would take this rate over what will likely be lower current generation speeds. We also note that eir Group are offering lower speed VDSL profiles hence we would suggest ComReg at least change 1km to 1.2km and seriously consider whether the workable distance should be 1.5km.

   - **ULMP Distance -** We note the original ComReg Cost model 'CAM' considered LLU ADSL2+ from the exchange would work to 5km. We believe ComReg should re-consider ULMP carrying ADSL2+ as we believe the average distance between the exchange and the cabinet will be about 3.5km

[1] Impact Analysis of VDSL2 from the local exchange (EVSDL) on VDSL2 from the cabinet (CVDSL) *For the Irish access network.* TNO report 2015 R10267. *See figure 9.*

leaving circa 1.5 usage distance from the cabinet to the customer which is not that dissimilar to the VDSL modelled distance.

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5. **Removal of Retail Minus Regulation for SB-WLR –** We support this significant proposal as we believe this will bring greater certainty to wholesale pricing by removing the link to eir Group retail prices brings consistency to ComReg's regulation as highlighted in the consultation.

2.0 BT Response to the Detailed Questions

Removal of Retail Minus Regulation

Q. 1 Do you agree with ComReg's preliminary view that the price control for SB-WLR should be amended from retail minus to a cost orientation price control? Please provide reasons for your responses.

A.1 We agree with ComReg's preliminary view that the price control for SB-WLR should be amended from retail minus to a cost based price control. The reasons for our support of this view are as follows:

a. We note that 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. This behaviour demonstrated eir Group's ability to act independently. We believe moving to cost based regulation will ensure eir Group receive an adequate return for its investment, and will lessen its ability to 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. We consider 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. Cost based regulation will remove this market behaviour and we support.

b. **USO -** We note that ComReg is simultaneously consulting on the Universal Service Obligation (USO) for Access Fixed Lines (AFL) and that a national cost based regulation for SB-WLR would prevent an increase in the digital divide and others could offer an eir Group WLR line for the USO.

c. **Innovation and new technologies –** with the advances of technology and the anticipated growth of VoIP based voice services, we are concerned absent SB-WLR cost based regulation that eir Group could potentially distort the market through changes to the SB-WLR price. We note the eir Group 2 Euro per month price increase in Standalone Broadband earlier this year coincided with the volume introduction of VoIP by a competitor in the market. We also note the

Vodafone presentation provided by ComReg as part of the consultation pack highlights the detrimental impact of the SABB price increase. Hence we believe eir Group's wholesale activity appears to have impacted competitor alternative voice access.

Q. 2 Do you agree with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and the ancillary services for Market 4 and SB-WLR? Please provide reasons for your responses.

A.2 We agree that a cost based price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, and the ancillary services for Market 4 and SB-WLR. We are not commenting on CEI and dark fibre in this response. We would like to offer the following points.

a. These services form the building blocks to enable competitors to compete with downstream eir Group services such as Bitstream and voice services. 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. Hence we support Cost based regulation as it removes the ability of eir Group to use price variations to change the market, however eir Group must also trade on an EOI basis to prevent a significant trading advantage being bestowed on eir Group.

b. We believe and are concerned that eir Group is internally trading bitstream services from its internal allocation of costs rather than the published prices offered to industry. This approach potentially stifles operators trying to climb the ladder of investment as competitors are never obtaining the same cost advantage enjoyed by eir Group downstream services. We consider 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. We welcome the recent EOI enhancements to SB-WLR with NGA but much more is needed.

Cost and Price Modelling

Q. 3 Do you agree with ComReg's preliminary views that in general eir Group's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets? Please provide reasons for your response.

A.3 We generally agree at a high level with the ComReg proposal for costing based re-usable assets where infrastructure is shared and non-reusable assets where it is not. However we are unable to comment on the detailed aspects without the actual data.

Q. 4 Do you agree with ComReg's preliminary view that for Reusable Assets we should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets? Please provide reasons for your response.

A.4 We would agree in principle with ComReg's preliminary view that for Reusable Assets the cost should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets. We consider this reasonable as these assets are exposed to the weather and will need to be replaced from time to time. We would also agree with ComReg that any such replacement costs should be predicable given the perception that Eircom has had periods of underinvestment.

Cost Model

Q. 5 Do you agree with the proposed principles, inputs and assumptions of the Revised CAM, as set out above in Chapter 5? Please provide reasons for your response.

A.5.1 We generally agree with the proposed principle, inputs and assumptions of the revised Cost Access Model (CAM).

A.5.2 Whilst the street analysis looks plausible the only people that could judge whether the analysis is correct is eir Group and ComReg/TERA with the detailed information in front of them to test the model against the actuals. Hence we are unable to give a considered view on this aspect of the model.

A.5.3 We agree 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.

A.5.4 We do not agree with 5.42 and 5.43, and 5.44 as the clarity concerning a customer's serving exchange has become less certain with the re-homing of cabinets to different exchanges. This happens for the copper network where customers were receiving poor current generation broadband, and for fibre served NGA I.e. it can be easier to serve fibre from an adjacent exchange – for these cabinets the CSID is based on the cabinet and not the exchange. If not already done we consider the network deployment at the street level needs to be modified to include re-homed cabinets. In future backhaul fibre may not even go back to the local exchange.

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A.5.6 Reference clause 5.239. The Line Fault Index (LFI) for the current generation platform has been a concern for some time and we note the relaxed requirements agreed between ComReg and Eircom in the Performance Improvement Plans that were implemented without consultation with industry. We consider that rather than further concessions to the regulation, which in our view is detrimental to the end user, ComReg should enforce the regulation that it set originally.

Q. 7 Do you agree with ComReg's preliminary view that an average price per service over the price control period is appropriate? Please provide reasons for your response.

A.7 We agree with ComReg's preliminary view that an average price per service over the price control period is appropriate to maintain a level of certainty in the market. Please also see our response to question 24

Product Pricing - LLU

Q. 8 Do you agree with ComReg's preliminary view that the monthly rental charge for LLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and eir Group's Indexed RAB for Reusable Assets in the LEA? Please provide reasons for your response.

A.8 Please see our response to question 3.

Q. 9 Do you agree with ComReg's preliminary view that the LEA footprint should be locked-in for the purposes of setting the LLU monthly rental price? Please provide reasons for your response.

A.9 We note the original ComReg Cost model 'CAM' considered LLU ADSL2+ from the exchange would work to 5km. We believe ComReg should reconsider at ULMP carrying ADSL2+ as 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.

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Product Pricing - SLU

Q. 10 Do you agree with ComReg's preliminary view that the maximum monthly rental charge for SLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and eir Group's Indexed RAB for Reusable Assets nationally, while lines longer than 1km should be excluded from the calculation? Please provide reasons for your response.

A.10 We generally agree with the approach however we would like to offer the following comments to the detail.

- **Exchange launched VDSL –** We consider the model needs to be updated to consider EVDSL as we believe this technology will address a significant part of the market (circa at least ✂ premises). This exchange launched technology is supported on ULMP/Line Share and it is known an alternative operator to eir Group has already deployed EVDSL and BT is also intending to deploy this solution.

- **D-Side Distances –** The data rate threshold for the usable distance of VDSL is not clear and we note ComReg is suggesting the usable distance should be 1km. However, we note from the TNO Report[2] supporting the recent Copper Loop Frequency Management Plan (CLFMP) industry discussion, the cabinet downstream bitrate is still over 36Mbit/s at 1km and circa 30Mbit/s at 1.2km. As

[2] Impact Analysis of VDSL2 from the local exchange (EVSDL) on VDSL2 from the cabinet (CVDSL) *For the Irish access network.* TNO report 2015 R10267. *See figure 9.*

the Government's minimum target rate for the National Broadband Plan is 30Mbit/s the model should at least consider this distance. However, the graph suggests a broadband service at 18 to 20mbit/s is still commercially viable at 1.5km and most customers would take this instead of current generation broadband. We also note that eir Group are offering lower speed VDSL profiles hence we would suggest ComReg at least change 1km to 1.2km and consider whether the workable distance should be 1.5km.

Product Pricing SB-WLR

Q. 11 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR should be based on the higher of the eir Group's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally (with active equipment based on BU-LRAIC+ costs) or the BU-LRAIC+ costs for Non-reusable Assets and active equipment with eir Group's Indexed RAB applied to Reusable Assets for the provision of SB-WLR in the LEA? Please provide reasons for your response.

A.11 We agree with ComReg's consideration as the proposed option C would appear to be trying to find a workable compromise.

Product Pricing – ISDN (BRA, FRA and PRA)

Q. 12 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR ISDN PRA and FRA services should be based on the higher of the eir Group's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR ISDN FRA and PRA nationally (with active equipment based on BU-LRAIC+ costs) or the BU-LRAIC+ costs for Non-reusable Assets and active equipment with eir Group's Indexed RAB applied to Reusable Assets for the provision of SB-WLR ISDN FRA and PRA services in the LEA? Please provide a reason for your response.

A.12 We do not agree with ComReg in this area. We are not aware of competitive issues with these services in Ireland and have two major concerns:

1. 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. We therefore consider a different approach to pricing is required.
2. We consider it 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. Therefore, regulatory intervention at this time will be counterproductive by undermining investment plans to deliver innovative substitute services. We therefore do not agree that ComReg should propose price reductions to FRA and PRA services as it will create uncertainty and potentially undermine new investment.

Product pricing - SABB

Q. 13 Do you 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? Please provide reasons for your response.

A.13 We are assuming this is for current generation SABB. We 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. However, we consider that ComReg need to consider the input cost elements with reference to our earlier comments on ULMP. I.e. we believe ComReg need to re-consider the D-Side working distances of ADSL2+. This would allow reduced prices for both current and next generation services based on the Unbundled Local Metallic Loop.

Product pricing – Line Share

Q. 18 Do you agree with ComReg's preliminary views that the incremental cost methodology should remain in place for determining the appropriate monthly rental price for Line Share? Please provide reasons for your response.

A. 18 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. We agree this pricing approach should continue as it correctly reflects the recovery of the order handing system costs for Line Share.

Margin Squeeze Tests

Q. 19 Do you agree with ComReg's preliminary views regarding the retail margin squeeze test between retail line rental and wholesale line rental and the associated inputs of the test? Please provide reasons for your response.

A.19 Absent functional separation, EOI and given past margin squeeze concerns in Ireland we consider there is a need to continue margin squeeze tests. We consider the ComReg proposal needs further specification as it does not define whether ComReg is taking a product by product approach or a basket approach. We believe it is possible to circumvent an MST basket approach by pricing low volume products high and high volume products low. We note the considerable work of OXERA as part of previous ComReg consultations and the outcomes and resulting processes of this work should be considered. I.e. we are concerned the underlying principle aims of the MST could be circumvented with poorly described process.

Q. 20 Do you agree with ComReg's preliminary views that pre-notification and pre-clearance is appropriate for the retail margin squeeze test between retail line rental and SB-WLR? Please provide reasons for your response. We welcome the views of industry regarding the alternative approach of self-compliance as discussed above at paragraphs 10.45 to 10.48.

A.20 We consider the 5 working day notice is insufficient for ComReg to respond to eir Group's submissions, particularly if pre-notice is not provided to ComReg. For example,

if the notice is given during a holiday period, will ComReg be able to adequately test the application? 5 days would appear an impractically short period.

Self-compliance - We believe the recent Eircom Governance Report highlights the approach of self-compliance by declaration is unlikely to work at this time. Past margin squeeze problems have taken a considerable time and industry resource to progress through ComReg to stop and the delay becomes extended where court proceedings commence. Hence the potential for market damage can continue for at least a year before action can be taken to stop the issue – the experience was very difficult in the past. We believe the Eircom Governance Report raises serious compliance questions at this time and undermines our confidence the proposal will work. Hence we reject this proposal.

We agree that the notification should include promotions, discounts and bundles as we note that eir Group has continued some promotions for well over a year. We consider such long duration's condition the market to treat these as prices rather than promotions. We consider ComReg should follow Ofcom in that promotions should be short in duration.

Q. 21 Do you agree with ComReg's preliminary views regarding the wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs) and the associated inputs of the test? Please provide reasons for your response.

A.21 Absent functional separation and EOI 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. We also believe 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. The Vodafone presentation attached to the publication of this consultation also supports our view that the price hike hindered the introduction of VoIP.

For carrier class VoIP many of the costs of a traditional switch still apply to achieve a reliable and predictable QOS sufficient for carrying 112/999 calls and we therefore agree an allowance for VoB costs is required.

Ancillary Services – Cost Based Regulation

Q. 22 Do you agree with ComReg's preliminary views regarding the ancillary charges for Market 4 products and services? Please provide reasons for your response.

A.22 Reference Power Charges – We remain concerned 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. Our concern is exacerbated as we are also paying for the associated cooling infrastructure that is larger than we require (up to twice what we require). We consider in a cost based environment the price we pay should only cover for assets we reasonably use and the infrastructure should be aligned with this requirement. Hence we consider we are over paying for power and cooling infrastructure and ComReg should stop this.

Q. 23 Do you agree with ComReg's preliminary view that circa €0.50 per line per month is appropriate to take account of SB-WLR connection costs in the SB-WLR rental charge? Please provide a reason for your response.

A.23 We agree that there has been a free connection promotion for a very considerable time and also that moving between service providers on Open eir's network does not incur a new physical connection. For these reasons we agree with ComReg's proposal to include the connection and presumably the exit fee in the line rental. This will also prevent eir Group from using wholesale promotions for its own targeted commercial aims.

Price Control Period

Q. 24 Do you agree with ComReg's preliminary view that the price control period should be for three years but should remain in place any further notice by ComReg and that eir Group should review the inputs, costs and assumptions of the Revised CAM annually for material changes? Please provide reasons for your response.

A.24 We agree with ComReg's preliminary proposal but given the potential disruption to the market of material price changes we consider ComReg should consult in the event that material changes are detected. 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,

Notification Timescales

Q. 25 Do you agree with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB Outside the LEA? Please provide reasons for your response.

A.25 We agree with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB outside the LEA. 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.

Q. 26 Do you agree with ComReg's preliminary view regarding the regulatory approval mechanism and where eir Group should be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval? Please provide reasons for your response.

A.26 We agree with ComReg's preliminary view regarding the regulatory approval mechanism and where eir Group would be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval. **However 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.**

Discounts And Promotions

Q. 27 Do you agree with ComReg's preliminary view that eir Group should not be allowed to give promotions / discounts with regard to SB-WLR connections? Please provide reasons for your response.

A.27 We consider 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

Regulatory Impact Assessment

Q. 28 Do you have any comments on the Regulatory Impact Assessment and in your opinion are there other factors which ComReg should consider in completing its Regulatory Impact Assessment? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.

A.28 We consider the RIA has overlooked the impact of the SLU price change on NGA pricing and CGA vs. NGA competition. We note ComReg suggests there is no impact by addressing this as 'no change' as the price regime has not changed. However this allows a considerable change to NGA pricing whilst current generation wholesale prices are pegged at higher rates. We are not saying the impact is necessarily wrong, but it should have been addressed in the RIA.

Decision Notices

Q. 29 Do you believe 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? Please explain your response and provide details of any specific amendments you believe are required.

A.29 We would like to offer the following comments:

1. Reference clause 4.10 and 5.6 – last paragraph. We have serious concerns about how fault codes change status as clear codes and the reason for a fault. For example, it is technically possible for a fault to be cleared whilst in the process of testing for the fault. In this case we believe that eir Group impose a Right When Tested (WRT) clear code and the fault will be then declared an invalid fault. To highlight this point we give two examples:

   Example 1 – Port lock up – Sometimes the electronics and software in an electronic data port can get confused and locks up – similar to the laptop lock-up. The simple process of re-setting or rebooting the device will clear the problem – just like a laptop. If this were defined as an invalid fault could industry be forced to pay a 100 Euro fee? We suggest no as, in the view of the customer, the service did not work and was fixed.

   Example 2 – At key flexibility points in the network such as the MDF, Cabinet and Poles it is quite possible that the action of testing can clear the fault. One reason is wires including the circuit to be tested, have to be physically moved to gain access to the electrical connectors and this action can actually resolve the problem if there is a poor joint. Indeed BT carried out an experiment many years ago of welding the doors of a cabinet shut and the fault rate dropped substantially i.e. moving the wires also adds faults to other circuits. This simple action can clear a fault so that when the test is carried out the service is found to be fault free – i.e. right when tested and declared an invalid fault.

   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.

2. Reference 5.4 – The language is too loose and we propose ‘backhaul’ should be changed to ‘backhaul data costs’ which is outside of the scope of this price control. I.e. These charges are different to infrastructure costs.

Q. 30 Do you believe that 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? Please explain your response and provide details of any specific amendments you believe are required.

A.30 We would like to offer the following comment:

Definitions ‘Fibre to the Cabinet’ 3rd line – replace ‘the’ with ‘a’. 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. This will also align with the text in the 'fibre to the node' definition.

Q. 31 Do you believe that the draft text of the proposed Decision Instrument for Market 2 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain your response and provide details of any specific amendments you believe are required.

A.31 We generally agree with the proposed decision subject to our concerns raised in our responses to the questions being resolved. We consider the proposed decision reflects the discussion and a move to cost orientation for WLR.

End

3: Eircom Ltd.

eircom Limited

Response to ComReg Consultation and Draft Decision 15/67

eircom Wholesale Access Services

Further Specification and Amendment of Price Control Obligations in Markets 4 & 5 and Further Specification of Price Control Obligation in Market 2

25 September 2015
(Non-Confidential)

The comments submitted to this consultation are those of eircom Ltd trading as ‘eir’ and ‘open eir’

1. Executive Summary

1.1. eircom welcomes the opportunity to comment on ComReg's proposed wholesale access prices put forward in *ComReg Consultation 15/67 – eircom's Wholesale access services* ('the Consultation').

1.2. The forthcoming years will be of particular importance for the development of Ireland's communications sector. Significant investment in multiple competing access networks is well underway. eircom is undertaking substantial investment in rolling out high speed fibre broadband. SIRO is investing in the rollout of its rival network and will shortly launch commercial services. UPC has launched high speed broadband services and is the largest provider of network services in many parts of Ireland. In addition, the Government has recently announced its proposed intervention strategy for the National Broadband Plan (NBP). Ireland's mobile networks are also continuing to extend 4G coverage and to increase speeds. Competition at the retail level, based on triple and quad play offers, also continues to intensify. All of eircom's main competitors, e.g. Sky and BT, operate as part of large international corporations who take advantage of substantial economies of scale in terms of network deployment, product development at both the wholesale and retail levels, and content purchasing power.

1.3. In this environment of rapidly developing competition, ComReg must ensure that regulation supports the efficient competitive process rather than being tailored to protect or assist particular competitors. It is also critical that regulation provides for the legitimate recovery of eircom's costs. Distortions created by regulation can deter investment by eircom and rival providers and lead to inefficient outcomes resulting in higher prices to consumers.

1.4. eircom is concerned that ComReg's proposals are based on a short-term framework that fails to recognise both the extent of likely future competition and what revenues will be needed over the longer term to ensure cost recovery.

Implications of competitive developments

1.5. eircom believes that the competitive developments under way have a number of implications for the regulatory proposals in the Consultation.

1.6. First, there is no justification for ComReg's proposed changes to apply more extensive regulation of SB-WLR, including the proposed cost orientation obligation and the proposed new margin squeeze between SB-WLR and retail line rental. Competition in the Larger Exchange Area (LEA) is intense with eircom's broadband market share much smaller than UPC's within that operator's network coverage area. There are well-established LLU-based providers and SIRO is in the process of creating greater network competition to eircom. Mobile substitution continues to be an important competitive factor nationally. eircom believes 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.

1.7. Continuing regulation of SB-WLR nationally (whether as retail minus or as a cost-based obligation) would clearly render the proposed new line rental margin squeeze test unnecessary. ComReg's own pricing evidence shows that eircom has not engaged in a margin squeeze in fixed voice – eircom's prices are being significantly undercut by rivals. Such a margin squeeze is even less likely looking forward. 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. However, eircom would have no scope to recover these losses given the intense prospective competition from UPC, SIRO, mobile broadband and the LLU-based operators. The margin squeeze test would be regulating margins to address a problem that does not exist, nor will exist. The margin squeeze test would, however, forestall the development of greater competition by constraining eircom's ability to launch competitive offers. The risks to competition from the imposition of the proposed test are much more substantial than any potential incremental benefit the test might offer over competition law.

1.8. The proposed POTS-based VUA margin squeeze test also lacks a compelling economic logic. VoB investment will be efficiently driven by the features of the technology and its relative cost. The design of the proposed test risks undermining efficiency. To the extent that ComReg believes that there is a need for competitive safeguards in this area, eircom believes that these can be efficiently addressed through an obligation on eircom to offer wholesale VoIP services to third parties.

1.9. Second, regulatory prices need to be based on the expected level of costs taking into account the likelihood of ongoing line losses to rival platforms. eircom's total group fixed access lines fell by ✂ in the year to June 2015. eircom's total lines can be expected to fall by around ✂ a year over the regulatory period (assuming that the recent rate of decrease reflecting losses to mobile and UPC continues ✂). The current proposals assume no line loss in the Bottom-Up modelling and a much lower rate of line loss in the Top-Down modelling than is likely to be experienced in practice. The Bottom-Up assumption is based on an incorrect understanding of the European Commission's Recommendation on Costing Methodologies[1] which clearly states that losses to rival network operators should be taken into account.

1.10. Third, 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. ComReg needs to take this into account to ensure that the price for SB-WLR reflects the actual cost of service provision. As well as this change, eircom's economic advisors, CEG, have identified a number of other changes in parameters and corrections to spreadsheet errors that necessitate an increase in the Consultation's proposed service prices.

1 Commission Recommendation of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment Brussels, C(2013) 5761 final

1.11. Fourth, while ComReg has sought to take into account the difference in competitive conditions between the LEA and outside the LEA, the aim of the regulation will only be achieved if the definition of the LEA reflects the best available information on the likely areas of future network rollout.

Price stability and longer term cost recovery

1.12. eircom is particularly concerned that ComReg has not considered what price increases would be implied by its approach beyond the forthcoming regulatory period. The current proposals will require large price increases in the next regulatory period. Such price instability risks deterring investment and does not appear credible. There are three major grounds for concern in this regard:

(i) the proposal to set constant prices over the regulatory period;

(ii) the proposed tilted annuity approach will require significant price increases over the longer term for services priced using Bottom-Up modelling; and

(iii) a substantial proportion of eircom's poles will need replacing in the medium term.

1.13. ComReg's proposal to set prices on the basis of the initial three years of costs has serious flaws. While the proposal offers price stability over the regulatory period, this is only achieved by creating the need for large price spikes at the start of the next regulatory period. Such a price path distorts investment and consumption decisions and can lead to problems for both wholesale and retail customers compared with a more conventional CPI-X approach. As ComReg's cost modelling already produces estimated costs for each year, there is no economic or practical reason for ComReg not to adopt standard international practice in implementing a CPI-X approach (where X is chosen so as to ensure that real costs are recovered over time). In addition, ComReg has not consistently conducted market reviews at 3 yearly intervals (as required by the European framework) exacerbating the risk that costs will rise substantially above prices before the next review.

1.14. The proposed prices generated by the Bottom-Up modelling are based on tilted annuities that would require large price increases over the longer term. It is not clear that ComReg would be willing to commit to such price increases. We believe that ComReg should instead set out a pricing approach that better achieves price stability, predictability and cost recovery.

1.15. eircom also believes that prices should be set so as to provide for the expected medium term costs of pole replacement. This would recover the same net present value of revenues but would do so in a way that achieves more stable prices over time rather than creating a windfall for current customers at the expense of future customers. More stable pricing would also support efficient investment decisions.

Other Concerns

1.16. eircom is concerned that:

(i) 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;

(ii) while welcoming ComReg's recognition of the need for eircom to be able to respond to the prices of its competitors, we believe 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; and

(iii) ComReg proposes to prohibit eircom from giving promotions or discounts with regard to SB-WLR connections – this would deny wholesale and retail customers the benefit of promotions and discounts without providing any competitive benefit.

Structure of Response

1.17. In section 2, we provide an overview of key market facts relevant to ComReg's proposals. In section 3, we set out key concerns with ComReg's proposed cost modelling approach. Section 4 responds to ComReg's proposed pricing approach. In the remainder of this response, we respond to the specific consultation questions on each of the areas of the consultation.

Also forming part of eircom's response are:

Appendix 1: a report by eircom's economic advisors CEG that provides an economic assessment of ComReg's major proposals; and

Appendix 2: a paper by Michael Rhodes and a report by Compass Lexecon that show why there is no justification for a margin squeeze test in the presence of wholesale cost-based regulation.

2. ComReg's Proposals Should Reflect the Rapidly Developing Competition in the Market

2.1. Many Irish consumers benefit from much greater competition in relation to fixed services than consumers elsewhere in Europe. UPC reports that its cable network passes 853,000 homes (more than 40% of Irish homes) and claims that its superfast broadband offer (of up to 240 Mbps) is the fastest in the country.[2] TERA notes that "*the market position of UPC is very strong in urban areas*."[3] As Figure 1 shows, in areas where UPC has rolled out its own network, UPC has taken 62% of fixed broadband customers while eircom has only 20% of customers in these areas and with Vodafone, Sky and others also holding significant shares.

Figure 1 – Retail broadband market shares in urban areas (disaggregated by whether UPC's network is present) and in rural areas

2.2. Significant network investment is taking place that will extend and deepen competition over the forthcoming regulatory period including as a result of:

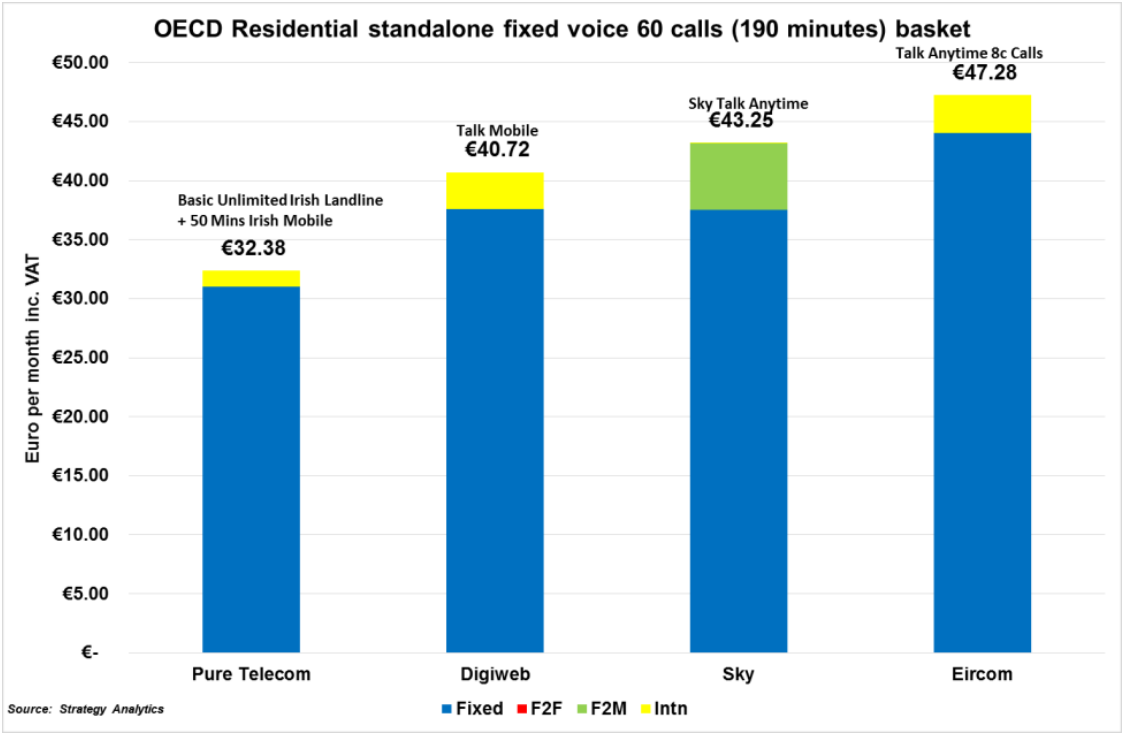
- The continued rollout of the SIRO FTTH network to 500,000 premises in 50 towns initially, particularly areas where UPC's network is not present and to a further 300,000 homes later;
- Sky, with the competitive advantages of its established TV offering and customer base, extending the availability of its retail fibre broadband service (which indirectly uses the eircom network via BT) to 1.6 million households by the end of 2015 and increasing competitive pressure on eircom at the retail level;[4]
- By 2018, 60% of premises in the National Broadband Plan (NBP) intervention area being passed by the wholesale open access network subject to a competitive tender in accordance with the NBP proposals announced in July 2015; and
- The improving speed and availability (together with the advantage of mobility) of mobile broadband services.[5]

[2] Liberty Global Form 10-K, 2013 and http://www.upc.ie/about-us/press/2015/upc-launches-fastest-broadband-ireland/.eircom does not concede that this claim is correct.
[3] TERA, *Report on the determination of appropriate costing and pricing methodologies for the copper access network in Ireland (ComReg Document 15/67a)*, p.25.
[4] http://www.independent.ie/business/irish/sky-ireland-launches-fibre-broadband-offering-speeds-of-up-to-100mb-30821099.html
[5] We also note that Three announced in June 2015 that its customers would get 4G services for no additional charge for another year and that former O2 customers are getting 4G for the first time (http://press.three.ie/press_releases/three-extends-free-4g-promotion-for-all-customers-until-july-2016/). Vodafone announced in July 2015 that its 4G+ technology is delivering speeds up to three times faster than standard 4G.

2.3. While upstream competition will always be limited in rural parts of Ireland with some of the lowest population densities in Europe, the NBP will see the wholesale provision of services to these areas subject to a competitive tender. Furthermore, SIRO's FTTH network is extending to many areas that are not currently subject to competitive wholesale provision. Nonetheless, the significant geographic differences in prospective infrastructure competition need to be recognised in ComReg's proposals.

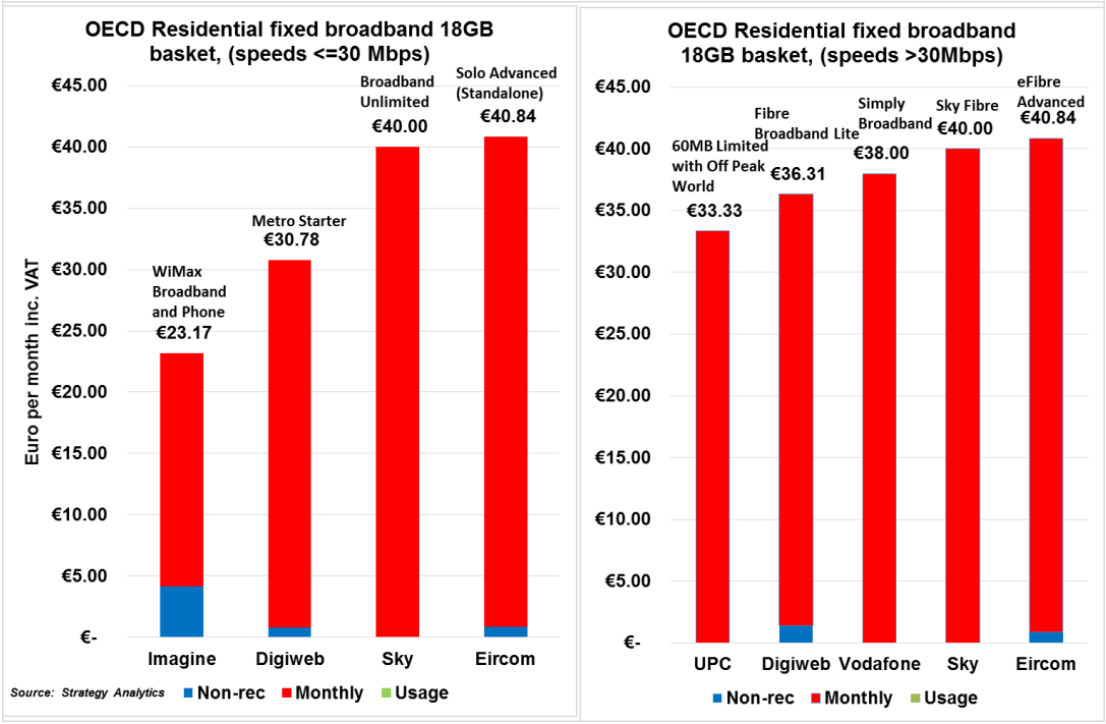
2.4. eircom's retail pricing is already undercut by other operators who self-supply and/or purchase wholesale inputs from eircom. This is shown in ComReg's price comparisons, including the comparisons for residential and business fixed voice baskets and for residential fixed broadband baskets (see Figures 2 & 3 below). These price comparisons are based on the overall cost of buying a standardised basket of services from each operator.[6]

Figure 2 – Price of a residential standalone fixed voice basket[7]



[6] Individual prices for each call type are not shown where they are included in the fixed charge for the bundle.
[7] ComReg 15/102, Figure 2.5.1.

Figure 3 – Price of residential fixed broadband basket[8]



2.5. Retail competition is intense. eircom's retail share of fixed line telephony subscriptions is 44% as at 30 June 2015 and 35.3% retail share of fixed broadband subscriptions[9]. Despite the intensity of competition in the fixed telecommunication and broadband markets, ComReg is proposing to retain extensive overlapping regulation and even to switch to more intrusive forms of regulation. The wide-ranging scope of the proposed regulation is not justified by the nature of any identified competition problem. In particular, ComReg has failed to target the regulation to only the areas where effective competition is unlikely to develop. Furthermore, ComReg is proposing multiple layers of regulation (including proposed new margin squeeze tests) when targeted upstream regulation would better achieve efficient outcomes.

2.6. In many cases, ComReg's proposals will be counter-productive. They will inhibit eircom's ability to compete against the other major players to the detriment of consumers, and they will distort investment incentives over a period when significant investment is planned to take place. We expand on these concerns in relation to our comments on ComReg's specific proposals in the rest of this response.

3. Key Concerns with ComReg's Costing Approach and Cost Modelling

3.1. This section sets out eircom's main concerns with ComReg's proposed cost modelling approach. More detailed comments are provided in response to the

[8] ComReg 15/102, Figure 3.6.1.
[9] ComReg 15/102

Consultation's specific questions later in this document, as well as in the accompanying report by CEG.

The approach to assessing prospective competition

3.2. eircom agrees with ComReg that the long-term benefits to consumers will be supported by promoting infrastructure competition to the full extent that is economically viable. In this regard, a BU-LRAIC+ approach should be applied to price services in all areas in which there is a realistic prospect of future network roll-out. ComReg notes (4.76) "*The economic rationale for the current cost approach applied by means of a BU model is that by linking the value of the assets to newly deployed network it promotes efficient investment incentives*." This should include the 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. It will be too late to only apply BU-LRAIC+ prices to areas after SIRO has determined its plans. The availability of services at prices based on Top-Down modelling risks leading to a narrower scope of rollout and hence the loss of the benefits of infrastructure competition.

3.3. The ongoing development of competition in the LEA also has two important implications for the cost modelling. First, as discussed next, it is highly likely that eircom will continue to lose lines to rival network operators which will increase the costs that need to be recovered from the remaining lines. Second, the take-up of SB-WLR is already skewed towards the higher cost rural areas and will become even more skewed towards these areas with the imminent launch of SIRO. ✂. ComReg's proposed prices do not even reflect the current geographic mix of SB-WLR take-up and will need to be increased significantly to ensure cost recovery. The CEG report sets out the required adjustment for this change as well as revised prices to address all the issues raised.

Forecast line numbers

3.4. ComReg assumes that eircom's line numbers will remain constant in its Bottom-Up modelling. This is inconsistent with the European Commission's Recommendation on Costing Methodologies which notes "*Only traffic volumes moving to other infrastructures (for example cable, mobile), which are not included in the cost model, will entail a rise in unit costs.*" eircom has experienced a significant loss in retail lines that has only been partly offset by increases in wholesale line numbers. We expect an ongoing loss in total lines. A significant number of households in Ireland have chosen to be mobile-only and some further growth in their number can be expected given improving mobile broadband speeds. Liberty Global's latest results show that UPC continues to grow its telephony and internet subscribers.[10] Looking forward, we also expect a significant loss in lines as Vodafone and potentially other wholesale customers shift to SIRO. The Government is also progressing its NBP tender which may also impact eircom's line numbers.

[10] http://www.libertyglobal.com/pdf/press-release/Liberty-Global-Earnings-Release-Q2-15-FINAL.pdf p.24.

3.5. ✂

3.6. We believe that the assumption of no line loss in the Bottom-Up Modelling is based on a misunderstanding of the Commission's Recommendation. We believe that both the Bottom-Up and Top-Down Modelling should incorporate a forecast line loss that takes into account the rate of loss in recent quarters and the known market developments into the future. The CEG report sets out the price impact of a reasonable forecast of line loss based on the most recent information available.

Treatment of poles and the credibility of the longer term price increases implied by ComReg's proposed approach

3.7. ComReg proposes to model the costs of poles using a weighted average of the costs in eircom's HCAs (adjusted for forecast pole replacement over the period 2015-17) and a Bottom-up valuation for a further 8% of poles expected to be replaced by NGA technology.

3.8. As ComReg is aware, a large share of eircom's poles is already over 30 years old and will need replacing in the medium term. 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. Customers today would effectively enjoy a windfall from wholesale access prices that do not reflect the true economic value of the current pole network. Furthermore, the price instability from ignoring the medium term replacement costs of poles risks undermining and distorting investment incentives. eircom believes that ComReg should give consideration to the alternative approach of Infrastructure Renewals Accounting as described in CEG's report.

3.9. eircom is also concerned that the use of a tilted annuity approach implies future wholesale access price increases that are not credible. eircom believes 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.

Other concerns with the proposed costing approach

3.10. As set out further in CEG's report (see section 3.2.2 and Appendix A), costs are also likely to be understated as a result of:

(i) the assumption that the network is instantaneously built and operational – in line with eircom's experience a more realistic time to build assumption would be in the range of 6- 12 months; and

(ii) The NBV of assets in the model are understated because the model overestimates the depreciation that has been allowed to date.

4. Key concerns with ComReg's Proposed Pricing Approach

4.1. eircom believes that the strength of competition in the LEA warrants less intrusive regulation and that there is little basis for the proposed change to instead impose a cost obligation on SB-WLR. We expand on our concerns in our response to Question 1 below. If, despite the evidence on competition, ComReg was to regulate the price of SB-WLR at cost, then there would be no economic justification for imposing the proposed new margin squeeze test between retail and wholesale line rental. eircom discusses this further in response to Question 19.

4.2. eircom's view is that ComReg's proposals in relation to dark fibre should be withdrawn in favour of the previous proposals put forward in ComReg Decision D03/13 (Document 13/11 on NGA Remedies). Any proposed price is likely to be well below a sustainable long term price. This is discussed further in response to Question 17.

4.3. eircom also has serious concerns with ComReg's proposal that the regulated prices be based on the average of the costs of the services over the initial three years. This approach runs the joint risks of eircom failing to recover legitimate costs in the absence of a prompt subsequent review, and of OAOs facing substantial increases in prices at the start of the next review. Please also see our response to Question 7 and section 5 of the CEG report.

4.4. ComReg considers that the price control period should be at least three years and remain in place until further notice by ComReg. eircom notes that under Article 16(6) of the revised common regulatory framework for electronic communications networks and services (the Framework Directive) as amended by Directive 2009/140/EC, national regulatory authorities are required to carry out an analysis of the relevant market and notify the corresponding draft measure within three years from the adoption of a previous measure relating to that market. Extensions to this three year period are only to be provided in exceptional circumstances and subject to prior approval by the European Commission.

Responses to Consultation Questions

Q. 1. Do you agree with ComReg's preliminary view that the price control for SB-WLR should be amended from a retail minus to a cost orientation price control? Please provide reasons for your responses.

ComReg proposes to change the regulation of SB-WLR from retail minus to cost orientation (as well as to introduce a new ex ante margin squeeze test between retail and wholesale line rental). This is at a time when competition is growing strongly and so the presumption would be that regulation should be wound back. eircom notes 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).[11] ComReg's proposal for instead 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.

ComReg overstates the drawbacks of a retail-minus approach

The Consultation has only a limited discussion of the benefits of a retail minus 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.

The Consultation notes (4.22) that retail minus is relatively easy to implement and requires less cost data than modelling all costs. ComReg dismisses this advantage on the grounds that they have developed a full cost model. However, the fact remains that cost modelling is based on numerous assumptions with a significant risk of error including in relation to the level of costs and the required return on capital. An approach that is less information intensive will carry less risk of undermining investment by both eircom and competing networks.

The Consultation correctly notes (4.23) that SB-WLR is close to a retail service which involves renting active equipment from eircom and with relatively little investment on the part of OAOs. As retail minus controls the retail margin, OAOs can compete based on their relative efficiency in retailing activities.

The TERA report also notes that retaining retail minus for SB-WLR provides for regulatory consistency which "*is important since it provides operators with a long-term vision and so facilitates planning investments*."

Neither the Consultation nor TERA consider a key reason as to why most European regulators use retail minus for SB-WLR. BEREC reports that in 2014, 13 NRAs use retail minus compared with 7 using cost orientation. A further 3 use price caps – as in the case of the Netherlands, these appear to be derived from earlier retail minus prices. In particular, other regulators have recognised that by setting SB-WLR at retail

[11] See Section 2 of the CEG report.

minus, they will promote investment upstream including in competing network infrastructures and in network investments utilising upstream access products. To instead allow competing providers to obtain cost-based access to a largely resale service will undermine the incentive for network investment. Why should a potential operator undertake a risky investment in rolling out a new network when it can obtain regulated cost-based access to eircom's existing network?

In its decision to introduce retail minus for SB-WLR, the Dutch regulator noted:

- WLR is primarily aimed at promoting effective service competition at the retail level and that SB-WLR rates based on retail minus offer more certainty to entrants because the retail margin in which they compete is fixed; and

- Retail minus will not discourage network investments because the price may be higher – at least not lower- than a cost based approach which makes it more attractive for someone to invest in alternative network than shop at KPN.[12]

A WIK report to the Dutch regulator at the time considered different scenarios as to the relationship of the incumbent's retail prices to costs and found that retail minus for SB-WLR would not deliver worse outcomes than cost orientation in any scenario but would give better outcomes in terms of promoting infrastructure based competition and avoiding the costs of inefficient service provider entry. WIK concludes:

> *"Our overall conclusion and recommendation is that the retail-minus-rule is the only one to provide the proper incentives to enter the market in all situations and configurations and should therefore generally be applied. A retail-minus approach rules out the possibility of a margin squeeze against the service provider. It links wholesale and retail prices exactly in a way that operators which are equally efficient as the incumbent will be able to compete."*[13]

Jan Weber of the Austrian Regulator similarly has stated:

> *"Operators who procure unbundled local loops from the incumbent as a wholesale service and whose investments in co-location and backhaul represent sunk costs and high market exit barriers incur a higher risk than a WLR provider. Therefore, FL-LRAIC cannot be regarded as the appropriate costing standard for calculating a WLR wholesale discount because prices for both wholesale services must consider the difference in risk and the higher capital cost of the unbundling operator for his access network infrastructure so that the price difference must enable the unbundling operator to recover his higher capital costs by gaining a higher margin than a WLR provider."*[14]

[12] OPTA, De Wholesalemarkten Voor Toegang Tot Het Vaste Openbare Telefoonnetwerk, 2005.
[13] WIK, Wholesale Line Rental as a Potential Remedy on the Market for Fixed Telephony, 2004, p.20.
[14] Weber, J., "Wholesale line rental: An Austrian perspective", 2004, p.9-10.

Consideration of the relative merits of retail minus and cost orientation must give proper weight to the risk that cost orientation will alter the incentives in favour of competitors relying more on reselling eircom's services than investing upstream.

The Retail minus price control regime for WLR has been successfully in place in the Irish market for more than 10 years now. In that time, WLR has grown from a zero base to a product that now comprises of nearly 40% of all access lines on the eircom network. WLR has grown consistently over that time period despite there having been a sharp decline in overall eircom access network lines over that same time period. A predictable pricing regime has been a major factor in facilitating these growth levels.

ComReg overstates the benefits of cost orientation

The Consultation also misstates the purported benefits of cost orientation. The specific reasons put forward for moving to a cost orientation basis for setting SB-WLR charges are set out in paragraphs 4.39-4.41.

Price predictability

The Consultation argues (4.39) that cost orientation provides for greater certainty. It is somewhat perverse to argue for a change in regulation on the grounds of providing greater certainty. Even looking forward, the factual basis of this argument is questionable. Over multiple regulatory periods, the outputs of cost models can change significantly as methodologies, inputs and forecasts change over time. Indeed, 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. The margin that would result from SB-WLR being cost-oriented could change significantly over different regulatory periods as it is simply the residual between eircom's retail prices and the cost-oriented prices as set by the regulator.

In reality, eircom has not increased its retail line rental charges since 2007 as a result of the competitive pressure we face. Should developing competition require eircom to change its retail line rental charges in future then it is likely that other providers would also need to respond to similar competitive pressures. A regulator should not aim to protect OAOs from competition.

eircom's market position

The Consultation further states (4.40) that a cost orientation obligation is justified because:

- The FACO market is a national market where eircom has SMP;
- eircom is the sole supplier in the FACO markets having held a stable 100% market share over time. It therefore does not face existing competition within such markets;
- eircom has a high market share of over 80% of the low level fixed access and call origination ('LL-FACO') market, nationally; and

- eircom has a high and stable market share of around 80% of the high level fixed access and call origination ('HL-FACO') market, nationally.

It should be noted that these are arguments for some form of regulation rather than a reason for choosing cost orientation over retail minus. Furthermore, these comments overlook what should be one of ComReg's key considerations, i.e. how best to set regulation going forward given the substantial competition that exists and that is intensifying in many parts of the country. The competition that eircom does face at the retail level as a result of multiple competing networks and access-based players means that (i) eircom is significantly constrained in the prices it can set; and (ii) extending cost-based regulation further down the value chain will chill the incentives for OAOs to invest further in developing their networks. Regulation cannot match the ability of network competition to deliver on-going service developments and cost innovations over time.

Consistencies across the investment ladder

The Consultation argues (4.41) that a cost orientation approach would result in the same pricing approach across the Wholesale Access Services and avoid potential inconsistencies that would prevent an OAO climbing the investment ladder.

This argument is odd. As recognised by other regulators, 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. 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. Competition from such resellers would limit the margins available to any OAO considering taking LLU.

As acknowledged by ComReg, retail minus provides the right incentive for entry at the retail level based on the efficiency of the OAO. Seeking to increase the margin beyond that needed to sustain efficient retail competitors risks inefficient entry.

There is no reason why multiple levels of regulations based on estimates of different costs should better promote the ladder of investment than an approach directly focused on determining an efficient retail margin.

Consistency with the European regulatory framework

ComReg's proposals should also be assessed in relation to the European regulatory framework. Two recommendations are particularly relevant. The European Commission's recommendation on costing methodologies requires 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*." eircom believes that the significance of network competition in Ireland has led to demonstrable retail price constraints. eircom has not increased its line rental since 2007 despite the retail price cap providing for increases in line with inflation. Furthermore, cost-based regulation of LLU and SLU will continue.

Second, the European Commission's Recommendation on relevant products and services markets states:

> *"Ex ante regulation imposed at the wholesale level should be considered sufficient to tackle potential competition problems on the related downstream market(s). 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). Given the advances in competition that have been achieved thanks to regulation, this Recommendation identifies only relevant markets at the wholesale level. It is believed that their regulation can address a lack of effective competition at the wholesale level, which in turn is the cause of identified market failures in the related retail markets. Should a national regulatory authority nonetheless demonstrate that wholesale interventions have been unsuccessful, the relevant retail market may be susceptible to ex ante regulation provided that the national regulatory authority has found that the three criteria test prescribed in this Recommendation is met."*[15]

Given the proposal to impose an obligation of cost orientation on SB-WLR, eircom considers that the imposition of the line rental margin squeeze test would effectively amount to the regulation of eircom's retail line rental charges. eircom'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.

The Commission's comments on the FACO Decision (Appendix C, ComReg 15/82) highlight that a simplification of regulatory obligations is required in the Irish market rather than adding further layers of complexity:

"*The need to review the retail access market*

The Commission notes that while transferring the WLR obligation from the retail access to the FACO markets, ComReg continues regulating the retail access market.

ComReg explains in this respect that further work is required to replace the important price control obligations currently residing in former market 1, including inter alia a further specification of the cost orientation methodology and the margin squeeze test on the FACO markets. The Commission notes ComReg's intention to monitor developments in the retail access market and to examine whether, in light of retail developments, regulation within the retail access markets (and the FACO markets) remains appropriate.

[15] Commission Recommendation of 9.10.2014 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 , para. 18.

In this respect the Commission observes that the retail market shares of Eircom are already relatively moderate (circa 47%) and invites ComReg to proceed with the review of the retail access market without undue delay.

Clarity of regulatory obligations

The Commission notes that the proposed price control obligations imply a combination of retail minus, cost-orientation and margin squeeze, the appropriateness and specificities of which are to be further examined in three pricing consultations planned for Q4 2015, i.e. a separate Access Network Pricing Consultation, a separate FVCO Consultation and a further NRT margin squeeze consultation (which could also lead to a geographic differentiation of remedies between LEAs and non-LEAs, if the current distinction is maintained). This results in a highly complex regulatory setting in Ireland.

The Commission therefore calls upon ComReg to take the opportunity of the forthcoming parallel consultations to streamline the existing pricing remedies, thereby enhancing transparency and legal certainty for market players.

As discussed further the reports by CEG (see section 4.1) and Compass Lexecon, and Michael Rhodes, if the price of SB-WLR is set at cost then there is no case for the proposed new margin squeeze test between retail and wholesale line rental. Wholesale access would support effective competition at the retail level and competition law is sufficient to address any potential competition risks.

In summary, 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. In particular, 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.

There is a particular case of this general finding for a proposal to move the price control to cost orientation using reported historic costs removing incentives to invest that has relevance to the eircom service. As is discussed in response to Q 11 below eircom is currently preparing a number of enhancements to the SB-WLR service in the interests of improving quality. The move from retail-minus to cost orientation runs the risk that eircom 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.

Q. 2. Do you agree with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and the ancillary services for Market 4 and SB-WLR? Please provide reasons for your responses.

In general any open eir (formerly, eircom Wholesale) service should only be subject to a price control by cost orientation where the service could not be replicated

economically by other operators. For LLU (ULMP), Sub-Loop Unbundling, and Line Share the operator could only replicate the service by building a copper access network in competition with the eircom network. In the Irish communications market this would clearly not be economically efficient given the large sunk costs and economies of scale associated with the first network. For this reason eircom has agreed for some time that price control by cost orientation is appropriate.

For SB-WLR in general the approach to price control for over a decade has been to apply price control by retail minus. For PSTN and ISDN connection and rental services this has been implemented by taking the eircom retail price and reducing this by a percentage to the retail cost incurred by eircom in providing the downstream service, averaged over several years. This margin was initially set at 8% and has risen to 14% as eircom unit retail costs have risen with declining retail service volumes.

At paragraph 4.40 ComReg puts forward four reasons why it considers that a price control for SB-WLR by cost orientation is justified. The first reason put forward is that the FACO market is national and eircom 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.

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.

The third and fourth reasons relate to the retail share of respectively the low level and high level fixed voice access supplied by eircom 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 eircom 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 eircom 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 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.

While eircom acknowledges that price control by cost orientation is appropriate for LLU, SLU, Line Share, SABB Outside the LEA and CEI services, the same retail minus approach that applies to the price control for SB-WLR line rental should also apply to SB-WLR ancillary services – for the very same reasons as articulated in the eircom response to Q1 above.

Q. 3. Do you agree with ComReg's preliminary views that in general Eircom's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets? Please provide reasons for your response.

An appropriately populated regulated asset base (RAB) is indeed the correct basis to develop the charge for re-usable assets. However eircom finds that the snapshot of the eircom asset register in 2013 used by ComReg is not an appropriate basis because of the depreciation profile for some key civil infrastructure assets. In particular the current base of poles is aged to the extent that more than half the poles do not attract any depreciation charges.

If "Regulated Asset Base" is intended to represent a stable base of assets necessary to deliver the range of access services consumed by the users of the eircom access network into the medium term then the construct modelled by ComReg is definitely not that. For a discussion of a more appropriate basis for developing a sustainable charge for re-usable assets see the discussion in the CEG report in section 3.1.5

Q. 4. Do you agree with ComReg's preliminary view that for Reusable Assets we should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets? Please provide reasons for your response.

The approach proposed by ComReg of using primarily a top down valuation of re-usable assets for pricing access services is substantially flawed. This is 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. 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.

A more appropriate approach for the treatment of reusable assets with long asset lives that will need replacement over the terms of several price controls is one such as the Infrastructure Renewals Accounting (IRE) implemented by OFWAT in the UK in regulating prices set by water utility companies.

Q. 5. Do you agree with the proposed principles, inputs and assumptions of the Revised CAM, as set out above in Chapter 5? Please provide reasons for your response

eircom generally agrees with the principles, inputs, and assumptions that inform the Bottom-Up modelling of the necessary assets for the CAM. However eircom does have 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. These issues are laid out in detail in section 3.2 and 5.4 of the CEG report attached to this response. In summary they relate to:

- The inconsistency between the use of a tilted annuity in the past to control access prices and the construction of a RAB based on past straight line depreciation as the basis for cost orientation of future access prices;
- The delay between investments in network assets and revenues from access services; and
- A mathematical error in the annuity formula.

Q. 6. Do you agree 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? Please provide reasons for your response.

No. eircom finds 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 eircom fixed access network. This is because for a fixed access service the unit costs will increase as service volumes decline and the total volumes of services delivered over eircom's fixed network are in structural decline for a number of reasons – 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 eircom delivers fixed voice and CGA broadband service. In particular SIRO will cause a decline in service volumes in provincial urban centres where operators currently use eircom LLU and Bitstream services. The CEG report sets out further information on current volumes and the likely fall in volumes over the regulatory period.

Both the Bottom-Up and Top-Down modelling should forecast the relevant unit costs for each year through the proposed price control period – and beyond – and set a price control that reflects the trends in the relevant costs for each service that such modelling exposes.

Q. 7. Do you agree with ComReg's preliminary view that an average price per service over the price control period is appropriate? Please provide reasons for your response.

There are a number of reasons why ComReg should not use the average modelled cost across the price control period to set a single rate for the price of the service to be controlled by cost orientation.

The first reason is 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. This will occur 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.

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. When directed the controlled price was to apply until the next review. The next review is still not complete. So, on the basis of the 2009 model of costs, the ULMP service has been priced below cost since the end of 2012.

We are now in a position where ComReg proposes to take a similar approach to setting the price for SB-WLR PSTN – a service where demand has exceeded 450,000 lines and is likely to exceed 500,000 during the price control period. So if the unit cost increases by as little as €0.10 per line per month the result will be that in the fourth year after the start of the control the directed price will be €0.15 per month less than the unit cost for that year. Continuing to charge the controlled price will lead to a shortfall in eircom's SB-WLR revenues below the modelled cost of more than €1 million in that year. So 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 in the Decision arising from the current consultation the higher controlled price that will apply in the next three period should the review be delayed.

For a further discussion of why the ComReg preliminary view is fundamentally incorrect see the detailed position laid out in the CEG report at section 5.1.

Q. 8. Do you agree with ComReg's preliminary view that the monthly rental charge for LLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets in the LEA? Please provide reasons for your response.

ComReg proposes to set LLU prices nationally based on the BU-LRAIC+ for non-reusable assets and eircom's indexed RAB for reusable assets in the LEA.

As discussed in Section 3 and the CEG report, eircom has serious concerns with a number of aspects of the cost modelling approach that underlies ComReg's proposed prices for LLU. In particular, eircom is concerned that:

(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; and

(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.

In addition, eircom believes 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. This will be significantly higher than the average cost of LLU provision in the LEA on which ComReg's proposed price is based. While ComReg has raised the risk of a digital divide from geographically de-averaged pricing for LLU, such a concern is more efficiently addressed by targeted funding such as via the NBP. Requiring eircom to subsidise the below-cost provision of LLU outside the LEA undermines competitive neutrality and is likely to lead to inefficient market outcomes compared with funding from broad-based general taxation.

We note that 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. The mechanism to be used to determine consistency is not clearly specified.

Finally, as discussed earlier, eircom believes 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.

Q. 9. Do you agree with ComReg's preliminary view that the LEA footprint should be locked-in for the purposes of setting the LLU monthly rental price? Please provide reasons for your response.

eircom does agree 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. In general, 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. For Line Share the LEA is not relevant as the price does not contribute to access network costs. For SLU it is not clear yet what is the appropriate LEA as EVDSL may present some additional opportunities – and as there are currently no instances of sub-loop unbundling at eircom street cabinets.

The LEA for the purpose of implementing the Net Revenue Test in D04/13 should continue to be amended where additional exchange areas meet the various criteria.

Q. 10. Do you agree with ComReg's preliminary view that the maximum monthly rental charge for SLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets nationally, while lines longer than 1km should be excluded from the calculation? Please provide reasons for your response.

A general review of the SLU service is now required after a number of developments in the eircom deployment on NGA. The current SLU service and pricing approach are predicated on an alternative operator connecting to the eircom copper access network at a street cabinet and using their own electronics to launch VDSL services to customers served via that street cabinet. Since the agreement at the ComReg NGA forum that VDSL services can be launched from eircom MDF sites operators locating electronics at such MDFs can launch VDSL services from MDFs as well as from street cabinets.

The operator can serve a customer directly fed from an MDF with a VDSL service that will deliver a better service than available from ADSL if that customer is served over a copper pair of less than 1 kilometre in length. This raises the issue as to whether the service that the operator uses in serving such customers is ULMP or exchange launched SLU. This definition of LLU services must be resolved before the prices for SLU and ULMP can be reviewed.

We agree in principle that national prices may be acceptable where the deaveraged prices differ to a very small extent.

Q. 11. Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally (with active equipment based on BU-LRAIC+ costs) or the 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? Please provide reasons for your response

eircom notes ComReg's reasoning that if SB-WLR is subject to a cost orientation obligation, then the price should be the higher of:

(i) eircom'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 eircom's indexed RAB for reusable assets for the provision of SB-WLR in the LEA.

We note that ComReg's pricing approach is put forward with the aim of achieving cost recovery while providing for some incentive for upstream investment in the LEA by rival operators (albeit that the incentive will be reduced relative to the use of retail minus). eircom believes that a number of changes would be required in the underlying costing approach. In particular, as discussed further in Section 3 and in CEG's report, there are strong grounds for the following changes:

(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.

When ComReg propose to use eircom's actual costs adjusted for efficiencies there is an issue with the alignment of the approach to using the reported eircom costs in recent financial years to the actual SB-WLR service that will be delivered during the price control period. This is because eircom has already engaged industry stakeholders around a number of service enhancements. Of these, the two that are

most advanced are enhanced provisioning and a streamlined repair process. The first initiative 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. The second will see open eir supporting all retailers by accepting screened line fault reports across the UG and taking full responsibility until clearance is confirmed. 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.

There is an additional reason why the costs of these enhancements to the SB-WLR service should be recovered from any controlled price for line rental. What characterises the two enhancements mentioned above, and may apply to others in preparation, is that, as well as causing higher open eir costs, they will deliver cost savings at the retail level to re-sellers of eircom fixed voice access services. These service enhancements will have been agreed at industry as providing benefits to the purchasers of SB-WLR services in terms of speed of delivery and speed of repair so the resulting costs to open eir may legitimately be recovered from any controlled price for the service.

Q. 12. Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR ISDN PRA and FRA services should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR ISDN FRA and PRA nationally (with active equipment based on BU-LRAIC+ costs) or the 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 ISDN FRA and PRA services in the LEA? Please provide a reason for your response.

No. For value-added telephony access services the level of eircom costs is not an appropriate basis for a price control. This would be the case even if the RAB were corrected to provide a sustainable basis for the appropriate signal for re-investment in re-usable assets. The main reason that eircom takes this position is that almost all of the assets specific to the eircom 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. Indeed, deep reductions in the eircom 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. The business case for such an investment was based on being able to win market share at ISDN prices that represented a moderate discount on eircom rates – and not on eircom's "actual costs" at a time when historic investments in ISDN infrastructure and much of the civil infrastructure underpinning the RAB view of the network is fully depreciated.

ComReg proposes that eircom's charges for SB-WLR ISDN PRA and FRA should be no more than the higher of: (i) eircom's actual costs adjusted for efficiencies for the provision of SB-WLR nationally (with BU-LRAIC+ applied to active equipment) and (ii) BU-LRAIC+ for non-reusable assets and active equipment and eircom's indexed RAB for reusable access for the provision of SB-WLR in the LEA.

eircom considers that the 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 eircom's total implied revenues would be the same as they would be under two separate caps. In other words, a basket approach offers the same protection to overall consumer welfare. However, a single basket cap would allow for the relative prices of the services to be changed if that would increase overall volumes compared with forecast volumes. As such, a basket provides the ability and incentive for eircom to alter its relative prices for PSTN and ISDN SB-WLR where to do so would increase overall consumer welfare. Varying the wholesale price for SB-WLR ISDN by charging a higher cost of copper for ISDN than for PSTN has certainly not undermined competition. ✂.

The efficiency advantages of applying a basket cap are well established in the economics literature. For example, Armstrong and Sappington note:

> "if the firm is better informed than the regulator about its costs or about consumer demand, then, by granting the firm some authority to set its tariffs, the regulator may be able to induce the firm to employ its superior information to implement prices that generate higher levels of welfare than the regulator could secure by dictating prices based upon his limited information."[16]

Armstrong and Sappington note that granting the pricing flexibility to the regulated firm may not be desirable in two cases: (i) when the pricing flexibility can be used to undermine competition and (ii) where a particular price structure is desired for distributional or other political reasons. The first case would be relevant if there were significant differences in the potential for competition between the services included in the basket. This is not the case for PSTN and ISDN SB-WLR. The second reason also does not suggest that eircom should be prevented from changing the relative prices of PSTN and ISDN SB-WLR (i.e. there is no reason that residential customers should be required to pay more so as to limit prices paid by business customers).

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. We note that ODTR/ComReg used the gradient in retail prices by time of day to determine the structure of wholesale interconnect prices by time of day. Other regulators have also used the historical retail price relativity of services (the pricing gradient) to determine cost allocations. For example, the Swedish and Danish cost models for fixed services regulation have allocated costs between identical Bitstream services of different

[16] Mark Armstrong & David E.M. Sappington, 2006. "Regulation, Competition and Liberalization," Journal of Economic Literature, vol. 44(2) pp.325-366

speeds using an "allocation gradient". The allocation gradient is used to re-allocate average bitstream service costs to services with different speeds. The effect of the allocation gradient is that higher average costs are allocated to higher speed services. The Swedish regulator set the allocation gradient initially to reflect the retail pricing structure of the incumbent, TeliaSonera.

Q. 13. Do you agree with ComReg's preliminary view that the monthly rental price for SABB Outside the LEA should be based on Eircom's Actual Costs Adjusted for Efficiencies with the active equipment based on the BU-LRAIC+ methodology for the provision of SABB Outside the LEA? Please provide reasons for your response.

ComReg proposes that monthly rental charge for SABB outside the LEA should be capped at its estimate of eircom's actual costs adjusted for efficiencies (with the BU-LRAIC+ methodology for active equipment) incurred in providing SABB Outside the LEA.

While re-stating our concerns about the use of the particular short-term view of eircom's "actual" costs of building and operating an access network, eircom agrees 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. Within the LEA, competition is strong and will ensure competitively priced services and a choice of offers for consumers.

eircom understands ComReg's reasoning as to the proposal to use eircom's actual costs rather than to price SABB at the full BU-LRAIC+ costs. This reasoning requires that ComReg ensures that its definition of the LEA correctly reflects the best information on the likely rollout of rival networks including SIRO's plans.

In addition, eircom believes that a number of adjustments are required in relation to ComReg's estimate of eircom's costs. In particular:

- the forecast loss in volumes needs to be updated to reflect the higher recent rate of line loss and likely market developments;
- pole costs should be recovered using Infrastructure Renewals Accounting that takes into account a long-term forecast for pole replacement;
- 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
- prices should be set over the regulatory period using a CPI-X approach.

Q. 14. Do you agree with ComReg's proposed approach for setting the price per pole? Please provide reasons for your response. If respondents have any alternative views regarding any of the assumptions used for setting pole access prices please substantiate your response with evidence, where appropriate.

The first comment by eircom is 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. On that occasion ComReg identified 10 possible cost allocation methodologies that might be used when setting a price controlled by cost orientation for a service that entailed two operators sharing a network that had been built by the regulated operator.

Some of the current discussion is based on an error. One of the bullet points in paragraph 8.30 states that if the existing network deploys two cables the route is full and pole access is not available. 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 eircom. This product 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".

The second comment by eircom is that the prices displayed in Figure 40 seem to contemplate only those situations where there are one or two cables on a pole. 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). 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.

This structure also 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.

eircom also has a number of concerns in relation to the treatment of pole costs as noted in Section 3 and in CEG's report. These are:

(i) the proposed approach ignores the need for substantial pole replacement in the medium term – Infrastructure Renewals Accounting would better promote long-term price stability and support efficient investment while ensuring strict cost recovery by eircom; and

(ii) the use of a tilted annuity implies future price increases that are not credible.

eircom is also concerned that the proposed approach of setting a constant pole access price over years is inefficient, carries significant risks of preventing full cost recovery and is likely to result in a price spike at the start of the next regulatory period.

A CPI-X approach would better achieve price stability over the longer term and better support efficiency.

eircom 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. By better aligning prices with costs, this price structure will promote efficiency.

Q. 15. Do you agree with ComReg's preliminary view that price per meter of sub-duct should be used for setting duct access prices? Please provide reasons for your response.

If the 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 eircom agrees that it should.

Q. 16. Do you agree with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas? Please provide reasons for your response.

eircom agrees that the differences in cost between Dublin and provincial areas faced by eircom in buying in trenching services should be reflected into the eircom prices for duct sharing. This is appropriate because 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.

As set out in Section 3 and CEG's report, eircom believes that the proposed approach to the treatment of duct costs will underestimate costs, particularly because of the use of a tilted annuity.

As with other services, eircom believes that annual prices should be set using a CPI-X approach.

ComReg considers whether duct access should be priced:

(i) Per meter of cable or sub-duct

(ii) Per meter and volume occupied (cm2)

(iii) Per active customer

ComReg argues that the price per volume approach would be supported by the cost causation principle and would also provide access seekers with the appropriate incentive to minimise the size (volume) of cables deployed in eircom ducts. However ComReg argues these benefits are less important if the duct access product includes arrangements supporting the provision of sub-ducts. ComReg argues that as sub-

ducts are included in the current offer, price per meter of sub-duct is a simpler (and therefore preferred) option. eircom agrees with this approach.

Q. 17. Do you with ComReg's preliminary view that national price per meter is appropriate for setting dark fibre prices? Please provide reasons for your response.

We reiterate that regulated dark fibre is only available in lieu of duct/pole access. eircom has concerns with both the proposal for a national dark fibre price and, more generally, the risk that dark fibre access, as proposed, will give rise to a range of serious problems. These problems need to be addressed before any such dark fibre access is implemented.

Proposal for national price

There are a number of reasons as to why eircom does not agree that a nationally averaged cost should be used to set a single national rate for access to eircom dark fibre. 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 – from eircom's MDF to the street cabinets served from those MDFs. 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.

In the future eircom will deploy fibre optic cable more deeply into the access network to provide FttH services to customer premises. This deployment will change the unit costs for dark fibre substantially – and 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. For these reasons, eircom 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.

ComReg is proposing that 'the annual price per meter for dark fibre should be no more than €0.19 nationally'. This is a significant departure from the proposal put forward in ComReg Decision D03/13 (Document 13/11 on NGA Remedies), where it was proposed that ComReg would not insist on the publication of reference prices for civil engineering access, due to the likelihood of a significant proportion of bespoke cost depending on local circumstances. 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.

eircom has significant additional concerns regarding the proposed dark fibre price and the limited specification of the circumstances in which dark fibre access will be required to be provided:

(i) 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' for dark fibre access. Without a clear idea of where and when dark fibre access might be required, it is not possible to calculate an appropriate access price.

(ii) The proposed price 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. If dark fibre is intended to be a substitute for duct/pole access, then the approach to pricing dark fibre access should be consistent with the pricing of the duct and pole access product.

(iii) The proposed pricing methodology is unlikely to provide a dark fibre access price that is stable and predictable over the medium to long term. This uncertainty has the potential to harm the investment incentives of both eircom and OAOs.

It is unclear at this point exactly where in the network eircom might be required to provide dark fibre access, and whether the currently proposed price is calculated using cost inputs that are consistent with the actual cost of all of the relevant segments of the access network.

The Consultation states that the proposed fibre cost is derived from an average of the eircom access network at paragraph 8.66 "For dark fibre the total annual cost of fibre cables reflect the quantity of fibre cables deployed in the access network including NGA fibre links (to connect street cabinets with DSLAMs) and Leased Line access links."

The question this aggregate approach raises is whether the average calculated using this method represents the likely average that will be applicable to NGA fibre links. For example 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. 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.

Even with the intention that dark fibre access is only required to be provided where duct or pole access is not available, the low price and the lack of specification in the document creates significant risks as to how its use may develop in practice. For example, what would happen if an initial access seeker uses the available duct/pole capacity and then it or a further access seeker requests dark fibre access?

In ComReg 12/27, ComReg states at paragraph 5.26 "Dark fibre is not civil engineering infrastructure, however it should be provided as an alternative to access to civil engineering infrastructure, where it is available and on the basis of a

reasonable request. By reasonable we mean, for example, fibre in excess of spare capacity legitimately required by Eircom to cater for future capacity requirements or needed for resilience purposes. This may be assessed by reference to Eircom's engineering rules."

ComReg Decision D03/13 (13/11) states "eircom shall have an obligation to provide access to…where Civil Engineering Infrastructure is not available, Dark Fibre where reasonably available."

In ComReg 15/67 ComReg states at paragraph 8.82 "It is important to note that the pricing obligation for dark fibre is only relevant where duct access is at full capacity and where dark fibre is available."

It seems clear that the primary policy objective is to provide access to civil engineering infrastructure (CEI), in order to provide alternative operators with the opportunity to themselves deploy fibre networks economically by sharing the cost of CEI. It appears to be clear that the intention is that if CEI access is available, then an access seeker will have to take duct and pole access (i.e. a request for dark fibre access will not be deemed 'reasonable'). 15/67 states at paragraph 2.47 "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".

At face value, the statements 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.

It is not clear what might then happen if that access seeker or other access seekers request access to additional duct or pole capacity. For example, 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? Would the answer depend upon whether parallel competing infrastructure (e.g. UPC) existed in the area?

These questions are important, as 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. 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.

ComReg document 12/27 recognised that dark fibre should only be considered reasonably available for access where the capacity exceeds eircom's own future capacity requirements. This is an important limitation – eircom should not have to provide access to its own fibre if doing so would prevent it from meeting its own needs (including its need for fault clearance). If demand exceeded the available fibre capacity then new investment would be required and, in that case, OAOs should undertake the investment required to meet their own needs. eircom calls for ComReg

to confirm its statement from 12/27 that access to dark fibre is not required to be provided where the available capacity is required for eircom's own future capacity requirements.

The policy intention is that dark fibre should be a fall back option that acts as a substitute for CEI access when CEI access is not available. Dark fibre as a product is 'downstream' of CEI access – more value has been added, as it includes the fibre and associated installation costs. It follows that dark fibre should normally be more expensive than duct or pole access, at realistic levels of fibre utilisation. If that is not the case, 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.

Against this, ComReg is proposing that the annual price per meter for dark fibre should be no more than €0.19 nationally. This compares with proposed duct access prices that range between €0.93 and €2.78 per meter depending upon the location and surface type. An access seeker using duct/pole access will then incur additional costs installing their own fibre, increasing the total cost per meter further. However, even ignoring this additional cost, 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.

This analysis shows that access seekers will potentially have a very strong incentive to seek dark fibre access. Furthermore, the indicative calculations understate how strong the preference for dark fibre is likely to be, as the calculations above do not allow for risk. Duct access would have a much higher fixed cost as a result of the higher per meter price (regardless of final demand) than fibre based access. These incentives can be expected to lead to perverse market behaviour as noted above, and are likely to lead to a high level of lobbying of ComReg and Government in favour of more widespread access to dark fibre being granted as a primary (rather than a fall back) method of accessing eircom's infrastructure.

We have examined information available on dark fibre elsewhere.

Comparison with the proposed approach in Austria also suggests the proposed price is too low

There are few examples of a regulated price for dark fibre against which the current proposal can be benchmarked. However we are aware that the NRA in Austria is proposing to provide regulated access to dark fibre, in particular to support dark fibre access for mobile operators developing their mobile broadband networks.

The approach taken to pricing dark fibre in Austria is quite different to that being proposed by ComReg. The method of calculation is in essence a relatively simple bottom up FL-LRAIC approach, where the cost of building new duct and installing fibre is calculated, and then split between an assumed 4.5 access seekers in developed areas and 3.5 access seekers in undeveloped areas. Using this approach, the regulated price of dark fibre is €0.13-€0.28 per meter per month, depending upon the geographic area in which access is provided.

The Austrian price is calculated for a fibre pair, and is on a per month basis. Dividing by two and multiplying by twelve to make the cost comparable with the proposals in 15/67, gives a per metre access price of between €0.78 and €1.68 per fibre per annum. It is notable that these access prices are still cheaper than the proposed duct price in Ireland (€0.93-€2.78 per meter per annum), but that duct access would be a viable or preferred solution for a much smaller number of lit fibres.

The current proposed approach to pricing dark fibre uses the costs in the copper access model (CAM), combined with assumptions as to the average number of fibres per cable and the average utilisation rate of the fibres in the cables in eircom's current network. The access price derived in this way will not be stable over time. The number of cables and fibres will change over time as will the utilisation rate of those fibres. This will result in changing access prices over time. It is also likely that the cost of trenches and duct – the most important cost factor – is currently shared between fibre and copper cables

The allocation of costs to fibre is therefore likely to materially change over time as services migrate from legacy copper services to fibre services.

Some of these factors will push the price in opposite directions. It is unclear what the path of the access price will be if the current proposed methodology is employed. eircom is of the view 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.

As noted above, dark fibre is an access product that is downstream of CEI access, and is being used as a substitute for CEI when access cannot be made available. It is also the case that the cost of CEI accounts for most of the cost of dark fibre. For these reasons, the price of dark fibre should be structured in a similar way to that of CEI. In the case of duct access, the per meter price proposed by ComReg for dark fibre is consistent with the per meter price of duct access. However, consistency would favour a similar breakdown by geotype to that used for duct (as shown in Figure 41 of 15/67).

It is clear that the proposed methodology for pricing dark fibre is not currently fit for purpose. The methodology does not take into account the fact that 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. This objective implies that it is important to consider whether the dark fibre price generated bears a reasonable relationship to the service it is substituting for. It is also apparent 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.

eircom's view is that this proposal should be withdrawn in favour of the previous proposals put forward in ComReg Decision D03/13 (NGA Remedies). That is, that ComReg would not insist on the publication of reference prices for civil engineering access, and eircom would have three months to agree a price with an access seeker which may reflect local costs. In addition, 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.

Q. 18. Do you agree with ComReg's preliminary views that the incremental cost methodology should remain in place for determining the appropriate monthly rental price for Line Share? Please provide reasons for your response.

It is eircom's position 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.

Q. 19. Do you agree with ComReg's preliminary views regarding the retail margin squeeze test between retail line rental and wholesale line rental and the associated inputs of the test? Please provide reasons for your response.

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. This is the case 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.

For a detailed exposition of the reasons why a margin test becomes unnecessary once the SB-WLR price has been set at cost see section 4.1 of the CEG report as well as the attached Compass Lexecon report and accompanying paper by consultant Michael Rhodes. The Compass Lexecon report and the paper by Michael Rhodes are provided in full in Appendix 2. The CEG expert advice in Appendix 1 clearly demonstrates that there is no justification for the imposition of a MST between retail line rental and wholesale line rental when the latter is set on a cost oriented basis.

However, should ComReg proceed with the proposed combination of controlling SB-WLR rental charges at cost and applying an unwarranted margin squeeze test between retail and wholesale prices for line prices, we draw ComReg attention to the service enhancements mentioned in the response to Q11 above. As discussed in the response to that question those enhancements have the effect of reducing the downstream costs faced by the re-seller of SB-WLR. Given that the proposed margin squeeze test purports to protect these re-sellers, then the downstream costs that the operator faces after the enhancements to the SB-WLR service – rather than those

reported in recent eircom accounts – would be the only correct costs to use in the proposed test.

Q. 20. Do you agree with ComReg's preliminary views that pre-notification and pre-clearance is appropriate for the retail margin squeeze test between retail line rental and SB-WLR? Please provide reasons for your response. We welcome the views of industry regarding the alternative approach of self-compliance as discussed above at paragraphs 10.45 to 10.48.

The 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.

Q. 21. Do you agree with ComReg's preliminary views regarding the wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs) and the associated inputs of the test? Please provide reasons for your response.

While we understand ComReg's policy objective in proposing the new test, the proposed margin squeeze test is not economically well grounded. In particular, it is not likely to promote productive economic efficiency. The core of the problem is that ComReg has set an objective of ensuring that VoB platform investment is economic. 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.

For a detailed discussion as to why the policy objective is misguided see the CEG report section 4.2.

Q. 22. Do you agree with ComReg's preliminary views regarding the ancillary charges for Market 4 products and services? Please provide reasons for your response.

The ancillary charges for Market 4 services have been reviewed and agreed between eircom and ComReg in line with preliminary views articulated in the consultation document paragraphs up to 11.36.

Q. 23. Do you agree with ComReg's preliminary view that circa €0.50 per line per month is appropriate to take account of SB-WLR connection costs in the SB-WLR rental charge? Please provide a reason for your response

The eircom view is 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.

Q. 24. Do you agree with ComReg's preliminary view that the price control period should be for three years but should remain in place any further notice by ComReg and that Eircom should review the inputs, costs and assumptions of the Revised CAM annually for material changes? Please provide reasons for your response.

The eircom view as to whether it is appropriate for the price control to remain in place until further notice after the initial control period of three years depends fundamentally on the form of control directed by ComReg. If the form of price control for SB-WLR line rental is in line with the preliminary views expressed in the discussion leading to question 7 above then the price control must terminate promptly at the end of the third year. 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.

It is worth noting 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 – based on the experience of several reviews – the review leading to the next price control will need to start no more than one year into the control period. This is the case because the necessary updating of cost models, consultation, and notifications can be expected to take between 18 and 24 months.

Q. 25. Do you agree with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB Outside the LEA? Please provide reasons for your response.

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 procedures described in paragraph 12.27. For instance if the form of control for SB-WLR is Initial Price x (1 +CPI – X%) for each year in the control period

and in any one year CPI is greater than X% then eircom will simply draw ComReg's attention to the difference, calculate the new rate for SB-WLR and publish the price in the RIO.

If, however, 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.

Q. 26. Do you agree with ComReg's preliminary view regarding the regulatory approval mechanism and where Eircom should be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval? Please provide reasons for your response.

Yes. 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.

Q. 27. Do you agree with ComReg's preliminary view that Eircom should not be allowed to give promotions / discounts with regard to SB-WLR connections? Please provide reasons for your response.

Any ban on price promotions in a wholesale price control is entirely unwarranted. 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%. This form of control should cover all revenues from whichever price elements eircom chooses to deploy (possibly within certain broad parameters to avoid distorting downstream competition). This form of control gives the appropriate flexibility for eircom to find additional efficiencies, one of which might be the reduction of unit costs by stimulating additional connections, which will benefit all users of the service, as well as improving the welfare of retail consumers.

ComReg proposes to prohibit eircom from giving promotions or discounts with regard to SB-WLR connections. ComReg's reasons are:

(i) If SB-WLR is set at cost then any promotion or discount would result in charges below cost;

(ii) Promotions and discounts would create price uncertainty for OAOs; and

(iii) Promotions and discounts could undermine the business case for LLU.

eircom 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. Promotions and discounts are common in competitive markets and serve to promote efficiency including in expanding volumes and in enabling firms to test the demand elasticity for price reductions so as to support the case for permanent price reductions to the benefit of consumers. In the forthcoming regulatory period in which eircom is likely to face more intense competition from rival fixed and mobile networks, pricing flexibility will be of increased importance.

Finally, it seems perverse to deny wholesale customers the benefit of promotions and discounts on the grounds of uncertainty to them. In that regard, there is huge demand for promotions and discounts among our wholesale customers to try to stimulate new access line growth and retention. We are therefore surprised at ComReg's proposals in light of this demand.

Q. 28. Do you have any comments on the Regulatory Impact Assessment and in your opinion are there other factors which ComReg should consider in completing its Regulatory Impact Assessment? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.

For the reasons set out above, many aspects of ComReg's Consultation Document are unclear, preliminary in nature and/or lack adequate justification. As such, it is difficult to see how a properly informed and reasoned Regulatory Impact Assessment (RIA) can have been developed. In these circumstances, eircom requests ComReg to publish a supplemental consultation document that addresses the main concerns raised in the comments, provides the necessary details around implementation of the proposed approach, and allows an opportunity for further (or reply) comments. The supplemental consultation should be based on a forward-looking analysis and should, at a minimum, address the following issues, the resolution of which is essential to an informed and reasonable assessment of what is being proposed by ComReg:

- 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;
- 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.

The supplemental consultation document should be accompanied by a RIA that evaluates the proportionality of the proposed measures after they have been more fully developed in the supplemental consultation document as well as considering potential alternatives. eircom is concerned that the imposition of cost orientation on SB-WLR in the LEA is not justified given the competitiveness of the LEA. In addition, the proposed new margin squeeze tests are more likely to harm than to promote competition.

The Revised RIA Guidelines[17] 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. One example is the failure to consider a wholesale VoIP offer as an alternative to the proposed VUA margin squeeze test. It should help to identify potential burdens on business – ComReg has not done this. It should be conducted at any early stage and before a decision to regulate has been taken – instead ComReg uses the process as a means of justifying regulation.

Even ComReg's own Guidelines[18] suggest that where possible it will identify opportunities to withdraw from or reduce regulatory intervention in relevant markets, by looking at all possible options and identifying the appropriate ones. ComReg does not do this, despite acknowledging the competitiveness of the LEA. As we say it merely seeks to justify continuation of what it has already decided which means the RIA is long and repetitive. It also fails to determine the impact on stakeholders in anything other than a very superficial manner.

Notably in Step 2 the option not considered is not forbearing from SB-WLR regulation in the LEA and not having the margin squeeze tests. ComReg merely repeats what is set out earlier in the consultation document in summary form. This is repeated in the relevant steps.

eircom considers that ComReg's policy objectives as set out in Paragraphs 14.10 and 14.11 of its RIA are inconsistent with ComReg's duties as set out in s12 of the Communications Regulation Act (the Act). 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. ComReg has failed to adequately address this objective. In its analysis set out in the following paragraphs it concentrated on the somewhat dated ladder of investment principle.

ComReg should not just consider whether eircom is recovering its efficient costs plus a reasonable rate of return, but whether that reasonable rate of return will permit it to both innovate and invest. It is not sufficient to consider eircom's continuing maintenance of its copper network as ComReg does in para 14.23.

[17] RIA Guidelines: How to conduct a Regulatory Impact Analysis, October 2005, revised 2009
[18] ComReg 07/56a

Even if ComReg's key regulatory objectives were correct then it has failed to achieve its objectives. Despite the intensity of competition in the fixed telecommunication and broadband markets, ComReg is proposing to retain extensive overlapping regulation and even to switch to more intrusive forms of regulation. The wide-ranging scope of the proposed regulation is not justified by the nature of any identified competition problem. In particular, ComReg has failed to target the regulation to only the areas where effective competition is unlikely to develop, areas outside the LEA. ComReg is ignoring the competition in the market which eircom has outlined in Section 2 and which is further outlined in the papers by eircom's economic advisors. Furthermore, as our response has outlined, ComReg is proposing multiple layers of regulation when targeted upstream regulation would better achieve efficient outcomes. ComReg's proposed approach is not consistent with the Commission's view that there is an already highly complex regulatory setting in Ireland. ComReg should take the opportunity to streamline the existing pricing remedies, thereby enhancing transparency and legal certainty for market players.

As set out above in response to question 19 the proposed margin squeeze test for retail line rental is not justified as a matter of economic principle or in accordance with ComReg's own guidelines which state that it will, where possible, identify opportunities to withdraw from or reduce regulatory intervention in relevant markets.[19] eircom's prices are already undercut by rivals (as ComReg's own price comparisons show). Further restricting eircom's ability to compete with its rivals will act only to limit competition to the detriment of consumers. As set out in response to question 21 above, the proposed VUA margin squeeze would undermine efficiency.

In relation to the Commission Recommendation,[20] ComReg has continued its 'pick and mix' approach to EU regulation. As recital 3 of the Recommendation makes clear, one of its aims is to establish predictable and stable regulated wholesale copper access prices as well as increasing certainty that NGA prices will not be regulated. So the Recommendation is specifically relevant to the old Market 2[21]. The Recommendation specifically requires NRAs to provide predictability beyond the lifetime of particular market reviews taking into account foreseeable changes in market circumstances.

Paragraph 25 recommends a costing methodology based on a modern efficient network, reflecting the need for stable and predictable wholesale copper access prices over time in order to provide a clear framework for investment and capable of generating copper access prices which serve as an anchor for NGA services. The 'build or buy' signals need to take into account sufficient incentives to deploy NGA networks.[22]

[19] Para 1.2 of ComReg document 07/56a
[20] Commission recommendation of 11.9.2013, C(2013) 5761 final
[21] Note that under current EU law this Market is no longer included in the list of relevant markets susceptible to ex-ante regulation – see COMMISSION RECOMMENDATION of 9.10.2014 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, a document which ComReg fails to consider.
[22] Recommendation para 27.

In considering its obligations under the Access Regulations ComReg has referred to alleged problems identified in market reviews conducted in 2010 and 2011 which are not consistent with the competitive position in 2015. Accordingly ComReg has failed to identify the nature of the problem referred to in Regulation 8(6). ComReg is obliged to conduct market reviews every 3 years[23] for this reason but has failed to do so. ComReg says that it is imposing remedies to provide transparency, but the complex nature of the remedies means this is highly unlikely. Given the extent of competition in the market eircom's pricing obligations are onerous.

In 14.3.4 ComReg quotes relevant parts of the Access Regulations, in relation to the encouragement of investment. However, ComReg is more concerned with investment by operators other than eircom. 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[24] and possibly extending it further.

Q. 29. Do you believe 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? Please explain your response and provide details of any specific amendments you believe are required

No, this 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. Making a decision in this manner increases the likelihood of non-compliance through human error and in an online world clarity is facilitated.

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.[25] 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. In fact 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.

In its comments on ComReg's Wholesale Fixed Voice Call Origination and Transit Markets (ComReg 15/82), 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. It also notes that ComReg has presided over a highly complex regulatory

[23] Article 16.6(a) of the Framework Directive as amended.
[24] See for example http://pressroom.eircom.net/press_releases/article/eircom_expands_fibre_broadband_investment/
[25] 9.10.2014 C(2014) 7174 final

setting in Ireland and calls on it to streamline the existing pricing remedies, to enhance transparency and legal certainty for market players in Ireland. 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.

The EC's comments are more than just procedural issues as they relate to ComReg's compliance with its obligations under the European Regulatory Framework and the implementing Irish legislation.

Imposing further additional pricing remedies is not consistent with streamlining existing pricing remedies. Piecemeal amendment of a number of historic documents also does not constitute providing transparency and legal certainty for market players. eircom notes 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.

ComReg needs to move onto the new markets and perhaps the proposed Decision Instrument should note this.

As to the draft Decision Instrument itself:

1. Definition of 'Access Reference Offer' - 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. Given that 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. 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'. (The highlighted words should be added).
2. The definition of 'Revised Copper Access Model' should be more precise. Chapter 5 refers to the Revised CAM. The link to this draft document was provided on 3 July. The draft may or may not be updated as a result of this consultation. It will then be the Revised Copper Access Model. Any process for the updating of the CAM needs to be specified in the Decision Instrument so there is certainty as to the costs calculated. It is imperative that both eircom and ComReg work from the same version of the model. From eircom's point of view any amendments should be agreed – and so the wording it would propose is "the model, as amended from time to time by agreement between eircom and ComReg…".
3. In the definition of 'Shared 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. As this remedy has not been used, eircom has no relevant experience as to what a beneficiary of access might consider appropriate, and so needs to know whether this term is to what eircom considers appropriate, to what is objectively appropriate (if that is possible) or to what the beneficiary considers

appropriate. The same amendment is needed to the definition of 'Sub-Loop Unbundling'.

4. The definition of what constitutes unbundled access to the fibre loop should be clear. As ComReg is aware eircom, in common with most European operators, uses GPON technology. That technology is not currently capable of unbundling but is expected to be in the future. 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.
5. 4.1. This amendment is unclear. eircom assumes that it means that in section 12.3 all words other than those set out in 4.1 should be deleted. The words set out already appear in section 12.3. It would be helpful for a consolidated text to be made available.
6. 4.2. again the drafting is unclear. The lack of clarity is highlighted below
   "(a) a price equal to the costs incurred by an efficient operator providing SLU nationally" [We understand this 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). However, it may be open to misinterpretation.] which shall be calculated in line with the Revised Copper Access Model. Such costs shall be based on a combination of a BU-LRAIC+ costing methodology and Top-Down HCA costing methodology [It is unclear 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? These comments apply to all instances of the use of this terminology in the draft Decision Instrument]; or

   (b) …..

   (c) the revised charge derived by the application of the Margin Squeeze Test between the VUA monthly charge and the SLU monthly charge based on the NGA Margin Squeeze Model (which is more particularly described in Section 11.14 of the Decision Instrument at Annex 2 to ComReg Decision D03/13) in relation to Wholesale Broadband Access. Any such amendment or changes to be subject to prior review by ComReg." [Note: The original NGA Margin Squeeze Model reflected in the requirement at 11.14 of the WBA Decision notice in D03/13 in effect 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 In addition, eircom may have unbundling obligations as part of any successful NBP bid and it is unclear how this would then work].

   These comments apply also to section 5.3.

7. Section 4.4 makes little sense given that the SLU charge is not applied in practice.

8. In 4.5 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, as section 4.6 would appear to indicate then there needs to be a mechanism for that charge to change as costs change, as with other charges. It is not clear to us that an absolute cap for all time can be justified by ComReg.
9. In 4.7 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. eircom has commented on the relevant costs and their calculation. The same comment applies to section 5.1.
10. The comment made in 9 above is repeated in relation to section 4.8. In addition it 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. eircom currently has no other obligations to provide dark fibre access but such obligations could be imposed in the future and it should be clear that different pricing would apply to such obligations. The same comments apply equally to 5.2
11. Section 4.9 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. The same comment applies to section 5.5.
12. In the last line of both 4.10 and 5.6 the wording should be amended to read as follows, with the change highlighted

'charge the Undertaking a one-off per event fault charge of no more than €100.'

13. In 5.4 ComReg appear to be saying that fibre backhaul costs should be cost regulated in accordance with the revised CAM. The 2013 Recommendation (using ComReg's definition) provides for the non-imposition of regulated wholesale access prices on NGA networks (para 49). To the extent that ComReg is seeking to impose cost regulation on fibre backhaul this is inappropriate. If it is not the wording should be clarified to make this clear. The same comment applies to section 5.5 to the extent that such Ancillary Services are not the same as the Ancillary Services to Current Generation WPINIA products.
14. The wording in 6.1 in the last 2 lines should read
'…that the price amendment of new price is consistent with the then current version of the Revised Copper Access Model.' The highlighted words should be added.

Q. 30. Do you believe that 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? Please explain your response and provide details of any specific amendments you believe are required.

eircom repeats and reiterates all of the general points made in response to question 29 above. ComReg should clearly set out all price control and transparency obligations in one place. That would be both proportionate and transparent. A particular example of where this would help all operators and ComReg is Paragraph 4.2 of the Decision Instrument.

1. The last sentence of 4.1 for clarity 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".
   (Changes highlighted).

2. In Paragraph 4.3, given that eircom has a duty to provide full and true disclosure of all material facts about any new or increased charge for standalone broadband outside the LEA, it is difficult to see what further information ComReg could reasonably seek to request. In any event, given the high onus on eircom, it would be reasonable to ask that any request from ComReg should be directly relevant to the request, rather than 'informing ComReg's decision'. For example information about the market within the LEA would not be relevant - indeed the only relevant information would seem to be cost information. In addition, it would appear unreasonable for ComReg to request information which is not in existence and needs to be created or obtained. We would suggest that the words ''which is in eircom's possession and related to costs Outside the LEA" be added after the words "seek further information" 10 lines up from the bottom of the paragraph.
3. In Paragraph 4.4 in the third last line 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.
4. In Paragraph 4.5 the same amendment as set out in Paragraph 4.4 should be made for the same reason.

Q. 31. Do you believe that the draft text of the proposed Decision Instrument for Market 2 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain your response and provide details of any specific amendments you believe are required.

eircom repeats and reiterates all the general comments made above and notes for the record that the market 2 referred to is no longer on the list of relevant markets. To the extent that comments are made on definitions used in the other draft Decision Instruments they are repeated here.

eircom would suggest that it would be clearer to withdraw the whole of section 12 of the Decision Instrument of D05/15 and set it out here. We assume the words "(i.e. SMP FACO Decision)" will be deleted?

1. In Paragraph 1.2 eircom would dispute that ComReg has taken into account the comments made by the European Commission. In particular it would refer ComReg to the paragraph of the Commission's letter headed "Clarity of regulatory obligations". 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.
2. In Paragraph 2.1 the term 'Authorised Undertaking' should be defined.
3. In Paragraph 2.1 it would be helpful for the definition of "Next Generation Access" (which is currently taken directly from the relevant EU Recommendation, which pre-dates the use of eVDSL) 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.
4. In Paragraph 2.1 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. The definition is probably no longer accurate. The Wikipedia definition is as good as any " voice-grade telephone service employing analogue signal transmission over copper loops" connecting with the PSTN
5. 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.
6. 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. This would mean

amending the definition of 'Retail Margin Squeeze Test' to read in part 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' [the additional words required are highlighted. Similar comments apply to the definition of the Wholesale Margin Squeeze Test.

7. 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.
8. The term 'portfolio basis' needs to be precisely defined.
9. In Paragraph 4.1, given that there is only one Active Asset, it would be preferable just to refer to Line Cards. Section (b) should presumably specify which each of the 2 costing methodologies should apply as in Section (a).
10. In Paragraph 4.2 there should be specific references to Paragraphs 10.10 and 10.11 of the SMP FACO decision or such paragraphs should be repeated here.
11. Paragraph 4.3 – see comments in point 2 of the preceding question. eircom would also question whether it is appropriate when there is a cost orientated price for there to be a need for ComReg approval. Surely it is sufficient that eircom is at risk if it does not implement the cost orientation correctly. 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.
12. eircom has commented in detail elsewhere in this response on the fact that the retail margin squeeze price control obligation is inappropriate and not required as there is cost orientation of the wholesale price. Again such 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.
13. In Paragraph 4.7 the words 'compliance and' in line 5 should be deleted. 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.
14. In Paragraph 4.8 ComReg should be obliged to find if the material submitted (which applies to proposed pricing) complies. Paragraph 4.5 gives ComReg powers should it not consider at any other time that there is compliance with the margin squeeze test. As to the request for further information we refer to our comments in point 2 in the previous question. This is not a reason to conduct a fishing expedition. Paragraph 4.8(ii) 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. Sections (iii) and (iv) 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.
15. Paragraph 4.9 is not clear. It 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. This provision would appear to be a hasty add-on, and obligations and procedures need to be spelt out.

16. 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. In particular by not doing this Paragraph 4.11 is completely unclear. Paragraph 12.9 of the SMP FACO Decision Instrument 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. In addition in Paragraph 4.11 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.
17. Similar comments as made in 16 above apply to Paragraph 5.1. It appears to be lazy drafting to add on this paragraph and 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'. Alternatively ComReg could carve out SB-WLR pricing from the existing language of Paragraph 10.10. The drafting should also clarify which time period relates to the SB-WLR element of an SB-WLR product, service or facility.
18. The same comments in effect apply to Paragraph 5.1. It would be far simpler to re-issue the Transparency provisions of the SMP FACO decision.

Annex 1

CEG Report

Annex 2

Michael Rhodes Paper

and

Compass Lexecon Report

COMPETITION
DISPUTES
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ComReg's Wholesale Access Service Consultation and Draft Decision

Analysis of economic issues

Paul Reynolds, Paul Muysert and Jason Ockerby

25 September 2015

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1 Summary

1. ComReg has put forward its proposals for the forthcoming regulation of eircom's wholesale access services in its consultation and draft decision, ComReg 15/67, published on 3 July 2015 ('the Consultation'). eircom has requested that CEG review a number of economic matters raised by the proposals. In particular, this report considers:

   - ComReg's overall assessment of competition in developing its pricing proposals;
   - the proposed costing approach;
   - the proposed new margin squeeze tests; and
   - the proposal for setting a uniform charge based on the average estimated cost of the first three years.

2. In the following, we present the key findings of the analysis set out in this report.

The need for a forward-looking competitive analysis

3. ComReg's regulation is required to be forward looking and in particular should be designed to ensure that it does not undermine future investment. Ireland's fixed communications sector is characterised by the strong position of UPC and a number of established LLU-based operators in the LEA, the competitive impact of mobile substitution and, looking forward, the imminent launch of SIRO's services. In this context, ComReg should be moving towards less intrusive regulation. We believe that there is little economic justification for the proposal to impose a national cost obligation on SB-WLR and that the proposal would be inconsistent with the stated reasons for the change.

4. The proposed price for SB-WLR is also below the cost of providing SB-WLR given the extent to which SB-WLR is taken in higher cost rural areas. Developing competition is likely to lead to a further fall in the take-up of SB-WLR in the LEA. As a result, ComReg should set a higher price for SB-WLR to ensure that it recovers the expected average cost of SB-WLR provision. ComReg should also ensure that the scope and design of its regulation (including the charge control levels) remain appropriate going forward taking into account the areas of likely future network rollout.

Treatment of pole costs

5. A large share of eircom's poles are being treated as fully depreciated and hence excluded from the Top-Down cost base. Effectively, the use of poles is being priced below their true economic value. This will distort downstream market entry decisions and undermine the use of competing pole networks. Uncertainty over future access prices risks deterring investment by parties reliant on pole access

particularly as future access prices are likely to need to rise significantly to recover the costs of pole replacement. The proposed 'cost-plus' system of regulation where eircom's investment is monitored on an ongoing basis also risks distorting eircom's investment incentives.

6. Infrastructure Renewal Accounting (IRE) is an alternative approach that would better promote efficient investment, achieve greater price stability and ensure no over-recovery by eircom. IRE is designed for long-lived assets where the precise asset life is uncertain. It has been adopted by the UK water regulator, OFWAT, since the 1990s. IRE effectively allows for errors in asset life assumptions to be corrected gradually over time while ensuring that the access provider only recovers their costs including a return on capital. We have calculated revised access prices that would be consistent with eircom's medium term need for pole replacement.

The modelling of capital expenditure underestimates costs

7. We have identified a number of issues with the treatment of capital expenditure in the revised draft Copper Access Model ('the model').

8. The draft Bottom-Up model assumes that the network is instantaneously built and operational. However, 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 likely to be realistic and efficient. In addition, there is a spreadsheet error in the draft model that would require revenues to be earned 6 months before investments are made.

9. The assumed NBV of assets acquired from 2010 onwards is also too low. One reason for this is a spreadsheet error that deducts accumulated depreciation from 2009 even though the investment was made in 2010 and later. A second reason is that the model uses information from eircom's regulatory accounts. These accounts do not reflect the basis on which some of eircom's key regulated prices have been historically set, and will systematically understate the NBV that should be applied. Costs will also be underestimated because of uncertainty over precise asset lives.

The modelling should reflect ongoing significant line loss

10. ComReg proposes to assume stable volumes in the Bottom-Up modelling. This is inconsistent with the European Commission's Recommendation on Costing Methodologies that recognises the need to take into account the forecast loss in volumes to rival networks. eircom's group fixed access lines fell by around ✂ in the year to June 2015 (with the rate of loss increasing in recent quarters). The model should firstly be updated to include eircom's actual lines as at June 2015. Second, we believe that it would be reasonable to forecast ongoing line loss over the forthcoming regulatory period. Improving mobile speed is likely to lead to some further loss in fixed lines, UPC has potential to supply telephony to more of its TV customers and the launch of SIRO can be expected to lead to Vodafone and potentially other wholesale customers shifting their demand to SIRO.

11. ComReg also proposes annual reviews of volumes for the Top-Down modelling. This would turn the regulation into an effective revenue cap rather than price cap and lose the efficiency incentives for eircom to seek to grow volumes between regulatory reviews. We believe that the Top-Down modelling should instead be based on revised volume forecasts and the estimated Top-Down annual costs be used to set prices for each year of the forthcoming regulatory period.

The proposed new margin squeeze tests risk harming competition and efficiency

12. The Consultation proposes a new margin squeeze test that would set the margin between SB-WLR and retail line rental. ComReg's pricing evidence shows that eircom has not engaged in a margin squeeze in fixed voice – indeed, eircom's prices are being significantly undercut by rivals. Market developments imply that there would be no prospect of eircom engaging in a profitable margin squeeze for bundles containing line rental going forward:

    - SB-WLR will either be regulated at retail minus (so that ComReg directly sets the margin) or under a cost orientation obligation;
    - A profitable margin squeeze would require eircom to be able to set above competitive prices in the future;
    - However, competition is intensifying including with UPC's launch of superfast broadband, the rollout of SIRO's network with services to be launch in the next few weeks, faster mobile broadband and the ongoing presence of LLU-based operators with significant sunk assets.

13. It would make no sense for eircom to incur losses now in the hope of achieving higher prices in the future when the market evidence shows that eircom's pricing will come under even more intense competition in the future. The proposed margin squeeze test would, however, inhibit eircom's ability to offer competitive pricing now and would forestall more vigorous competition to detriment of consumers. The risks to competition from the imposition of the proposed test are much more substantial than any incremental benefit the test might offer over competition law.

14. The proposed POTS based VUA margin squeeze test is also not economically justified. VoB investment will be viable if it brings additional value or offers a cheaper way to provide voice services and this will be the case even if the proposed test is not met. In fact, the test risks undermining efficiency by creating headroom for inefficient entry.

ComReg's proposed constant prices over the regulatory period is inefficient

15. ComReg's proposes to set constant prices over the indefinite forthcoming regulatory period. Such an approach carries a significant risk of preventing eircom from recovering its costs and thus risks deterring investment. Constant prices also undermine efficient consumption decisions and efficient investment by access seekers as prices will be held constant for the regulatory period despite rising costs and then require large price spikes to be aligned with costs at the start of the next regulatory period. As ComReg's cost modelling already produces estimated costs for each year, there is no economic or practical reason for ComReg not to adopt standard international practice in implementing price caps based on CPI-X (where X is chosen so as to ensure that real costs are recovered over time).

The longer term price paths implied by the current proposals are not credible and this undermines investment incentives

16. The current proposals imply that the price of upstream regulated inputs such as LLU will need to rise significantly over time, while the price of downstream regulated inputs such as WLR will be more stable. This is due to the different depreciation approaches being proposed for the different wholesale services.

17. It is questionable whether ComReg will actually allow the future price path implied by its tilted annuity approach given the rate of increase of future prices and the problems that would create in relation to the investment ladder (including a regulatory created margin squeeze). As such, the tilted annuity approach creates a significant risk that eircom will not be allowed to fully recover its efficiently incurred costs which are 'back-loaded' into future years. ComReg needs to provide greater guidance on what will be the allowed path of prices beyond the forthcoming regulatory period. Unless ComReg will commit to the price paths implied by its tilted annuity approach, ComReg should instead adopt a standard annuity which would require increases in the prices of the products subject to bottom-up modelling but a flatter future price path for these products.

ComReg proposed prices would be significantly below the costs of the services

18. As a consequence of the issues that we have identified with the draft models, we believe that the proposed prices would fall significantly below the efficient measure of costs for the services. In Table 1, we present revised costs for the services that reflect the cumulative impact of the changes we propose in this report. We have shown two columns of revised costs. The first column of revised costs reflects changes to only the parameters used in the draft model for the regulatory period 2016 to 2018. For the Bottom Up modelling, these are to assume a 6 month time-to-build and our forecast loss in eircom's lines. ✂ For the Top Down modelling, the first column of revised costs shows the impact of the forecast change in the WLR

LEA/non-LEA mix and the higher forecast line loss than assumed in the draft model. In the second column of revised costs, we show what costs would need to be recovered to achieve greater long-term price stability. These figures include the earlier revisions and then also take into account the need for eircom to replace a significant number of its poles over the medium term. They do not take into account other factors that will drive up costs over the longer term in terms of continuing volume loss and the implied prices resulting from the use of tilted annuities. The tables later in the report show the impact of the individual proposed changes (unless otherwise stated).

Table 1 – Service costs revised to reflect the issues identified in our report (average prices 2016-2018)

		Cost estimated in draft model	Costs with revised assumptions over regulatory period	Costs to be recovered to achieve greater long-term price stability
LLU based on LEA cost of BU-LRAIC+ and TD HCA		11.15	✂	✂
SLU based on national costs of BU-LRAIC+ and TD HCA		5.88	✂	✂
SB-WLR price based on national TD HCA with BU-LRAIC+ active equip. costs		16.72	✂	✂
SABB outside the LEA (TD HCA costs with BU-LRAIC+ active equip. costs)		22.16	✂	✂
Pole (per annum)				
	LEA	11.58	✂	✂
	Outside the LEA	9.53	✂	✂
Dark fibre (per meter per month)				
	National	0.016	✂	✂
Duct access (per meter of subduct per month)				
Dublin	Carriageway	0.232	✂	✂
	Footway	0.178	✂	✂
	Verge	0.108	✂	✂
Provincial	Carriageway	0.130	✂	✂
	Footway	0.104	✂	✂
	Verge	0.077	✂	✂

2 ComReg's proposed approach to price setting

19. ComReg recognises that infrastructure-based competition offers the greatest potential to offer sustainable competition to the benefit of end-users and that it is important that regulation promotes infrastructure investment.[1]

20. ComReg's regulatory proposals take into account the presence of rival networks to some extent. For example, ComReg notes that a Bottom-Up costing approach promotes efficient investment incentives as it implies that "*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.*"[2] ComReg has proposed a Bottom-Up approach to the areas and assets in relation to which there are already alternative networks or where ComReg has taken a view of the likelihood of such investment. ComReg is also setting cost-based prices for SABB only in the areas outside the LEA.

21. We believe, however, that there are aspects of ComReg's proposed regulation that go beyond what is warranted by the actual intensity of competition prevailing and by the likely future extent of competition.

22. Substantial competition has developed in Ireland that is significantly constraining eircom and limiting and changing demand for eircom's services. A report for the European Commission found that 41% of Irish households in 2014 relied only on mobile services for telephony (a higher percentage than the European average and an increase of 4 percentage points compared with 2011).[3] UPC has taken ✂ of the retail broadband market and around 41% of the fixed telecommunications subscriber base in its coverage area with eircom's share in those areas at 20%.[4] UPC has also launched its unlimited 240Mbps fibre broadband in March 2015. A number of LLU-based operators have established themselves including BT and Magnet.

23. Looking forward, SIRO has announced that its open FTTP network service will be available this autumn in the first ten towns and will reach 500,000 premises in 50 specified towns by the end of 2018, with further rollout in a second phase.[5] SIRO's imminent launch is hard to reconcile with the comment in the Consultation (5.273) that "*the NBP and the SIRO rollout is unlikely to have a significant impact over the price control period given the timescale of deployment and launch in the market.*" We believe that the Consultation falls short of the requirement for market reviews to be based on a "*forward looking, structural evaluation…taking into account*

[1] The Consultation para. 4.55 and 4.58.
[2] The Consultation para. 4.76 and 2.10.
[3] European Commission, *E-communications and telecom single market household survey*, 2014, p.30-31.
[4] Eircom derived figures from brand tracking market research (collated by eircom exchange area and overlaid on UPC footprint. UPC's fixed telecommunications share calculated based on UPC passing 853,000 homes and having 352,000 fixed telecom subscriptions in June 2015 (http://www.libertyglobal.com/oo-ireland.html).
[5] http://siro.ie/faq/

expected or foreseeable market developments".[6] For example, given its joint control of SIRO it would be reasonable to expect Vodafone to move traffic to SIRO's network as soon as practicable

24. We believe that there are three specific ways in which the regulation should reflect the developing competition.

There is no justification for more intrusive regulation of SB-WLR

25. First, greater competition should warrant regulation being wound back. However, ComReg is proposing that SB-WLR should be made more intrusive in being changed from retail minus to a cost obligation and that new margin squeeze tests should be imposed. We address the margin squeeze test proposals in Section 4 of this report. We do not believe the change to require SB-WLR charges to be set at costs nationally is justified. The strong presence of UPC together with the LLU-based competitors in the LEA, the rollout of SIRO and the significance of mobile in Ireland should warrant the 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. For example, many European mobile markets are more concentrated than Ireland's fixed market in the LEA and those markets have been found to be effectively competitive without the need for wholesale access regulation.

26. A number of EU Member States have withdrawn or never imposed regulated access to WLR including Austria, Belgium, Finland and Germany. The decisions of these regulators reflect a combination of the unregulated commercial alternatives to regulated WLR being considered reasonable as well as increasing substitution with the incumbent operator's services. For example, the Director General of Finland's regulator stated:

> *"Ms Sihvonen-Punkka explained that Finland had been one of the first countries to deregulate wholesale line rental and carrier pre-selection in June 2013, on the basis of strong substitution between fixed and mobile telephony in the country."*[7]

27. The European Commission has also indicated that developing competition should be leading to the withdrawal of WLR obligations. For example, Mr Whelan, the Director for Electronic Communications at DG Connect, commented on the EC's revised Recommendation on Relevant Markets:

> *"Mr Whelan described the main changes introduced by the new Recommendation. The main deregulatory measure is the removal of markets for access to the fixed telephone network and wholesale call origination,*

[6] Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, para.20.
[7] http://www.wik.org/index.php?id=658

which is likely to result in the removal of obligations for Wholesale Line Rental and Carrier preselection over time. According to the European Commission, this has been made possible through increased competition in retail broadband bundles, and substitution for fixed voice by mobile (for residential customers) and voice-over IP."[8]

28. The Commission has also previously commented:

"In situations where it cannot be concluded that the different competition conditions would justify the definition of sub-national geographic markets, it could nevertheless be appropriate for NRAs to respond to diverging competitive conditions between different areas within a geographically defined market, for instance due to the presence of several alternative infrastructures or infrastructure-based operators, by imposing differentiated remedies and access products."[9]

29. While we believe the extent of competition in the LEA does warrant the relaxation of WLR access obligations in the LEA, we note that even if regulation is retained there is little economic justification for the proposed switch from retail minus to a cost obligation. 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*."

30. ComReg's Consultation puts forward three justification for the proposed change:[10]

- The Consultation notes eircom's high share of the national market. However, this fails to distinguish the difference in competitive conditions as between the LEA and outside the LEA.
- The Consultation argues that cost orientation will provide for greater price predictability. However, the practical significance of achieving greater predictability seems limited given that the stability in eircom's retail line rental charges and that, as we explain later in this report, ComReg's proposed costing approach is likely to lead to large changes in cost-based regulated prices between regulatory reviews.
- The Consultation also argues that a cost orientation approach would avoid potential inconsistencies that might prevent OAOs climbing the ladder of investment. However, to the extent that ComReg's proposed approach impacts available margins, it will act to reduce the additional margin that an OAO would receive from using LLU rather than WLR. As such, it acts to discourage OAOs from climbing the ladder of investment.

[8] Implementing the new Recommendation on Relevant Markets WIK Conference, 18 November 2014. Available at: http://www.wik.org/index.php?id=658&L=1

[9] European Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA), para. 9.

[10] The Consultation, para. 4.39-4.41.

31. In short, we believe that the competitiveness of the relevant markets warrants less intrusive rather than more intrusive regulation in the LEA and that ComReg's arguments for the change to cost orientation are not consistent with what would be the practical effect of its proposed change.

The SB-WLR price should reflect the expected cost of the services acquired by access seekers

32. ComReg generally recognises that the price for a service should be equal to the cost of providing the service in the area in which it will be taken. In particular, ComReg generally proposes to either use de-averaged prices or prices that reflect that the specific regulated service will only be taken or be likely to be taken in a particular area.

33. ComReg, however, proposes to set a price for SB-WLR based on the estimated national costs of SB-WLR. 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.

34. Table 2 shows that ComReg's SB-WLR price effectively assumes that ✂ of SB-WLR will be taken in the LEA (i.e. based on ComReg's estimated costs of SB-WLR provision in the LEA and outside the LEA). This is significantly higher than the actual current LEA share of SB-WLR lines. Further, it is reasonable to assume that the launch of SIRO will result in Vodafone shifting its customers across to its jointly owned network and potentially other current SB-WLR customers also switching to SIRO. Assuming that ✂ of current SB-WLR customers in the exchange areas where SIRO is rolling out will switch to SIRO over the forthcoming regulatory period results in a forecast LEA share of SB-WLR lines of ✂. Given ComReg's estimated LEA and non-LEA costs of SB-WLR, a ✂ LEA share of SB-WLR lines would require a SB-WLR price of ✂ (rather than ComReg's proposed price of €16.72 per month) for revenues from SB-WLR customers to cover the cost of the services they acquire.

Table 2 – Revised SB-WLR prices to reflect the forecast take-up of WLR as between the LEA and outside the LEA

	Share of WLR in LEA	Share of WLR outside the LEA	Implied national SB-WLR price (€/month)
ComReg's proposed price	✂	✂	16.72
Current SB-WLR take-up	✂	✂	✂
Forecast SB-WLR take-up	✂	✂	✂

35. ComReg puts forward its proposed SB-WLR pricing approach on the basis that it will ensure overall cost recovery.[11] However, in not reflecting the actual geographic split of demand for SB-WLR, the proposed price will require eircom to supply SB-WLR below cost. eircom 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. The proposed prices would be neither efficient nor sustainable. As recognised by the European Commission's Universal Service Directive, concerns about the affordability of cost-based prices should be addressed in a competitively neutral way that ensures that the main network operator is compensated for any net cost burden. Government assistance, such as through a National Broadband Plan, is an efficient means of addressing concerns about prices in rural areas.

The regulation should reflect a definition of the LEA that takes into account the future rollout of SIRO's network

36. We believe 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. 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. It is particularly important that the second phase rollout is taken into account as SIRO will be making decisions as to the extent of its rollout over the forthcoming regulatory period. 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. In addition, the scope of regulatory obligations should be reviewed to reflect developing competition including in relation to SB-WLR (as discussed above) and in relation to the provision of SABB (where regulation is differentiated between the LEA and outside the LEA).

[11] The Consultation, para. 6.166.

3 Review of ComReg's costing approach and cost modelling

37. In this section, we highlight a number of significant issues with the proposed costing approach and the cost modelling presented in the Consultation.

3.1 Treatment of pole costs

38. ComReg is proposing to take into account pole costs based on a weighted average of 92% of eircom's TD costs (i.e. for poles that can be reused for NGA including forecast capital spend on poles over the next 3 years) and 8% of BU-LRAIC+ costs (i.e. for replacement of poles for the provision of NGA services).[12] However, around ✂ of poles are being treated as fully depreciated and hence excluded from the cost base. Accordingly, 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.

3.1.1 It is not efficient to price an economically productive asset at zero

39. 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). Assets that are still in service and remain productive would, for example, have value if there were an effectively competitive market for those assets (in this case pole networks), even if the book value of those assets was zero. To effectively price such an asset's use at zero would distort economic signals.

40. Ofcom in the UK took this factor into account when deciding not to impose a cost orientation obligation on BT's ISDN services. When considering the issue of the economic undervaluation of the assets that would result from the use of accounting value, Ofcom noted that:

> *"…requiring the wholesale ISDN30 charge to be set at any of the reported cost figures (FAC, DSAC or DLRIC) could risk prices being set at the wrong level for the market and so risks not meeting our concerns. This is because we believe that the reported cost orientation standards for wholesale ISDN30 in BT's RFS are not likely to reflect a reasonable level of cost,*

[12] The Consultation, para. 4.131.

particularly given the fact that much of the wholesale ISDN30 asset base is already heavily depreciated.

We would need to adjust the levels of FAC to take account of the heavily depreciated nature of the assets (in a similar way to our approach in the 2012 ISDN30 Charge Control Statement) because, while in accounting terms the assets have been fully depreciated, the products are still being used. This means that the assets' accounting value, as reflected in the ISDN30 reported FAC level, may underestimate their true economic value, and so would need to be upwardly adjusted to reflect this value.[13]

41. 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.

3.1.2 Risks to competitive infrastructures should also be taken into account

42. Pricing access to the pole infrastructure at a level that is below the long-run cost of replacement[14] will also undermine competing infrastructure by devaluing the value of assets in parallel existing or future networks. This should be of particular concern to ComReg in the forthcoming period given the rollout of SIRO's network with investment in a second phase still to be determined. Underpricing of eircom's pole network would reduce the returns to the use of alternative networks and thus risk deterring such investment.

3.1.3 Heavy reliance on historic costs and current actual investment volumes by ComReg risks distorting eircom's investment incentives

43. eircom's own investment timing may be distorted depending on the timing by which new investment is recognised and the approach taken to recognise new versus existing poles. We note that ComReg has itself acknowledged the risk of not providing the correct investment signals to eircom and creating pricing instability in a situation where eircom would have to demonstrate to ComReg annually by way of its HCAs the amount actually invested in poles for that particular financial period in order to recoup those costs going forward. In our view, ComReg is correct to be wary of a situation where it is required to audit actual volumes of activity on an ongoing basis. This issue is discussed in more detail later in this report (see section 3.3).

[13] Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30, Volume 1, 26 June 2014, para. 17.35 and footnote 1203.

[14] By 'long run replacement cost' we mean at a level that supports investment in replacing poles with new poles when existing poles come to the end of their economic lives.

3.1.4 Access seekers should be exposed to market prices which are sustainable in the long run to support efficient market entry decisions and avoid price instability for end-customers

44. 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. For example, an entrant might develop a new business based on the current pole access price, find that in the future the access price has to rise and that following that price rise its business is no longer viable. Setting prices that reflect longer term forward looking costs will avoid the risk of unstable access prices that lead to potentially inefficient or unsustainable entry decisions and the risk of unstable prices will in itself deter investment by access seekers.

45. One of the key objectives of the 2013 European Commission Recommendation on costing methodologies is "*to establish predictable and stable regulated wholesale copper access prices*".[15] The Commission has recently re-stated the importance of price stability for investment:

> *"Second, the Commission is concerned that ILR's approach may compromise the stability and predictability of copper prices over the review period and beyond. The Commission considers that price stability is necessary to provide a clear framework for investment."*[16]

46. 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. This is because of the 'lumpy' nature of the initial investment in the pole asset base. While it might be that pole prices have been too high in the past (due to too short an economic life), 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.

3.1.5 The alternative of Infrastructure Renewals Accounting

47. As discussed above, treating a productive asset as having zero economic value carries risks to investment in both the market for that infrastructure's services as

[15] EC Recommendation of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, page 2.

[16] Commission Decision concerning Case LU/2015/1770: Access to the public telephone network at a fixed location for residential and non- residential customers in Luxembourg, 29 July 2015.

well as in downstream markets and the approach will lead to unstable prices for customers with a likely sharp rise in prices over time.

48. We note that ComReg may be concerned that to include a higher effective value for pole assets in current prices could lead to over-recovery by eircom. Whether there would actually be any over-recovery would depend on an analysis of the allowed recovery of poles expenditure over the full life of the poles. We have not attempted such an exercise that would require information over several decades. However, even if there were to be a one-off over-recovery as a result of past incorrectly set depreciation, it is not clear that this concern should over-ride the importance of sending efficient investment and consumption signals going forward.

49. There is an alternative approach available to ComReg that can promote efficient investment, achieve greater price stability and ensure no over-recovery by eircom. In particular, the approach of Infrastructure Renewal Accounting (IRE) was developed precisely to address long-lived assets where the precise asset life is uncertain. OFWAT in England and Wales is using infrastructure renewal accounting for long-lived assets in UK water networks.[17]

50. 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 eircom'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.

51. 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. While IRE does require long-term asset management planning, this should not be seen as a drawback as such information provides better information on future access prices for access seekers and hence supports their investments.

[17] See OFWAT, *Regulatory accounting guideline 1.05 – Guideline for accounting for capital maintenance charges and current costs*, 2013 (**https://www.ofwat.gov.uk/publications/rags/gud_rag_1capmaint_105.pdf**).

3.1.6 What prices would better reflect medium term pole replacement costs?

52. ComReg has estimated the cost of poles for its Top-Down model based on eircom's capital investment in poles for 2015 and assuming the same number of poles are replaced each year of the three year control period (with actual expenditure adjusted for annual pole price trends).[18] However, this estimate 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. One approach to estimate the medium term average pole expenditure is to use information on eircom'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 eircom's total poles divided by 30). ✂. By setting prices higher now so as to recover this annuity (in particular by increasing the 'Pole investment from 2015' in the Dashboard sheet of the model), revenues can be accumulated over the initial years that reduce the extent to which prices will need to be raised in the future.

53. In Table 3, we present the service prices that would be implied by entering the estimated average annual medium term investment required in poles in the draft CAM model.

[18] The Consultation, para. 8.17.

Table 3: Revised prices to reflect medium term pole replacement

		ComReg's cost estimate	Estimate revised for pole investment[19]
LLU price based on LEA cost of BU-LRAIC+ and TD HCA		11.15	✂
SLU price based on national costs of BU-LRAIC+ and TD HCA		5.88	✂
SB-WLR price based on national TD HCA with BU-LRAIC+ for active equipment		16.72	✂
SABB price based on TD HCA costs (and BU-LRAIC+ active equip. costs) outside the LEA		22.16	✂
Pole access			
	LEA	11.58	✂
	Outside the LEA	9.53	✂
Dark fibre (per meter per month)			
	National	0.016	✂
Duct access (per meter of subduct per month)			
Dublin	Carriageway	0.232	✂
	Footway	0.178	✂
	Verge	0.108	✂
Provincial	Carriageway	0.130	✂
	Footway	0.104	✂
	Verge	0.077	✂

54. Our revised prices should be considered an approximation. If more poles need to be replaced over the regulatory period than what ComReg assumes (a significant risk given the age of many of the poles) then prices would need to be higher. If the number of poles replaced over the longer term is lower than what we have assumed then the appropriate prices will be somewhat lower than our estimates.

3.2 The modelling of capital expenditure underestimates costs

55. We have identified a number of problems with the treatment of capital costs in the draft model.

[19] These estimates also reflect a correction of the spreadsheet error described in section 3.2. The SB-WLR price does not reflect the error in terms of the incorrect LEA/non-LEA mix. Correcting both the mix issue and the need for higher medium term pole replacement would imply an SB-WLR price of €17.55.

3.2.1 Depreciation calculation error in the draft model

56. In the Copper Access Model – Main Model excel spreadsheet, the calculation of tilted annuities for reusable assets appears under "15 Remaining asset life in 2015 & annuity for following years for investment 2015 (2015 excluded)" in the "FAR based depreciation" sheet. Specifically, cells CZ2607 to EM2791 calculate the "Tilted annuity in 2015 of the assets progressively rolled-out until 2014 (included)" by multiplying the accounting NBV (under Straight Line Depreciation (SLD) adjusted for the change in asset lives in 2009) with the depreciation factor (adjusted for remaining lives) for each asset. The calculated annuity is then allowed to grow at the asset-specific price trend until the asset reaches the end of its life.

57. We have identified an error in the calculation of accounting NBV for investment made during 2010-2014. Instead of subtracting from initial GBV the accumulated SLD since the year of investment, the model subtracts the accumulated SLD from 2009 regardless of when the investment actually incurred.[20] As a result, the accounting NBV calculated by the spreadsheet is over-depreciated.

58. The effect of this error is to reduce the annuity compensation for reusable assets by around ✂ annually. We have corrected this error in also applying the further changes to the model discussed in the rest of this report.

3.2.2 Time to build

59. The Consultation states that:

> *"ComReg considers the payment of contractors' invoices, the operational launch of the network and the generation of revenues, generally occur at approximately the same time. Therefore, the Revised CAM assumes that revenues are realised at the same time investments are made – the network is instantaneously built and operational."*[21]

60. ComReg's proposed new assumption contrasts with its 2010 LLU Pricing Decision where ComReg concluded: "*…in order to be conservative, ComReg considers a six month time lag between the out payments of the investment and revenue generation strikes a reasonable balance between assuming simultaneous recovery and recovery in periods in excess of one year or more*."

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[20] See "FAR based depreciation" sheet cells CZ2607 to EM2791. The current formula for CZ2607 is:
✂
The correct formula should be:
✂
This error is then carried on to all the tables towards the right under "15 Remaining asset life in 2015 & annuity for following years for investment 2015 (2015 excluded)".

[21] The Consultation, para. 5.209.

61. We believe that there are two problems with ComReg's proposed change to the time between investment expenditure and the generation of revenue (we refer to this delay as the 'time to build'). It is not supported by evidence and there is an error in the formula in the draft CAM model.

62. eircom has advised that an assumption of an average 6 month 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 while 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.

63. As noted by ComReg in its 2010 LLU decision, the Swedish regulator assumes a 12 month delay between investment expenditure being incurred and revenues being realised and the Belgian regulator assumes a 6 month delay. We note that a number of other regulators also assume of a 6 month time to build.[22] ComReg's own consultants, TERA, have stated that "*The time to build should be taken into account. It is typically more than one year for an access network.*"[23]

64. In our view, 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. The time to build reflects the real cost to an operator of having to outlay expenditure for an asset before that asset being operational. Some costs will be incurred in relation to an operator's own workforce who are paid regularly. ✂. In relation to suppliers, a payment term of 1-2 months seems reasonable so that if eircom receives revenues 7.5 months after incurring expenditure then it would be incurring expenditure around 6 months before receiving revenues. In addition, long payment terms may mean that the charges of suppliers are higher.

65. An additional problem is that there is an error in the way the payment term has been implemented in the tilted annuity formula in the draft model. The depreciation factor is calculated in the draft model using the following formula:

$$Deprecation\ factor = \frac{WACC + RiskPremium - Price\ trend}{1 - \left(\frac{1 + Price\ trend}{1 + WACC + RiskPremium}\right)^{Asset\ life}} * (1 + WACC + RiskPremium)^{\frac{PaymentTerm-6}{12}}$$

[22] Telecommunications Regulatory Authority of Bahrain, *Development, implementation and use of bottom-up fixed and mobile network cost models in the Kingdom of Bahrain*, 2011, p.113 and "Modification and development of the LRAIC model for fixed networks 2012-2014 in Denmark", *Specification document, Ref: 2012-55-DB-DBA - Fixed LRAIC*, 2014, p.102 and

[23] TERA, *EPT comments on ILR fixed network BU LRIC cost model*, 2013, p.15.

66. 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.

67. We have instead applied the formula with the term in the exponential "Payment term – 6" being replaced by 6. This reflects our view that a 6 month time to build is reasonable. Table 4 shows the specific impact of this individual change under ComReg's proposed pricing approach for each service (with the change impacting on assets valued using a Bottom-Up approach).

Table 4 – Service costs assuming a 6 month time to build

		Costs in draft model (€)	Costs with 6 month time to build (€)
LLU price based on LEA cost of BU-LRAIC+ and TD HCA		11.15	✂
SLU price based on national costs of BU-LRAIC+ and TD HCA		5.88	✂
SB-WLR price based on national TD HCA with BU-LRAIC+ for active equipment		16.72	✂
SABB price based on TD HCA costs (and BU-LRAIC+ costs for active equip) Outside the LEA		22.16	✂
Pole access (per annum)			
	LEA	11.58	✂
	Outside the LEA	9.53	✂
Dark fibre (per annum)	National	0.16	✂
Duct access (per meter of subduct per month)			
Dublin	Carriageway	0.232	✂
	Footway	0.178	✂
	Verge	0.108	✂
Provincial	Carriageway	0.13	✂
	Footway	0.104	✂
	Verge	0.077	✂

3.2.3 Other issues in the modelling of capital expenditure

68. In the Appendix, we identify other issues with the treatment of capital expenditure in the draft Bottom-Up model. In particular, these are:

- The model assumes Net Book Values (NBVs) that are too low given actual depreciation allowed to date; and

- Uncertainty over asset lives requires an upward adjustment to provide an expectation of cost recovery.

3.3 Volumes

69. ComReg makes differing volume assumptions between the BU model and the TD approach. ComReg assumes constant volumes in the BU model (5.272), while for the TD modelling ComReg assumes a ✂ decrease in lines and states that eircom "*should conduct an annual review of the Revised CAM to assess if there are any material changes*" during the three year price control period (5.274). We consider each of these proposals in turn.

3.3.1 The assumption of constant volumes in the BU model is not justified

70. The Consultation states that the proposed assumption of constant volumes in the Bottom-Up model is being made so as to be consistent with the European Commission's 2013 Recommendation on Costing Methodologies. However, we believe that the proposed approach is inconsistent with the Recommendation and would undermine the efficiency signals that are the objective of Bottom-Up modelling.

71. The Recommendation states that copper prices should not be increased as a result of the migration of volumes from an SMP operator's copper network to that operator's NGA network. The Commission has stated that the purpose of this is to:

    a. avoid an SMP operator cross-subsiding its NGA investment through copper access prices; and (somewhat inconsistently)

    b. the SMP operator being discouraged from turning off its copper network.[24]

72. The Commission's concerns are not incompatible with the basic requirement that a regulated firm be allowed to recover its efficiently incurred costs. In particular, some prices increases may be necessary to ensure full cost recovery under the following circumstances[25]:

    - First, when the incumbent's total volume of active lines is falling due to migration of customers to rival platforms; and

[24] See, Commission Decision concerning Case LU/2015/1770: Access to the public telephone network at a fixed location for residential and non- residential customers in Luxembourg, 29 July 2015, p.6-7.

[25] As these circumstances require volume loss to be taken into account simply to recover cost they do not give rise to any ability to cross-subsidise NGA investment nor do they lead to extra returns that might discourage the switch-off of the copper network. As such, they would not give rise to either of the concerns raised by the Commission.

- Second, where there are technology specific fixed and common costs and hence modelling the costs of a single network would underestimate the actual costs of two networks being run in parallel.

73. We focus on the first situation where the incumbent suffers a fall in overall demand due to the loss of volume to competing platforms. 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.*" We note 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. This is well recognised in the standard approach to modelling mobile termination charges in the EU on the basis of the expected market share of the efficient operator going forward.

74. Consistency with the Recommendation requires that ComReg develop a reasonable forecast of the likely loss in volumes from eircom's network to rival network infrastructures. One approach to forecasting the likely overall loss in lines from eircom's copper and fibre networks is to consider overall demand for lines in Ireland and then potential loss to rival networks such as UPC and SIRO.

75. ComReg does not publish overall market data on lines. ComReg does publish data on narrowband fixed access paths and VoB subscriptions as part of its Quarterly Key Data reports. This data is not identical with the number of lines. For example, ISDN lines may include multiple paths and the data shows the number of ISDN paths has been growing significantly. ComReg's data shows that total PSTN and ISDN paths fell by 3.6% in the year to Q2 2015 and that the sum of PSTN, ISDN and VoB subscriptions fell by 1.6% over the same period.[26] Some of the loss in total fixed access lines is likely to be caused by the growth of mobile-only households (with this growth more than offsetting the gradual growth in overall household numbers).[27] A recent study found that faster mobile broadband speeds significantly accelerate fixed to mobile substitution in Europe.[28] Given that Ireland's mobile networks are continuing to extend 4G coverage and to significantly increase available speeds,[29] it is likely that there will be some further loss in total fixed lines in favour of mobile-only access over the forthcoming regulatory period.

76. While overall fixed lines have been falling, UPC's share of these lines has been increasing. Liberty Global's Earnings Releases show that UPC increased its

[26] ComReg, Irish Communications Market: Key Data Report – Q2 2015, Figure 2.2.1.1 (change in PSTN, ISDN and VOB calculated from percentage change for each service).
[27] European Commission, *E-communications and telecom single market household survey*, 2014, p.30-31.
[28] Cincera, M., L. Dewulfb and A. Estache, "How much does speed matter in the fixed to mobile broadband substitution in Europe?", *iCite Working Paper 2014*, p.15.
[29] For example, Vodafone states that its 4G+ network can now deliver speeds of up to 225 Mbps (http://www.irishexaminer.com/technow/tech/vodafone-4g-plus-now-three-times-faster-than-standard-4g-342264.html**).**

telephony subscribers in Ireland by 8.6% and its Internet subscribers by 4.3% between Q2 2014 and Q 2015.[30] There are reasons to believe that UPC will continue to take some further share from eircom. UPC's number of telephony subscribers is ✂ smaller than its TV subscriber numbers suggesting the potential to grow its telephony subscribers by selling telephony in a bundle to its TV subscribers. Further, as noted earlier, UPC supplied telephony to only ✂ of the homes that it network passes. Its launch of mobile services this year will also enable it to grow subscribers through bundles including mobile services.

77. eircom's total group fixed access lines have been falling. eircom's fixed access lines decreased by 4.9% from the quarter ending June 2014 to ✂ lines in the quarter ending June 2015 (with the rate of loss increasing in recent quarters).[31] In addition to these lines, eircom also supplies full LLU lines and SABB. ComReg's data shows full LLU line numbers had fallen to 11,833 lines in Q2 2015 (17% lower than in Q2 2014).[32] ✂

78. Given the dynamic nature of Ireland's market and known future developments, it is difficult to predict the future rate of eircom's line loss. We believe that mobile substitution will continue to be a factor and may increase with the availability 4G+ (LTE) mobile (which may prove sufficient for many households) as well as new mobile entry. UPC's recent rate of increase in subscribers, its potential to sell telephony to its TV subscriber base and its recent launch of its 240 Mbps fibre broadband suggests that it is reasonable to expect that UPC will continue to take some subscribers.

79. Over the forthcoming regulatory period, two new factors are likely to also contribute to line loss. SIRO has announced that it will launch its services in autumn of this year. It is highly likely that Vodafone and potentially other providers of fixed services will shift their customers to SIRO. ✂ The National Broadband Plan tender with the proposal announced in July 2015 for at least two to three lots and for 60% of addresses to be passed by 2018 could result in further loss to rival networks.

80. We have updated the draft model to reflect the latest information on line numbers and likely loss in lines. First, we have used eircom's total number of lines at June 2015 for the 2015 total lines in the model. ✂ We have then considered two scenarios for our forecasts.

81. The first scenario assumes that 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. ✂ This scenario could be considered as a base case for line loss over the forthcoming regulatory period. This scenario does not reflect the higher rate of line loss of recent quarters, assumes that there is no acceleration in line loss due to 4G+ and assumes

[30] UPC Second Quarter Results 2014 and 2015.
[31] eircom Results presentation, 1 September 2015, slide 23.
[32] ComReg, Irish Communications Market: Key Data Report – Q2 2015, Figure 3.2.2.

that the NBP does not cause additional line loss. Table 5 presents the revised costs based on this scenario for the services which ComReg proposes should be priced based largely on Bottom-Up costs (note that the Tables in this section show the impact of the different volume change alone rather than in conjunction with the earlier suggested changes).

Table 5 – Revised BU costs under base case future loss scenario (average cost estimate 2016-2018)

		Cost estimated in draft model	Revised costs for forecast line loss
LLU based on LEA cost of BU-LRAIC+ and TD HCA		11.15	✂
SLU based on national costs of BU-LRAIC+ and TD HCA		5.88	✂
SB-WLR based on LEA cost for BU-LRAIC+ and TD HCA (used as a minimum price)		12.51	✂
Pole (per annum)			
	LEA	11.58	✂
	Outside the LEA	9.53	✂
Dark fibre (per meter per month)			
	National	0.016	✂
Duct access (per meter of subduct per month)			
Dublin	Carriageway	0.232	✂
	Footway	0.178	✂
	Verge	0.108	✂
Provincial	Carriageway	0.130	✂
	Footway	0.104	✂
	Verge	0.077	✂

82. The second scenario uses the forecast line loss from eircom's Five Year Plan. ✂ We believe that losses of this magnitude could eventuate given the higher recent rate of loss and potential additional loss caused by 4G+, SIRO and NBP. Table 6 presents the revised costs based on this scenario.

Table 6 – Revised BU costs under eircom's line forecasts (average cost estimate 2016-2018)

		Cost estimated in draft model	Revised costs for forecast line loss
LLU based on LEA cost of BU-LRAIC+ and TD HCA		11.15	✂
SLU based on national costs of BU-LRAIC+ and TD HCA		5.88	✂
SB-WLR based on LEA cost for BU-LRAIC+ and TD HCA (used as a minimum price)		12.51	✂
Pole (per annum)			
	LEA	11.58	✂
	Outside the LEA	9.53	✂
Dark fibre (per meter per month)			
	National	0.016	✂
Duct access (per meter of subduct per month)			
Dublin	Carriageway	0.232	✂
	Footway	0.178	✂
	Verge	0.108	✂
Provincial	Carriageway	0.130	✂
	Footway	0.104	✂
	Verge	0.077	✂

83. We believe that there is a case for regulation to adopt assumptions that provide a higher likelihood of achieving cost recovery so as to avoid undermining investment incentives. As such, we believe that ComReg should at minimum adopt the first scenario or give further consideration to impacts of higher rates of line loss as assumed in our second scenario.

3.3.2 Annual reviews of volumes undermines efficient incentives

84. As noted above, the draft Top-Down model has assumed a forecast annual loss in lines of ✂ over the regulatory period and that annual reviews should be conducted to determine if there are material changes from these forecasts. We believe that annual reviews have undesirable incentive properties and that the forecast annual line loss of ✂ needs to be increased given recent information on line loss and expected market developments.

85. We have concerns that the proposed annual reviews 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.

86. Decker provides an overview of the incentive issues associated with different types of price cap regulation.[33] He notes that the particular basis on which a regulated price-cap is determined — whether it is based on total revenue, average revenue or weighted average revenue — can have important effects on the incentives of a supplier to reduce costs, set efficient tariff structures, expand demand and improve the quality of supply.

87. With respect to total revenue caps, Decker summarises the incentive issues as follows:

> *"The first type is where a supplier's total revenue is capped ex ante such that the revenue that may be earned is constant, and is independent of fluctuations in the quantity supplied. The allowed revenue is therefore always equal to expected revenue at the time the price control is set. Consequently, under this approach, the risks associated with demand volatility fall largely on consumers, and suppliers with significant fixed costs are effectively protected from demand volatility risk: prices tend to rise when demand is falling and decrease when demand is rising, an outcome similar to that of pure rate of return regulation. Given the nature of this form of price-cap arrangement a supplier may have perverse incentives to reduce the volume of sales and degrade the quality of services (insofar as costs are linked to demand). In addition, in order to induce a reduction in demand, a supplier may have incentives to set inefficient price structures by setting prices above marginal cost on the most elastic services."*

88. Decker notes that one of the most significant difficulties associated with pure price cap regulation is that such regulation can create incentives for suppliers to reduce or degrade the quality of service.[34] This incentive exists because, within this framework, suppliers are likely to be able to reduce costs – and increase their profits for a given level of revenue – by offering a lower quality of services to customers.

89. An alternative approach is to cap the average revenue of a supplier by setting an *ex ante* allowable revenue per unit of output with the consequence that:

> *"…the (positive and negative) risks associated with demand volatility fall on the supplier: if demand is lower than expected when the average unit price is set some fraction of fixed costs will not be recovered by the firms, conversely, where demand is higher than expected, the supplier will over-recover relative to its fixed costs. So, for example, in the event that actual demand is greater than that expected at the time the price control is set, a supplier will earn higher profits than anticipated. Under this approach a supplier*

[33] Decker, C., *Characteristics of Alternative Price Control Frameworks: An Overview, February 2009. A Report for Ofgem.*

[34] This incentive is relative to the incentives under rate of return regulation. Rate of return regulation on the other hand is noted for creating incentives to over-invest.

therefore has clear incentives to expand demand beyond that forecast by the regulator at the time the price cap is set. Consequently, the supplier may have incentives to increase the quality of services offered to high-demand customers only, or similarly, may have incentives to set tariffs in such a way so as to encourage greater usage by high-demand customers…".

90. It can be seen from this extract that a key advantage of allowing the possibility of profit from expansion of demand is an incentive to increase demand, either through pricing mechanisms or through maintenance of high quality services.

91. These considerations were taken into account by Ofcom as part of its current consultations on leased line charge controls in the UK.[35] Ofcom has in its current consultation rejected calls to implement:[36]

- 'P0' adjustments (i.e. one-off starting charge adjustments) where forecast error has led to prices to be out of line with costs, and
- explicit error correction mechanisms to ensure prices better proxy a competitive outcome.

92. In rejecting these arguments, Ofcom stated:

A13.14 Even if there was evidence to suggest that our volume and efficiency assumptions were biased, the question is what the appropriate regulatory response is… Tying prices more closely to outturn costs over time may mitigate the impact on prices of biased forecasts, ***but it also undermines BT's incentives to pursue efficiency improvements and volume growth****. [Emphasis added]*

93. Ofcom also noted that:

A13.21 ***The use of error correction mechanisms within a price cap has the effect of moving closer to a rate of return control****. In the extreme, a rate of return control could be characterised as a price cap with a complete set of adjustment mechanisms. [Emphasis added]*

94. Dealing more specifically with volume forecasting and the general difficulty of setting efficient incentives when it comes to factors that are within the regulated firms control, Ofcom stated:

A13.23 By contrast, ***where factors are*** *to a significant extent* ***endogenous to the firm, it is difficult to construct mechanisms that correct for forecast errors but do not undermine the incentive properties that arise from the ability to out-perform the forecast****.*

[35] Business Connectivity Market Review: Leased lines charge controls and dark fibre pricing. Consultation published on 12 June 2015.
[36] Ibid, Annex 13 at A13.3.

> *A13.24 In our view,* ***leased lines volumes are in large part endogenous to BT because they are driven by factors such as price and quality****, which, under the current regulatory framework, are partly determined by BT.* ***We therefore consider that error correction mechanisms in relation to volumes are unlikely to be appropriate****. Vodafone's suggested approach to implementing a volume error correction mechanism does not address the impact on BT's incentives to pursue volume growth as it would remove any benefit BT gains from out-performing the base case volume forecast.*

95. In summary, reviewing volumes annually may initially seem a reasonable policy response to forecast uncertainty with the aim of ensuring cost recovery while minimising costs to consumers. However, in practice it risks creating perverse incentives, potentially leading to reductions in volume and quality. It also has the unintended consequence of transferring forecasting risks from the regulated firm to consumers.

96. We believe that ComReg should instead set prices over the regulatory period on the basis of estimated annual costs that reflect the best forecasts of line numbers given available information. We believe that 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 such as SIRO's imminent launch and potentially also the impact of the NBP. As discussed in the previous section, we believe that the base case line loss scenario is likely to be at the lower end on the potential range for line loss (i.e. with the potential to understate line loss and understate costs). Table 7 shows revised costs for SB-WLR and SABB under this scenario (i.e. these are the services that ComReg proposes to be priced largely based on Top-Down costs). We also show in Table 8 the revised costs under the scenario of eircom's Five Year Plan line loss forecasts described in the previous section. Both Tables show the impact of the volume changes alone rather than in conjunction with the other proposed changes.

Table 7 – Revised TD costs under base case loss scenario (average cost estimate 2016-2018)

	Cost estimated in draft model	Costs with revised forecast line loss
SB-WLR based on national TD HCA with BU-LRAIC+ for active equipment	16.72	✂
SABB price based on TD HCA costs (and BU-LRAIC+ active equip. costs) outside the LEA	22.16	✂

Table 8 – Revised TD costs under eircom's 5 year plan line forecast (average cost estimate 2016-2018)

	Cost estimated in draft model	Costs with revised forecast line loss
SB-WLR based on national TD HCA with BU-LRAIC+ for active equipment	16.72	✂
SABB price based on TD HCA costs (and BU-LRAIC+ active equip. costs) outside the LEA	22.16	✂

4 ComReg's margin squeeze test proposals

97. ComReg is proposing two margin squeeze proposals in the Consultation: a retail margin squeeze test between SB-WLR and retail line rental and a wholesale margin squeeze test relating to POTS based VUA. In this section, we show that these tests are not justified by the market circumstances and are likely to harm competition, efficiency and ultimately consumers.

4.1 The proposed margin squeeze test between SB-WLR and retail line rental

98. eircom is currently subject to a retail price cap on line rental as well as a requirement for nationally uniform charges and ComReg is proposing that regulation of SB-WLR be changed from retail minus to cost-orientation. ComReg also proposes in the Consultation that a new margin squeeze test be applied setting a minimum margin between the price of retail line rental and the price of wholesale line rental (WLR).

4.1.1 ComReg's rationale for margin squeeze test even with WLR set at cost

99. For a margin squeeze to occur, competitors must face wholesale prices which are too high and/or retail prices which are too low to allow them to recover an efficient level of retail costs. Under current retail minus regulation of WLR, ComReg directly sets the margin between eircom's WLR and retail line rental and thus can eliminate the potential for a margin squeeze for the service.

100. ComReg is proposing that WLR be subject to a cost orientation obligation based on eircom's actual national costs adjusted for efficiencies (with active equipment based on BU-LRAIC+ costs reflecting the viability of competitors investing in their own active equipment). The proposed cost obligation on WLR would prevent eircom from creating a margin squeeze through charging rivals a WLR price above costs. Even if the BU LRAIC+ cost of active equipment was priced above eircom's costs,

competitors could readily invest in their own active equipment. Accordingly, the cost obligation would imply that a margin squeeze could only be implemented through eircom setting a retail line rental charge below the total costs of providing line rental at retail. The Consultation appears to recognise this in stating (10.6) the rationale for the proposed new margin squeeze test:

> *"ComReg is concerned that even if the cost oriented SB-WLR national price would prevent eircom 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 Eircom's retail prices either on a standalone basis or in a bundle."*

4.1.2 Economic framework for assessing whether an ex ante margin squeeze test would be appropriate

101. Before examining the likely effects of ComReg's specific proposed test in relation to line rental, it is useful to consider what factors should generally be taken into account in assessing where ex ante margin squeeze tests are warranted.

102. The first point to note is that competition authorities and the courts recognise that prohibitions on particular conduct have to be applied cautiously with a detailed assessment of the facts of any specific case. The objective is not to replace competitively determined prices with regulatory-determined prices but to protect the competitive process itself. Competition authorities recognise in particular that they can make two types of mistakes:

- Type 1 errors – where an authority intervenes excessively with the effect that pro-competitive conduct is prevented that would have benefitted consumers; and
- Type 2 errors – where an authority fails to intervene to prevent conduct that does harm competition.[37]

103. With the aim of correctly distinguishing between competition on the merits and harmful conduct, the enforcement of European competition law requires all of the following conditions to be met before conduct will be found to be abusive.[38]

i. The firm must be dominant (generally although not exclusively assessed by the ability of an undertaking to profitably increase prices above the competitive level for a significant period of time, taking into account existing competitors and the potential for entry). Absent dominance, particular conduct is unlikely to harm competition. For example, pricing below cost would only harm

[37] For example, see G. Monti, *EC Competition Law*, 2007, p.18.
[38] European Commission, *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.*

customers if a firm has the ability to set excessive prices in the longer term that more than recover the short-term losses.

ii. The conduct must have the likely effect of hindering competition. For example, the European Commission states "*The Commission will normally intervene under Article 82 where, on the basis of cogent and convincing evidence, the allegedly abusive conduct is likely to lead to anti-competitive foreclosure.*"[39] This assessment will depend heavily on the specific market facts and may also include evidence of actual anti-competitive intent.

iii. The conduct is not necessary or efficiency-enhancing, i.e. it would harm consumers. Competition law is not intended to shield individual competitors but to promote the best outcomes for consumers such as in terms of lower prices and better quality. Recognising this, competition authorities examine whether particular conduct is objectively necessary or would produce efficiencies to the overall benefit of consumers. For example, competition law permits dominant firms to take reasonable measures to protect their own commercial interests including responding to competitive offers of rivals. In addition, certain pricing may support greater efficiency in the longer term by achieving higher volumes to the benefit of consumers (e.g. promotional pricing to build product familiarity or loss leading to realise scale and scope economies in time). Where volumes are declining, a firm may not be able to fully recover its sunk costs so that pricing above average avoidable costs but below average total costs may be rationale.

104. Whether an ex ante margin squeeze test is warranted also requires a careful assessment of the likely risks of imposing such a test compared with not imposing such a test. Indeed, there is a need for greater caution in the use of ex ante tests as they carry a much greater risk of preventing or hindering pro-competitive price offers. This is because an ex ante margin squeeze test represents a blanket prohibition on particular pricing without an assessment of evidence on whether specific pricing would be likely to harm competition and whether such pricing would promote efficiency.

105. Given the blunt nature of ex ante margin squeeze tests, they should be used exceptionally. First, the three conditions set out above that competition authorities consider are also relevant to assessing whether an ex ante margin test is warranted. However, they need to be applied on a forward-looking basis to the general market circumstances. In particular, given the general market circumstances, would the firm have the ability and incentive to exploit a dominant position so as to create likely harm to competition to the detriment of consumers? Second, if such a test was implemented, what would be the risk of preventing pro-competitive and efficiency-enhancing conduct? In considering whether or not the balance of these risks warrants an ex ante margin squeeze test it is necessary to consider both:

[39] Ibid., para.20.

- what is the likelihood of each risk arising; and
- what would be the harm to consumer welfare if that risk eventuates?

106. A further consideration is that competition law applies regardless of what regulation there is, so that the case for an ex ante margin squeeze test requires that it provides sufficient incremental benefits particularly in further protecting competition that outweigh the potential for harm from the margin requirement. Of relevance to this, the European Commission has stated:

> *"Ex ante regulation would be considered to constitute an appropriate complement to competition law in circumstances where the application of competition law would not adequately address the market failures concerned. Such circumstances would for example include situations where the regulatory obligation necessary to remedy a market failure could not be imposed under competition law (e.g. access obligations under certain circumstances or specific cost accounting requirements), where the compliance requirements of an intervention to redress a market failure are extensive (e.g. the need for detailed accounting for regulatory purposes, assessment of costs, monitoring of terms and conditions including technical parameters and so on) or where frequent and/or timely intervention is indispensable, or where creating legal certainty is of paramount concern (e.g. multi-period price control obligations)."*[40]

107. The Commission identifies that an ex ante test could be warranted where the remedy is not able to be imposed under competition law. This is clearly not the case generally with margin squeeze tests. It would be the case were the objective and design of the test targeted at assisting competitors establish themselves in a market where competition is nascent and there are reasonable grounds to believe that entry assistance would deliver longer term competitive benefits that outweigh the direct harm from such assistance such as higher retail prices. A market where competition is nascent might also warrant more timely intervention than to await a fact-based competition law investigation.

108. An ex ante margin squeeze test could also be used as an alternative to wholesale price regulation to protect competition while seeking to avoid undermining investment incentives by the access provider. For example, BEREC notes that "*the ex-ante economic replicability test aims at deterring the SMP operator from using market foreclosure strategies in order to foster retail demand for NGA-based retail services when NGA-wholesale inputs are not subject to regulated access prices.*"[41]

[40] Commission staff working document, Explanatory note accompanying Recommendation on Relevant Product and Service Markets, 2007.
[41] BEREC, *Guidance on the replicability accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze test)*, p.49.

109. The imposition of an ex ante margin squeeze test is unlikely to be appropriate where:

- There is little risk of an anticompetitive margin squeeze given the constraints on the dominant operator and the ability for future entry to prevent any attempted margin squeeze from being profitable;
- There are significant competitors already present with the risk that a margin squeeze test inefficiently hinders one operator in competing against rivals while offering little potential to increase competition; and/or
- The market is at a stage where it is unlikely that a short-term margin squeeze test would cause long-lasting harm to competition so that ex post competition law can instead be relied on.

4.1.3 Is the proposed line rental margin squeeze test warranted by the circumstances in Ireland?

110. We use the framework outlined in the previous section to assess whether the proposed line rental margin squeeze test is likely to be justified.

111. First, we assess what would be the risks to competition absent such a test. As noted above, assuming that a SB-WLR price is set based on cost[42], 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. That is, a margin squeeze test would require eircom to incur losses. If the requirement for nationally uniform charges is retained, these losses would also be much greater than if eircom were able to target price discounts. Incurring losses would only be a profitable behaviour for eircom if it could expect to sustain above competitive prices in the longer term. However, there is no reasonable basis for eircom to expect to be able to charge above competitive prices in the longer term given:

- the ability of OAOs to access cost-based SB-WLR and hence remain or to readily re-enter should eircom later increase prices above competitive levels; and moreover
- the presence of rival network with significant sunk costs (and hence being highly unlikely to exit) and that are, in fact investing heavily including the upgrade of UPC's network with the launch 240Mbps broadband in January 2015 and SIRO's rollout as well as the migration to NGA.

[42] ComReg had raised uncertainty over actual wholesale Bitstream costs as a reason for applying a retail margin squeeze test to Bitstream services (Wholesale Broadband Access 13/90, para. 5.40(v)). While we have not assessed whether that test is justified, we note that there is little uncertainty over eircom's WLR costs. A further difference is that eircom would not have the ability to charge higher than costs for WLR in any area.

112. 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.

113. We note 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 (the Consultation seems to raise both concerns although the proposed design of the test considers only the difference between retail and wholesale line rental). In either case, the regulation of SB-WLR would remove the scope for a margin squeeze. Further, ComReg already imposes a Net Revenue Test that applies to bundles including line rental. There would appear to be no economic rationale to supplement the Net Revenue Test with a test applied to line rental on its own. ComReg should be concerned with ensuring efficient competition, not with guaranteeing the viability of any entrant no matter how narrow their chosen product offering. In Ireland's fixed services market, competition is driven by players offering bundles of line rental with other services. ComReg has noted the demand for bundled offers in commenting on the decline in demand for a stand-alone CPS product.[43] Given that competition is based on bundles, whether or not a margin squeeze test applied to line rental on its own is met is of little relevance to ongoing competition. This is also the view taken in European competition law and by Ofcom:

> *"The method used to determine whether there is a margin squeeze in this case is based on the principle that the established operator's tariff structure must enable competitors to compete with that operator effectively, and at least to replicate the established operator's customer pattern."*[44]
>
> *"In the case at hand, the margin squeeze test has been conducted on the basis of an aggregated approach, i.e. on the basis of the mix of services marketed by Telefónica on the relevant retail market. This approach (referred to as the "aggregated approach") is based on the principle that competitors must at least be able to profitably replicate Telefónica's product pattern … The aggregated approach is consistent with a new entrant's internal decision making process in that it assesses the profitability of its investment in a network by considering the complete range of products that it is able to offer in the relevant downstream market."*[45]
>
> *"We consider it appropriate for our test to allow competitors to compete for the portfolio of BT's SFBB services as a whole. While any firm may decide to price some products more aggressively to target particular groups of*

[43] ComReg 14/26, para. 5.24.

[44] Case COMP/C-1/37.451, 37.578, 37.579 Deutsche Telekom AG [2003], para. 127.

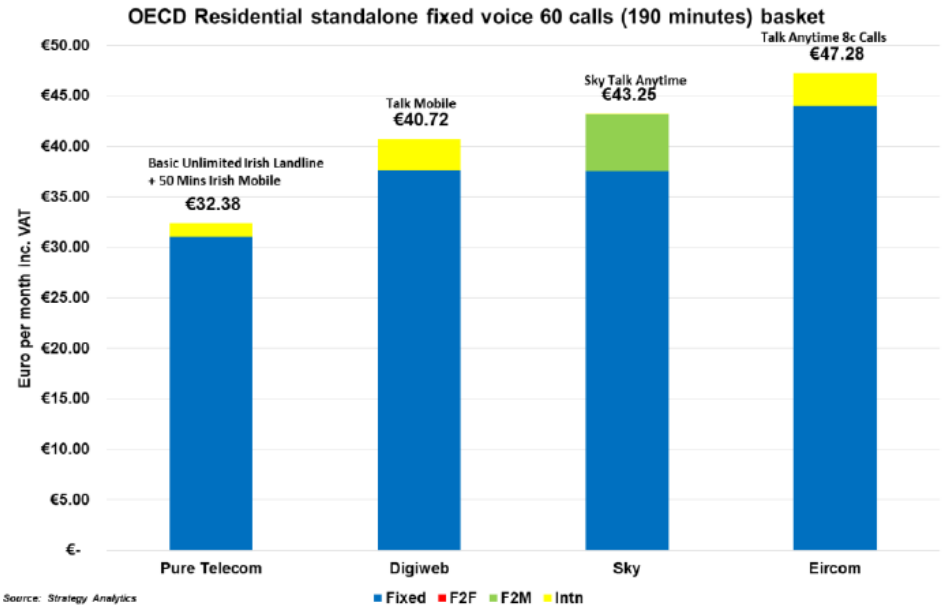
[45] Case COMP/38.784 Wanadoo España v Telefónica (2007), paragraph 388. While the Telefonica decision does note that it could be relevant to conduct the test with respect to a single product this is where the product is new and with the potential to grow substantially over time (this is not the case with line rental).

customers, as long as BT's SFBB portfolio is earning revenues that exceed the LRIC of that portfolio, then an operator which is at least as efficient as BT could compete for the entire SFBB portfolio."[46]

114. Not only would eircom have little incentive or ability to attempt a margin squeeze but any such attempt would have little risk of harm to consumers. Consumers would gain from lower retail prices in the short-term and prices would be constrained to competitive levels in the longer term because of the presence of rival networks and access-based operators. Line rental is not in a nascent market where ex ante margin squeeze regulation could be justified by the objective of creating competition for the first time. 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.

115. While the proposed line rental margin squeeze test offers little potential competitive benefit, it does carry substantial risks to competition and efficiency. As ComReg's data in Figure 1 shows, eircom's prices are already undercut by its competitors. 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. Given that absence of a margin squeeze to date, ComReg needs to substantiate why it believes a margin squeeze would occur in the future.

Figure 1– Price of a residential standalone fixed voice basket[47]



[46] Ofcom, CW/1103/03/13: Complaint from TalkTalk Group against BT about alleged margin squeeze in relation to superfast broadband pricing, 2014, para. 5.62.

[47] ComReg 15/102, Figure 2.5.1. Note that calls that are included in the provider's bundles are not shown separately such as an allowance for international call minutes in Sky's Talk Anytime bundle.

116. eircom also faces rivals with significant competitive advantages including UPC with its cable network and Sky, Vodafone and BT, all part of large international groups. Competition between these players based on bundled offerings can be expected to continue to intensify. Economic analysis shows that bundled offers can bring significant consumer benefits including in terms of lower prices (through economies of scope), reduced transaction and information costs as well as greater variety and convenience. Bundling can support higher consumer demand being met than pricing products individually as companies may be able to supply a bundle to consumers who would otherwise face prices for individual elements of the bundle that are above their willingness to pay. In this regard, bundling can also support the take-up of new products.

117. 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. For example, 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. A test applied based on average total costs would exacerbate the risk of unreasonably preventing pro-competitive pricing by eircom as eircom's large rivals may choose to recover common costs elsewhere (including across their international operations) or may price to cover average variable costs only.

118. 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. For example, eircom's competitors would have much greater flexibility in pricing line rental than eircom would under ComReg's proposed test, even though consumer outcomes are driven by competition for bundles.

119. The Consultation's proposal can be contrasted with Ofcom's assessment in deciding to further deregulate BT's retail pricing in 2009 particularly to allow BT to offer discounted bundles of services and thereby to "*enable BT to compete more fiercely with rival providers*". Ofcom carried out deregulation despite BT's 57% retail share of lines because Ofcom recognised that access regulation would be sufficient to support competitive outcomes. Ofcom in particular addressed concerns raised by rivals regarding the risk of a margin squeeze and found that consumers would be better off from greater price competition even at the expense of margins. Ofcom stated:

> *"With respect to the risk of price squeeze, as discussed in the March Consultation, our current concern is that, despite the entry of new competitors and a decline in fixed wholesale costs in 2004, there is little indication of improved prices to end customers. BT has had price flexibility yet not chosen to exercise this. We think that the removal of the existing remedies will open the prospect of greater price competition. In particular,*

the current price publication remedy supports the maintenance of existing margins for BT Retail and other Communications Providers rather than encouraging competition for the benefit of customers. We remain conscious of the possibility of price squeezing as we are with all products BT sells both at the retail and wholesale level. Our SMP finding indicates that BT retains a dominant market position in the supply of these services and allows us to intervene in the event of concerns over potentially abusive conduct."[48]

120. In summary, we believe that there is little justification for the proposed line rental test and that it carries much greater risks of causing competitive harm than any incremental benefit it offers in protecting competition compared with reliance on competition law.

Table 9 – Risks of implementing versus not implementing the proposed line rental (LR) margin squeeze test

	Chance of error	Resulting harm to consumers
Do not impose the LR margin squeeze test	Low risk of anticompetitive margin squeeze given (i) wholesale regulation; (ii) no evidence to date; and (iii) intensifying network competition preventing any scope for future recoupment of losses	Little risk of consumer detriment given existing rivals and limited effect of any attempt margin squeeze
Impose the LR margin squeeze test	High risk of preventing pro-competitive pricing particularly given eircom currently being undercut and competition from rivals with bundled offers and a range of competitive advantages	Potentially substantial harm in hindering eircom's ability to launch competitive offers in a market where competition between bundles expected to intensify

4.1.4 Inconsistency with EC's Markets Recommendations

121. The EC's Recommendation on relevant products and services markets states:

"Ex ante regulation imposed at the wholesale level should be considered sufficient to tackle potential competition problems on the related downstream market(s). 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

[48] Ofcom, *Fixed narrowband retail services market,* 2009, para.712-7.14.

upstream market(s). Given the advances in competition that have been achieved thanks to regulation, this Recommendation identifies only relevant markets at the wholesale level. It is believed that their regulation can address a lack of effective competition at the wholesale level, which in turn is the cause of identified market failures in the related retail markets. Should a national regulatory authority nonetheless demonstrate that wholesale interventions have been unsuccessful, the relevant retail market may be susceptible to ex ante regulation provided that the national regulatory authority has found that the three criteria test prescribed in this Recommendation is met."[49]

122. Given the proposal to impose an obligation of cost orientation on SB-WLR, the imposition of the line rental margin squeeze test would effectively amount to the regulation of eircom's retail line rental charges. This is despite the European Commission's general expectation that retail regulation should not be required. We believe that rival network players together with LLU access regulation will be sufficient to achieve effective competition at the retail level. Competition law also offers an additional competitive safeguard. We note 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. The Commission states:

"The Commission notes ComReg's intention to monitor developments in the retail access market and to examine whether, in light of retail developments, regulation within the retail access markets (and the FACO markets) remains appropriate. In this respect the Commission observes that the retail market shares of Eircom are already relatively moderate (circa 47%) and invites ComReg to proceed with the review of the retail access market without undue delay.

Clarity of regulatory obligations

The Commission notes that the proposed price control obligations imply a combination of retail minus, cost-orientation and margin squeeze, the appropriateness and specificities of which are to be further examined in three pricing consultations planned for Q4 2015, i.e. a separate Access Network Pricing Consultation, a separate FVCO Consultation and a further NRT margin squeeze consultation (which could also lead to a geographic differentiation of remedies between LEAs and non-LEAs, if the current distinction is maintained). This results in a highly complex regulatory setting in Ireland. The Commission therefore calls upon ComReg to take the opportunity of the forthcoming parallel consultations to streamline the

[49] EC Markets Recommendation, 2014, para. 18.

existing pricing remedies, thereby enhancing transparency and legal certainty for market players."[50]

123. ComReg's proposed new line rental margin squeeze test would add to, rather than streamline, the extensive existing regulations applying to these services. 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.

4.1.5 Modification required to the MST

124. While we believe that there is no justification for the proposed margin squeeze test, if one is to be introduced then we believe that the retail costs to be included should be more limited.

125. ComReg considers that the following retail costs are relevant in the context of the provision of retail line rental:

- Product management;
- Marketing and sales;
- Billings costs; and
- Fault reporting costs, and costs associated with customer facing activities during the fault repair process (for example, customer care).

126. While we agree that these costs represent retail costs, we believe that the test should require prices to only cover ongoing costs, i.e. average avoidable costs. The use of average avoidable costs is appropriate to protect the existing competitors - competitors which have well-known brands and existing billing systems (including UPC, Vodafone, BT and Sky). 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. It is also the case that with innovative bundles firms may misjudge demand leaving them to write-down some of their initial investments (i.e. sunk costs are not always recoverable in competitive markets). Average total costs would force eircom (and eircom alone) to seek to recover past investments even where they have proven unsuccessful. We note that European competition law establishes average avoidable cost as the standard cost measure to test for predatory pricing.[51] Pricing below average total cost is recognized as often being undertaken for legitimate commercial reasons and is only found to be anticompetitive when there is direct evidence that the pricing has been adopted with the intention of harming competitors.

[50] Commission Decision concerning Case IE/2015/1746: Fixed voice call origination market in Ireland Comments pursuant to Article 7(3) of Directive 2002/21/EC.
[51] See Case T-340/03, France Telecom SA v Commission [2007] ECR II-107, para. 224.

127. Average avoidable costs would also provide greater pricing flexibility for eircom and thereby engender greater price competition to the benefit of end customers. To instead require eircom's pricing to recover a set proportion of its sunk costs and common costs in particular prices would put eircom at a disadvantage relative to its established rivals.

128. We note that ComReg seems to believe (10.31) that the test should be used to assist further entry rather than to protect current competition. However, 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. As such, the use of Average Total Costs would competitively disadvantage eircom to the detriment of efficiency and competition while providing no offsetting competitive benefits. The existence of significant rivals to eircom also supports ComReg's use of an EEO standard.

129. ComReg recognizes that the test should be applied on national basis to allow for "*some efficient price differentiation*". However, ComReg has not considered the extent to which the test itself would prevent further efficient price discrimination.

4.2 Proposed POTS based VUA margin squeeze test

130. At a wholesale level, ComReg proposes a margin squeeze test on POTS based VUA against the price for standalone VUA/NGA Bitstream (including a contribution towards Managed VoB costs).[52] ComReg state that the purpose of the test is to:[53]

> *"... ensure that there is 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."*

4.2.1 Description of the proposed test[54]

131. The test deals with the fact that the copper network will co-exist for the foreseeable future alongside the NGA network. As regulated copper access products will continue to be available, OAOs' will have two options to provide a combined voice and SFBB service:

[52] The Consultation, p. 185.
[53] The Consultation, para. 10.51.
[54] There is some mixing of terminology in the Consultation. The heading of section 10.3 refers to VUA, the text (10.51) has a mix of POTS based VUA and standalone VUA/NGA bitstream, while the TERA model refers to VUA in the headings but bitstream in the detailed calculations. In practice we think the test is capable of being applied either to VUA or bitstream services, as long as it is consistently applied. For simplicity and consistency with the detail of the TERA model we refer in this analysis to the test being applied to NGA bitstream.

- **Option 1.** Copper and fibre. Rent the copper connection based on the SB WLR price, provide narrowband voice and then buy an add-on bitstream SFBB service. The total cost will equal SBWLR + POTS NGA bitstream.
- **Option 2.** Fibre only. Rent a NGA standalone bitstream service, and then supply a VOIP voice service using own VoB investment. The total cost will equal NGA bitstream standalone + the (internal) cost of VOIP provision.

132. The question being considered is whether it will be economic to choose Option 2. In particular, ComReg's stated objective noted above is to ensure that it will be economic to invest in a VoB platform (at least for a reasonably efficient competitor).

133. TERA has constructed a model which illustrates the test.[55] We have reproduced and reorganized their model below, representing it in a form that makes the proposed test more clearly visible. Note that the POTS based NGA Bitstream charge is initially set to zero. This is because the purpose of the model is to allow this charge to be varied, and then once a proposed charge has been entered, to see if the test is passed.[56]

Option 1: POTS and NGA Bitstream (i.e. Copper/narrowband voice and NGA Bitstream)	
SBWLR	16.72
POTS based NGA Bitstream rental/port price	✂
Cost total	✂
Less: Connection charge revenue (per month)	✂
'Pots + NGA b/s' Net cost per month	✂
Option 2: VOIP and NGA Bitstream (i.e. Fibre/VOIP and Standalone NGA Bitstream)	
NGA bitstream standalone price	✂
VOIP contribution (average cost VOIP platform)	✂
Cost total	✂
Less: Connection charge revenue (p/m)	✂
'VOIP + NGA b/s standalone' Net cost per month	✂
Margin Squeeze test	✂

134. Using the figures that TERA has input for the initial calibration of the model (based on the bitstream service), and with no charge input initially for POTS based

[55] Wholesale Pots Based VUA Margin Squeeze Model - Consultation July 2015, TERA Consultants.
[56] Note also that we have not reconstructed TERA's annualisation calculations exactly, so our reconstructed figures are slightly different to those shown in the model (about €0.01 difference). The difference is not material to the analysis of the test.

bitstream, the model estimates that the total cost per month of Option 2 (fibre only and OAO-own VoB platform) is ✂ per month, while for the POTS based solution based on WLR the cost is ✂ per month.

135. This result is however before the POTS based bitstream costs are added. In this model the test shows ✂ per month. This means that if the POTS based bitstream charge were ✂ per month or more, then an OAO would prefer Option 2, and the margin squeeze test would be passed (that is, no margin squeeze would be found). In other words, given these illustrative figures, the test would imply that eircom would need to charge at least ✂ per months on the POTS based bitstream service to avoid failing the margin squeeze test.

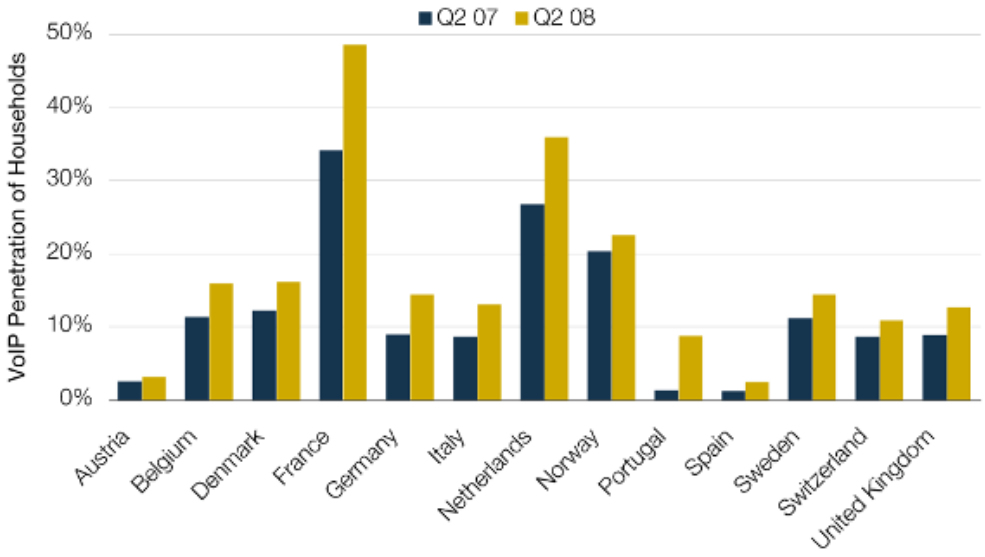
4.2.2 It seems unlikely that a test based solely on the Irish market is relevant

136. 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 market. It is not clear this is necessary. Over-the-top competition from competitors such as Skype typically occurs internationally. 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. As an example, Colt offers 'a full range of voice and VOIP services' in Ireland today,[57] with its website stating that its IP Voice Solution can provide customers with the benefits of traditional telephony delivered over an IP connection. Colt states that it offers these solutions over 13 countries. We also understand that Vodafone has a European VoB platform.

137. The available evidence on VoIP penetration in Europe does not support the view that a large domestic market is needed to support voice over IP development. Analysis by TeleGeography in Figure 2 shows that of the top three markets in terms of penetration, two are relatively small European markets (the Netherlands and Norway), while the UK, Sweden and Switzerland have similar levels of VoIP penetration despite very different market sizes. The TeleGeography report noted that while incumbents lead the VoIP market in France, Italy, the U.K., the Netherlands and Norway, competitive operators held the lead in most other markets, which again suggests that significant scale is not necessary to provide VoIP services.[58]

[57] http://ww2.colt.net/ie/en/voice-services/index.htm.
[58] Source: http://www.itu.int/ITU-D/ict/newslog/CategoryView,category,VoIP.aspx.

Figure 2 - VoIP Penetration of Households, Q2 2007 & Q2 2008



138. Given the ability of telecoms operators such as Colt and others 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. Similarly, the evidence does not support the view that small markets are unable to support competition

4.2.3 The proposed test is not economically justified

139. While we understand ComReg's policy objective, in our view the margin squeeze test is not economically well grounded. In particular, it is not likely to promote productive economic efficiency. The core of the problem is that ComReg has set an objective of ensuring that VoB platform investment is economic. 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.

140. In broad terms, there are two reasons why a VoB investment might be economically desirable.

141. First, 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 (i.e. if the test calculations suggest that there is insufficient margin to support the investment). In particular, the test does not establish that investment in a VoB platform will not be viable for OAO operators. It would only establish this if the VoB platform offers no additional value whatsoever

(compared with POTS) in downstream activities. If no additional value is created, it is unclear why incentivising investment in VoB is a valid policy objective.

142. The second reason why VoB investment could be economic is that it might be a cheaper way (at the access level of the network) than POTS to provide voice services. More specifically, in a network with both copper and fibre assets in place, 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.[59] 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. The margin squeeze test proposed does not conduct such a check, and is therefore unlikely to promote efficient investment. Indeed, the proposed test may promote inefficient entry by artificially increasing the margin available to OAOs and providing incentives to invest in VoB whether or not it is economically efficient to do so.

143. In summary, there is no clear requirement for the proposed test to be implemented to support VoB investment, and the proposed test does not promote economically efficient investment decisions. As such, we do not think imposing such a test on eircom is in the long term interests of the consumers of telecommunication services in Ireland. In coming to this conclusion we also note that we are not aware of any other regulator applying a similar test to that proposed by ComReg.

4.2.4 Comments on the technical design of the test

144. As noted in the previous section, we believe that there is no compelling economic justification for the test. However, if such a test is implemented, we believe that the proposed design of the test would bring additional problems.

145. The Consultation proposes that the test be based on:

- The cost base of a Reasonable Efficient Operator (REO); and
- An assumed 25% market share of the operator.

146. 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. We note 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.[60] Such a test would constrain eircom's competitiveness

[59] We note that the relevant cost savings will not only be located in the access network. The savings from migration to IP only networks include benefits in backhaul, core and active electronic components of the network.

[60] ComReg Q1 2015 market data.

while not giving benefits to smaller operators who would have to compete with eircom's larger rivals anyway. It is also the case 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. An EEO standard would better promote competition on the merits and efficiency.

147. We also note that the customer life of 3.5 years is relatively short compared with eircom's broadband churn around ✂ which suggests a ✂ lifetime would be more appropriate. However, the customer life is not used in the current form of the draft model.

5 ComReg's proposal to set a constant price over time

148. The Consultation states:[61]

> *"ComReg proposes that the price control period should be for three years from the date of our decision but in any event it should remain in place until further notice by ComReg."*

149. ComReg considered three options in terms of setting the price for each service as follows:[62]

- Option 1: Determine a price per year for each service;
- Option 2: Determine one average price for each service over the price control period; and
- Option 3: Determine the price for the first year of the control period and use a glide path based on CPI for subsequent years.

150. ComReg proposes Option 2, a single average price for all three years on the grounds that it would involve less administrative burden than Option 1. ComReg argues that Option 3 could cause a divergence between revenues and actual costs according to the CAM requiring an end of period correction that would create price instability and uncertainty for OAOs.[63]

151. As a preliminary point, we noted that none of ComReg's proposed options involve a conventional CPI-X cap which many regulators would consider to be best practice, offering benefits over the long term both to consumers of telecommunications

[61] The Consultation, para. 12.9
[62] The Consultation, para 5.276.
[63] The Consultation, para. 5.284.

services and to regulated firms. We comment on this omission further below as, in our view, none of ComReg's proposed options have particularly satisfactory incentive effects. In this initial section, we provide our views on the options put forward for consultation.

5.1 Setting the modelled price each year

152. 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. In particular, 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. Noting that there is a risk that the control will not be reset in a timely manner, then the longer the average price cap remains in place the greater the risks of distortions to inefficient pricing levels. The risk of distortion to investment also increases, particularly if underlying costs are rising over time.

153. Setting constant prices based on an average will also result in a price 'spike' when the price control is reset, as prices then need to be adjusted to costs. Table 10 presents our estimates of the increase in prices that would be needed to bring ComReg's proposed constant prices for the period to at least 2018 in line with costs in 2019. The longer the period to the regulatory reset the larger will be the spike.

Table 10 – Increases from ComReg's prices to align prices with costs in 2019

	ComReg's proposed prices	CEG cost estimate for 2019	Average price change
LLU	11.15	✂	✂
SLU	5.88	✂	✂
SB-WLR based on national TD HCA with BU-LRAIC+ for active equipment	16.72	✂	✂
SABB Outside the LEA	22.16	✂	✂
Pole (per annum)			
LEA	11.58	✂	✂
Outside the LEA	9.53	✂	✂
Dark fibre (per meter per month)			
National	0.016	✂	✂

154. ComReg's proposed constant prices over time approach also directly undermines the purpose of employing a tilted annuity in the cost model, and the benefits ComReg itself claims come from the use of the methodology. ComReg states (5.204):

> *"A tilt is applied to an annuity to reflect the expected changes in the prices of assets and is intended to send better economic signals to market players, giving market players incentives to invest now if prices are expected to increase or delay investment if prices are expected to decline."*

155. ComReg's cost modelling already estimates annual costs for each service, so there is no practical difficulty for ComReg to apply charge controls based on the estimated annual costs. In our view doing so would better promote efficiency. We accept that there will be some costs to consumers of price changes but this is not considered a significant issue in other jurisdictions. Moreover, a well-designed price cap methodology will deliver significant benefits to consumers over time that will far outweigh any menu costs associated with annual price adjustments.

5.2 Option 3 is inconsistent with good regulatory design

156. In our view Option 3 would have particularly poor incentive effects, and should not be considered. As proposed, Option 3 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.

157. We agree with ComReg's concern that this option would risk creating price instability and uncertainty for OAOs and that this is undesirable from a policy and economic efficiency perspective.

158. This approach would likely have perverse incentive effects that would harm consumers. The proposal to correct for 'overs and unders' would remove the incentive on the part of the regulated firm to pursue efficiency improvements, and any gains during the control period are likely to be clawed back by the regulator at the end of the period. On the other hand, the risks associated with over-investment would be reduced, as there might be the possibility of claiming costs at the end of the regulatory period, whether or not the investment was efficiently incurred.

159. Option 3 would amount to a form of 'cost plus' regulation. International experience has shown that over the long run this approach has poor incentive effects, leading to inefficiency in production and ultimately higher prices and lower service quality to consumers than can be achieved using a more conventional CPI-X price cap approach.

5.3 ComReg should move to a CPI-X price cap

160. In our view, 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. This approach would involve:

- 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.[64]
- In each year monitoring that eircom meets the required change in prices so calculated, once the appropriate correction for inflation has been incorporated.
- Price caps based on this 'CPI-X' methodology were introduced to align prices with costs over the long term, but while also providing regulated businesses with the incentive to pursue cost innovations beyond the cost forecasts incorporated in the regulated prices. Price caps of this form are also commonly designed to give the regulated firm a strong incentive to grow volumes through pricing and service innovation by allowing the firm to profit in the short to medium term. In the long term, consumers benefit greatly from better services and more innovation, while cost savings are also ultimately passed on to consumers.

161. CPI-X regulation also provides regulated businesses with protection against unexpected changes in inflation. ComReg's Option 1 and 2 approaches provide no protection against inflation risks, while Option 3 would provide protection to the business, but at long run cost to consumers as discussed above.

5.4 The future price paths implied by the current proposals do not look credible

162. ComReg proposes to set eircom's prices for LLU and SLU services based on a tilted annuity for both reusable and non-reusable assets. For example, with regard to reusable assets, the Consultation states:[65]

> *"The reusable assets in our cost model are valued based on the net book value ('NBV') from Eircom's accounts and depreciated over the remaining lifetime of the asset by applying a tilted annuity formula which uses as a parameter*

[64] Note that the 'X' factor has commonly been negative in many markets, however positive values of X are also possible. This is most likely if costs are rising over time, either due to increasing input prices or due to falling demand (particularly for legacy services).

[65] The Consultation, p. 55.

the asset price index – this approach is referred to as 'Eircom's Indexed regulatory Asset Base (RAB)' throughout this Draft Decision."

163. ComReg proposes to use a tilted annuity on the grounds that it ensures strict cost recovery and calculates annuities which increase every year in line with price trends, with the purpose of providing the right entry/exit signals to the market. This is consistent with the European Commission's recommendation to take into account a price index.[66]

164. On the other hand, eircom'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:[67]

"ComReg is of the preliminary view that in order to ensure regulatory consistency the tilted annuity approach should be adopted for LLU, SLU and poles, as set out in paragraph 5.203. The HCA/straight line approach is relevant to SB-WLR and SABB Outside the LEA, by reference to Eircom's accounts."

165. The decision to use a tilted annuity approach raises policy issues regarding the implied longer term price increases that will be required in order for the approach to be continued to completion. The decision to use an HCA/straight line approach for costing products downstream of those using a tilted annuity approach raises further potential problems. In this section we:

- Analyse the different profiles of cost recovery inherent to different depreciation schedules.
- Look at the path of cost recovery and therefore prices associated with a tilted annuity, and explain why it is necessary to maintain the schedule to avoid over or under recovery of costs.
- Consider the pricing paths implied by the current proposals, and the policy issues raised.
- Finally, we show that an alternative approach (flat annuity) would avoid the potential problems identified.

5.4.1 Depreciation

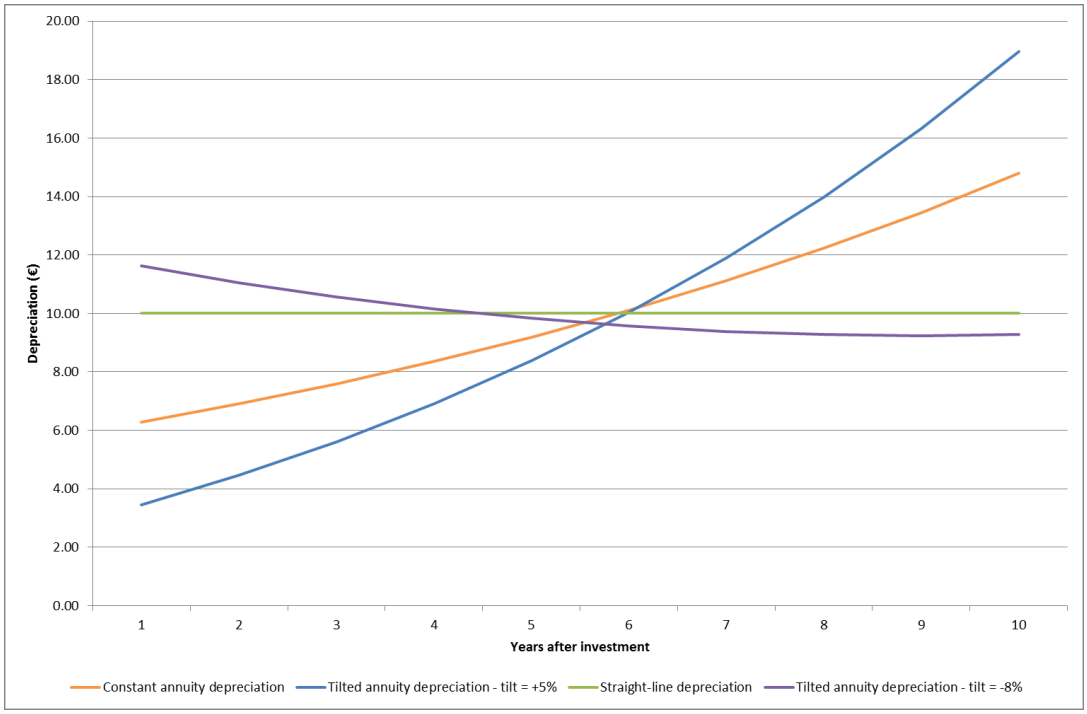
166. Investors require a reasonable expectation of receiving return of capital (depreciation) as well as a return on capital in order for efficient investment to occur. Any depreciation schedule can be set by a regulator without being unfair to

[66] The Consultation, p. 107.
[67] The Consultation, p. 107.

rate-payers or investors in a net present value sense.[68] According to the Invariance Proposition, rate payers and investors are indifferent between depreciation schedules since the net present value of all investments will equal zero under rate of return regulation.[69]

167. For example, Figure 3 shows a set of different depreciation schedules with net present values equal to the initial investment (€100). The depreciation schedules based on a constant annuity or a tilted annuity with a positive tilt are "back-loaded", meaning there is more return of capital (depreciation) in the second half of the 10 year asset life than in the first. In this example, the tilted annuity with a negative tilt is "front-loaded", though this is not always the case, and straight line depreciation is, by definition, neither "back-loaded" or "front-loaded". The Invariance Proposition suggests rate payers and investors are indifferent between these depreciation schedules despite their profiles being very different.

Figure 3: Depreciation schedules



[68] Any depreciation schedule is economic depreciation, i.e. it results in the depreciated value of an asset at every point in time being equal to the net present value of the cash flows that it will generate in the future, ensuring full recovery for investors.

[69] Provided the allowed rate of return equals the actual rate of return. Schmalensee, R. (1989), "An expository note on depreciation and profitability under rate-of-return regulation", *Journal of Regulatory Economics,* 1:293-298, p. 295.

168. The Invariance Proposition only holds if a depreciation schedule is followed to completion, otherwise full recovery of investment will not be achieved. Time inconsistency in depreciation policy is therefore problematic. Time inconsistency involves a regulator changing its policy over time which can lead to over- or under-compensation. Before an investment is made, a policy maker has incentive to offer full recovery in order to incentivise efficient investment. After the investment is made, it may no longer be optimal to allow full recovery, depending of the objective of the regulator. If the regulator does not commit to following the initial depreciation path for the full asset live, it is likely to under- or over-compensate the business.[70]

169. In order to achieve incentives for efficient investment, regulators must ensure that there is an expectation of cost recovery (sometimes known as financial capital maintenance). For long-lived assets, future regulatory decisions are as important as current ones, in determining whether cost recovery is achieved. This is particularly important for setting regulatory depreciation. Regulatory depreciation will set a profile for recovery of an asset over its life, which may span regulatory periods. If future regulatory decisions are inconsistent with past decisions (i.e. a change in the profile of depreciation occurs), this would be an example of a time inconsistent decision and is likely to result in under- or over-compensation.

170. Time inconsistency is a problem in telecommunications regulation because network investments are largely sunk once made and are long-lived, spanning multiple regulatory cycles. It is optimal for the regulator to provide incentives for investments to be made before they are made by offering full cost recovery however it may not be optimal to allow full cost-recovery once the investment has already been made. Ergas (2009) notes:[71]

> *"As a result, the optimal policy ex ante is to offer full cost recovery for such investments… However, once the sunk investment is made, reneging on that promise may be optimal: for a short-run welfare-maximising regulator, if it allows prices to be reduced to marginal costs; or for a regulator that is maximising its popularity, if gains to consumers are weighted more heavily than losses to investors."*

5.4.2 Tilted annuity depreciation

171. Tilted annuity depreciation is set by allowing a capital charge (including both return on and return of capital) that grows at a constant rate. By setting the growth rate in line with the long-run trend in input prices, regulated prices reflect average input

[70] Ergas, H. (2009) "Time consistency in regulatory price setting: An Australian case study", *Review of Network Economics,* Vol. 8, no. 2, p. 153-4.
[71] Ibid, p. 154.

price trends, sending efficient entry/exit signals. The annuity includes depreciation and the return on capital and is calculated according to the following formula:

$$Annuity_t = (1+p)^{(t-1)} \times \frac{(r-p)}{1-(\frac{1+p}{1+r})^T} \times I.$$

Where:

r = cost of capital

p = rate of price change ("tilt")

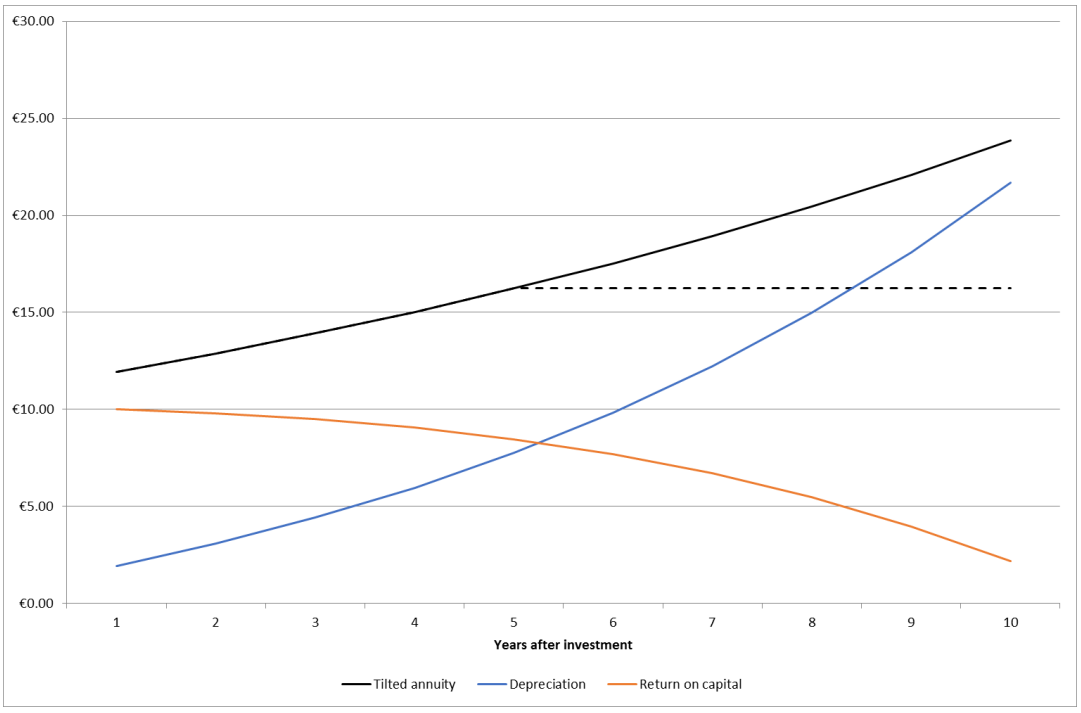
t = number of years after investment

T = asset lifetime

I = investment

172. Depreciation is calculated as the difference between the annuity in each year and the return on capital (the written down asset value times the rate of return). The solid black line in Figure 4 shows an example of a tilted annuity with an initial investment of €100, an 8% tilt, 10% rate of return and a 10 year asset life. The blue and orange lines show the return of capital (depreciation) and return on capital that make up the annuity.

Figure 4: Tilted annuity example



173. Changing the path of the capital charge away from the original tilted annuity path *during the life of the asset* violates the present value neutrality of the tilted annuity formula.

174. Consider, for example, the annuity set out in Figure 4. The solid black line serves to demonstrate a baseline level of compensation that is present value neutral (returns the original €100 investment) over the 10 year life of the asset. The dashed line shows the path of compensation assuming that after 5 years the regulator does not reset the capital charge. The dashed line returns less than the initial investment cost of €100 over time. This can be clearly seen because it lies at or under the present value neutral solid line for the entire life of the asset. The present value compensation returned by the dashed line is €90.50 over the life of the asset.[72]

175. Ergas (2008) argues that "back-loaded"[73] depreciation profiles, such as the tilted annuity set by ComReg, are more risky when there is uncertainty about future regulated revenues:[74]

> *However, it is widely recognised in the economic literature that the Invariance Proposition only holds under idealised conditions, and breaks down when assumptions about the regulated firm's future revenues are more realistic: where there is a risk of obsolescence, because (say) existing infrastructure can effectively be "bypassed" as a result of technological innovations, and, more generally where there is uncertainty about future revenues, including regulated revenues. In these circumstances, certain depreciation profiles, in particular back-loaded profiles are more risky, because they increase the probability that the regulated firm will not be able to recover the cost of its invested capital in some circumstances.*

5.4.3 ComReg's approach requires a commitment to long term increasing price

176. 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. If not, its approach will be time inconsistent and will effectively truncate the future recovery of capital that is embodied in the current decision. This will create an expectation of under-recovery which will lead to under-investment.

[72] Alternative assumptions could also give rise to examples of over-recovery.

[73] In back-loaded depreciation schedules, depreciation is higher towards the end of the asset's life than at the beginning.

[74] Ergas, H. (2008) "Depreciation", p. 3, available online at http://www.accc.gov.au/system/files/SSD2_25%20Concept%20Economics%20Depreciation%20Report%20August%202008.pdf.

177. 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:

- It is likely ComReg will consider prices based on ✂ capital charge for LLU and a ✂ capital charge for SLU as unreasonably high (note they are growing at ✂ and ✂ per year, respectively, which is faster than inflation);
- The paths could result in prices that are materially above EC guidance;
- ComReg's current approach will result in SABB and SB-WLR prices converging on LLU prices, which is likely to be unacceptable to ComReg;
- 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; and
- 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.[75] This would lead to significant under-compensation under the tilted annuity approach.

178. As such, there are strong grounds for eircom to be concerned about a time-inconsistent approach which would prevent full cost recovery and deter investment.

179. Figure 5 shows the capital cost component for each service implied by ComReg's proposed approach from 2015 to 2030. The LLU and SLU paths are based on tilted annuities, assuming current assets are maintained in perpetuity, i.e. that assets are replaced at the end of their asset lives. It shows that in order to be time-consistent, ComReg needs to commit to allowing higher rates of capital cost recovery in the future for the LLU and SLU services, which are priced based on a tilted annuity:

- The capital cost component of the LLU price would increase from ✂ in 2016 to ✂ in 2030, increasing at an annual average rate of ✂.
- The capital cost component of the SLU price would increase from ✂ to ✂ in 2030, increasing at an annual average rate of ✂.

180. These prices may not be acceptable to ComReg. ComReg may therefore decide to change the path of depreciation, leading to under-compensation for eircom.

[75] In the Consultation it states *"ComReg proposes that the price control period should be for three years from the date of our decision but in any event it should remain in place until further notice by ComReg"*, p. 19.

Figure 5: ComReg tilted annuity path

Source: ComReg cost model, CEG analysis

181. In contrast, eircom'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. In Figure 5, we have assumed continued capex going forwards based on ComReg's forecasts in order to demonstrate the capital cost path implied by this approach for SABB and SB-WLR. The capital charges for SABB and SB-WLR increase at a much slower rate than for LLU. The result is that the initial capital charge margins of SABB and SB-WLR over LLU are reduced over time and, in the case of SB-WLR, eliminated. From 2022, the capital charge for SB-WLR will be below the capital charge for LLU.

182. It is important that the prices for SABB and SB-WLR be set with a margin over the price for LLU. SABB and SB-WLR services are downstream services and use active assets (line card, backhaul) on top of LLU. An appropriate margin between the services provides other operators with the appropriate buy/build signals for these incremental assets and provides incentives for operators to "climb the ladder of investment", i.e. invest in the active assets used on top of LLU. ComReg is cognisant of the importance of these margins and will not find it acceptable to have them eroded:[76]

> *In determining the appropriate cost based rental price for SB-WLR, it is also important to ensure that there is sufficient margin between the SB-WLR price and the LLU price so that OAOs are encouraged to climb the ladder of investment and OAOs using the LLU service are not foreclosed from the broadband market.*

183. ComReg is inconsistent in its decision regarding its depreciation methodology. 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:[77]

> *This option would determine a costing methodology for each asset, and that same costing methodology would apply for each service which uses that asset. For example, if D-side cables are based on the BU-LRAIC+ approach for SB-WLR, they would be based on the BU-LRAIC+ approach for full LLU, SLU and SABB.*

[76] The Consultation, p. 142.
[77] The Consultation, p. 53.

184. The basis for ComReg's initial decision to use consistent approaches across services was that applying different costing methodologies for the same asset for different services could lead to inconsistent prices and in turn inhibit incentives for operators to "climb the investment ladder":[78]

> *This could lead to discrepancies in the value of assets as applied to different services thereby introducing inconsistencies across the investment ladder. Such discrepancies in the way an asset is treated could favour, for example, the use of SABB over LLU or SLU which may inhibit incentives for OAOs to climb the investment ladder.*

185. This is indeed the problem that will occur if ComReg continues to set prices based on the depreciation schedules set in its current decision.

5.4.4 Alternative depreciation profile – Standard annuity

186. To the extent that ComReg is not willing to commit 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. 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. The constant annuity is calculated using the formula set out above for a tilted annuity, with a tilt of zero.

187. Figure 6 shows the capital charge profile that would be allowed for LLU and SLU services under a constant annuity approach.[79] For 2016, the capital charge allowance for each service under a constant annuity approach (✂ for LLU and ✂ for SLU) would be higher than under the tilted annuity approach (✂ for LLU and ✂ for SLU). However, by 2022 the capital charge under the constant annuity approach will be lower than under the tilted annuity approach, which sees ✂ and ✂ average annual growth. By 2030, the tilted annuity capital charge for LLU of ✂ is much higher than the constant annuity capital charge, which would still be ✂. Similarly for SLU, the tilted annuity charge of ✂ in 2030 would be higher than the constant annuity charge of ✂.

Figure 6: Constant annuity path

✂

Source: ComReg cost model, CEG analysis

[78] The Consultation, p. 53.
[79] Assuming current assets are maintained in perpetuity, i.e. that assets are replaced at the end of their asset lives.

Appendix A - Other issues in the Bottom-Up modelling of capital costs

188. This appendix identifies several other issues in the approach to capital costs in the Bottom-Up modelling. These issues will tend to lead to costs being underestimated.

A.1. The model assumes NBVs that are too low given actual depreciation allowed to date

189. ComReg has proposed that it will adopt eircom's regulatory accounts' Net Book Values (NBVs) of existing assets, prior to applying a tilted annuity formula to depreciate reusable assets:

> *"The Reusable Assets in our cost model are valued based on the net book value ('NBV') from Eircom'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 is referred to as 'Eircom's Indexed Regulatory Asset Base (RAB)' throughout this Draft Decision."*[80]

190. The proposed approach switches depreciation profiles from Straight Line Depreciation (SLD) in the regulatory accounts to annuity depreciation. ComReg's intention is to maintain strict cost recovery:

> *"To ensure cost recovery for Reusable Assets ComReg considers that it is necessary to depreciate the regulatory accounting value net of the accumulated depreciation at the time of calculation over the remaining lifetime of the assets.*
>
> *The tilted annuity method calculates annuities which increase every year with price trends (index). This method is generally used in BU models but can also be used in TD models.*
>
> *ComReg considers that the CCA-FCM and tilted annuity ensure strict cost recovery since they are calculated based on the NBV of the assets, derived from Eircom's accounts. Both methods seem consistent with the 2013 Recommendation."*[81]

191. ComReg are seeking to construct an NBV for existing assets that is consistent with the 2013 Recommendation. The NBV in 2015 is in effect the value of the RAB for the reusable assets. It is useful to note that the EC Recommendation is to construct

[80] The Consultation, p. 55.
[81] The Consultation, p. 107.

a RAB that takes into account the past expenditures that have been recovered by the network owner. The EC Recommendation states:[82]

> *"In the recommended costing methodology the Regulatory Asset Base (RAB) corresponding to the reusable legacy civil engineering assets is valued at current costs, taking account of the assets' elapsed economic life and* ***thus of the costs already recovered by the regulated SMP operator****. This approach sends efficient market entry signals for build or buy decisions and avoids the risk of a cost over-recovery for reusable legacy civil infrastructure. An over-recovery of costs would not be justified to ensure efficient entry and preserve the incentives to invest because the build option is not economically feasible for this asset category" [Emphasis added].*

192. The European Commission's Recommendation also states:

> *"…the initial RAB corresponding to the reusable legacy civil engineering assets would be set at the regulatory accounting value, net of the accumulated depreciation at the time of calculation and indexed by an appropriate price index, such as the retail price index."*

193. The suggested approach in the Recommendation is correct, under the key assumption that the costs already recovered by the network owner are reflected in the accumulated depreciation (i.e., the difference between GBV and NBV). However, to ensure cost recovery for reusable assets, the regulator must consistently apply the depreciation methodology that has been used when setting the regulated firm's prices in the past.

194. eircom's regulatory accounts (and the underlying accounting depreciation method used in the accounts) do not reflect the basis on which some of eircom's key regulated prices have been historically set. ComReg notes that "*the tilted annuity formula is the formula applied in the 2010 LLU Pricing Decision*",[83] and the documentation supporting the 2010 BU Access Model (prepared by TERA in 2007) also supports the view that a tilted annuity depreciation scheduled was used when setting past regulated prices.[84] This means that in terms of its actual regulated prices, an annuity based depreciation schedule is needed to track the depreciation that eircom has actually been able to recover.

195. In the following sections we illustrate the systematic differences that arise in the pattern of cost recovery that occurs when straight line and annuity based depreciation methodologies are employed, and show that the (seemingly logical) approach used by TERA and ComReg in calculating depreciation will in fact lead to a systematic under-recovery of eircom's costs.

[82] EC Recommendation, para 35.
[83] The Consultation, para. 5.204.
[84] TERA Consultants Specification document of the LLU BU Model, slide 159.

The 'back-loaded' nature of depreciation embedded in a tilted annuity

196. ComReg's draft decision is to estimate the annual network costs based on the following tilted annuity formula for both BU assets[85] and Eircom's TD assets for LLU, SLU and poles[86]:

$$Depreciation\ factor = \frac{WACC - Price\ Trend}{1 - \left(\frac{1+Price\ Trend}{1+WACC}\right)^{Asset\ life}} \qquad (*)$$

197. This formulation is consistent with the definition of a so-called growing annuity[87] or tilted annuity whereby:

- an amount of annual payment/cost will grow at the prescribed price trend over the entire useful life of the asset; and
- the present value of all future payments discounted at the required rate of return on capital (WACC) is equal to the amount of initial investment.

198. The approach is analogous to a fixed-payment mortgage, the total amount of annuities in the future is just enough to recover the full amount of the initial investment (the 'principle') made by investors and their required rate of return (the 'interest') based on the WACC.

199. Similarly, the amount of depreciation is equivalent to the payback of a mortgage that reduces the total owing amount, but which in this case reflects the economic value remaining of an asset (hence, the NBV). As a result, the return on capital in each period, calculated as the product of the WACC and the NBV, will decrease over time as the NBV decreases.

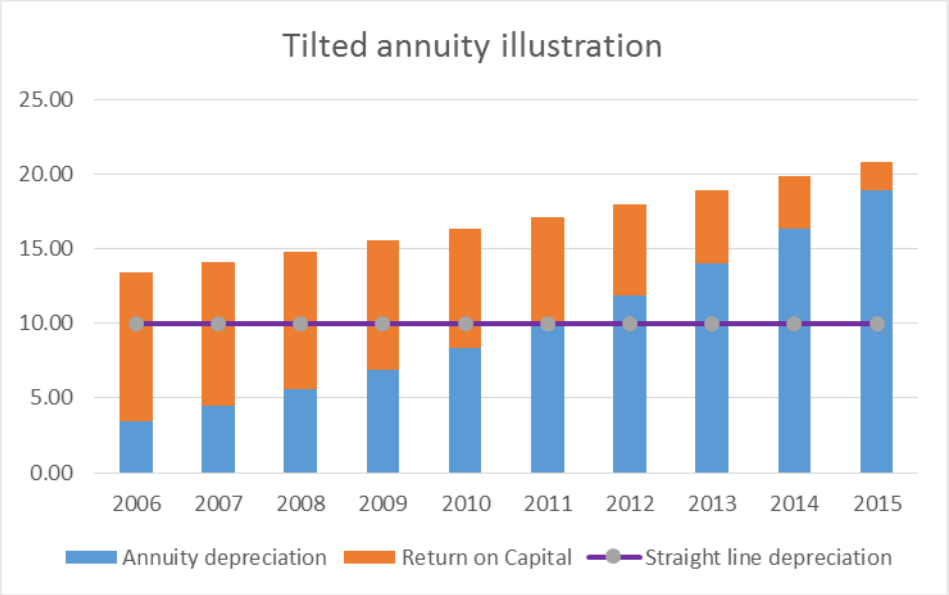
200. Depreciation is calculated as the difference between the annuity in each year and the return on capital (the written down asset value times the rate of return). Accordingly, the amount of depreciation per annum will be increasing (i.e., 'back-loading' the recovery of the value of the asset) over time.

Illustration of single investment

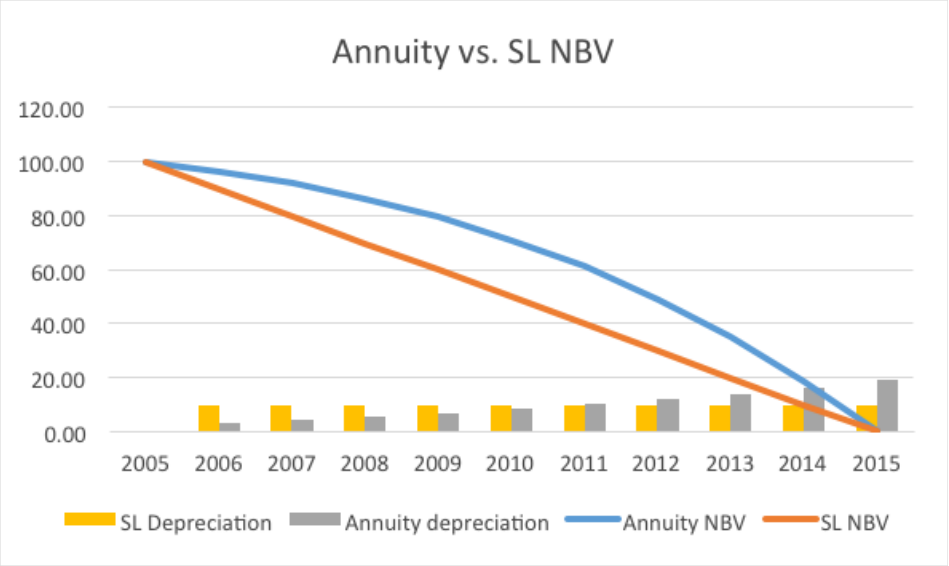
201. The figure below illustrates the depreciation and return on capital components in the path of an annuity with €100 initial investment, 5% tilt and 10% WACC in 2006. Each column represents the annual cost as the sum of return on capital (the orange bar) and the annuity depreciation (the blue bar); while the purple line represents the amount of Straight Line depreciation for accounting purpose, which is equal to

[85] The Consultation, p. 104.
[86] The Consultation, p. 107, assuming zero payment term
[87] Brealey R., Myer S., Partington G. and Robinson D. (2000) *Principles of Corporate Finance*, McGraw-Hill Irwin, New York

€10 in each year. It is clear that annuity depreciation is lower than Straight Line depreciation until 2011.



202. Consequently, the NBV of the asset calculated using the tilted annuity approach is *always* above the NBV calculated using a Straight Line depreciation approach, due to the 'back-loading' of depreciation charges that occurs when an annuity approach is employed. The figure below compares the annuity based and Straight Line depreciation based NBV over time for the €100 investment assumed in the illustration.

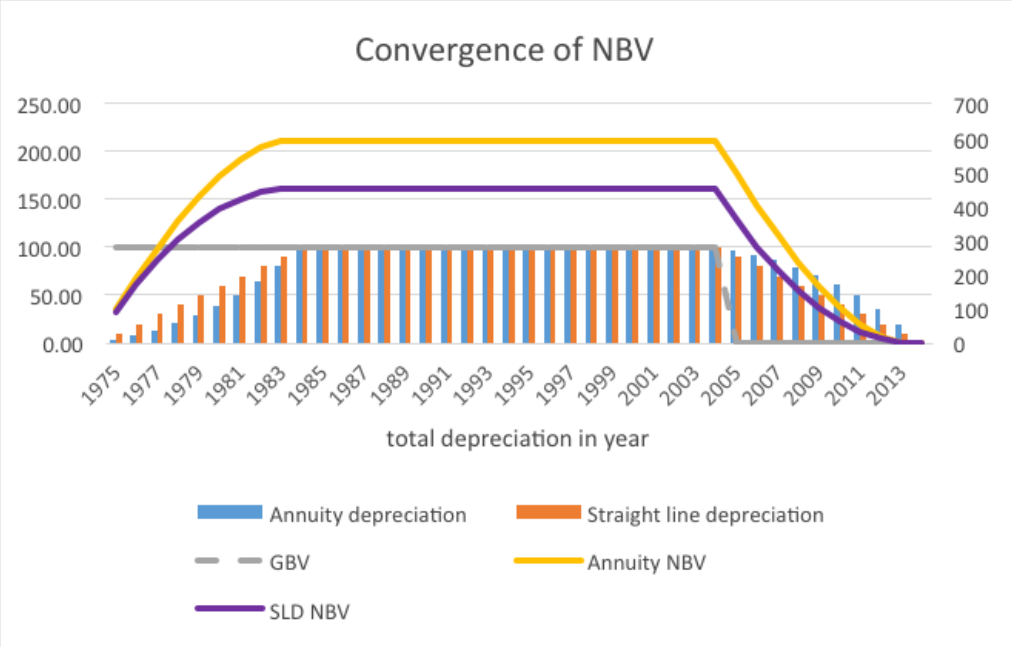


203. Notably, the gap between the annuity and Straight Line depreciation approach to calculating NBV will increase in the early years, although at a decreasing rate, before decreasing and converging to zero eventually as the asset reaches the end of its life.

Illustration of constant investment chronology

204. If an extra €100 is invested in each year following the first investment, the gap will **never** be closed. Because the maximum amount of total annual depreciation under either approach, which will be reached starting from the 10th year after the first investment, will be capped at €100 when there are 10 assets in the portfolio with 1, 2, 3…10 years of remaining life, respectively. Accordingly, for both the Straight Line and annuity based approaches, the NBV will keep growing until the depreciation cap is reached, and remain constant in the following periods as the amount of depreciation will be exactly cancelled out by the amount of new investment.

205. This is shown in the following figure. The primary axis on the left measures the amount of incremental investment and total depreciation in each year; while the secondary axis on the right measure the accumulated Straight Line and annuity derived NBV over time. The figure illustrates the fact that the gap that emerges over the first 10 years will be carried over into the future unless there is a 10-year-zero-investment period to allow for convergence.



206. In reality, eircom has invested in its assets in a similar manner to that illustrated in a stylised manner above. The amount of actual investment in each year is recorded

in the FAR (see figure below). Therefore, we would observe similar gaps between the NBV calculated using either an annuity or Straight Line depreciation approach for each asset in the FAR by the end of 2015.

✂

Under-recovery of investment resulted from switching to a straight line depreciation from an annuity approach

207. If sufficient cash flow is not allowed to ensure full cost recovery of historical investment, and a regulated firm then forecasts that looking forward similar under-recovery is likely, then efficient investment will be deterred. In setting out its regulatory objectives, ComReg understands that investors require a reasonable expectation of receiving both return on and of capital (depreciation) to incentivise future investment[88]:

> *"In the context of this document the following objectives are also relevant:*
>
> *• Incentivise efficient network investment by Eircom and other operators, as appropriate;*
>
> *• Ensure Eircom recovers its actual efficient investment together with an appropriate rate of return;"*

208. If an annuity is calculated to recover the full cost of an asset at that asset's date of purchase, it is possible at any point in time to recalculate the annuity and generate a set of figures that is consistent with the original calculation. This can be done as long as the accumulated depreciation used in the recalculation matches the depreciation allowed in the initial calculation at the point of recalculation.[89] To illustrate, if the current year is 2010 and we want to work out the annuity payment from the illustrative €100 investment made in 2006 which has a 6 year remaining life by the end of 2009. Using the formula in (*), the annuity payment in 2010 can be calculated as:

$$Annuity = NBV * Depreciation\ factor$$

$$\text{✂ } from\ data\ table\ 1 = \text{ ✂ } from\ data\ table\ 2 * \frac{10\% - 5\%}{1 - \left(\frac{1 + 5\%}{1 + 10\%)}\right)^6}$$

209. In contrast, if we conduct a similar recalculation at 2010, but using a NBV based on straight line depreciation (which is always lower than the NBV calculated by the initial annuity calculation), the recalculation will lead to under-recovery of historical investments.

[88] The Consultation, p. 12.

[89] We assume the other inputs remain constant – that is, expected asset lifetime and interest rate inputs.

$$SLD Accounting\ NBV * Depreciation\ factor < Annuity$$

$$\text{✂ } from\ data\ table\ 2 * \frac{10\% - 5\%}{1 - \left(\frac{1 + 5\%}{1 + 10\%)}\right)^{6}} = \text{✂} < \text{✂ } from\ data\ table\ 1$$

210. The under-recovery stems from applying a straight line depreciation allowance to calculate the starting (net) book value. The straight line depreciation approach is not consistent with the back-loading in depreciation that is embedded in the tilted annuity approach. The figure below illustrates the divergence of cash flows calculated above. The drop in the allowed cash flow in 2010 will create a gap between the allowed and required annuity. The size of such gap will also grow at the same price trend (5%) with the annuity. By 2015, the gap has increased from ✂ in 2010 to ✂.

✂

211. ComReg has indicated that it will apply the same tilted annuity approach and price trends that were developed for the 2010 model), and were adopted when calculating prices LLU, SLU and poles (at 5.225). As a result the 2015 accounting NBV used in the current model will assume a higher level of depreciation than was allowed when setting prices in the previous regulatory decision.

Demonstration of under-recovery

212. The figure below shows the GBV, NBV and depreciation amount over time for the BU asset "Ca0020", which has an asset life of 15 years, based on historical investment from 1975-2014. The primary axis on the left measures the amount of incremental investment and total depreciation in each year; while the secondary axis on the right measure the accumulated accounting and actual NBV over time.

✂

213. Historically, Straight Line depreciation was significantly higher than annuity depreciation in the early 1980s as new investments were just starting to roll out (the peak of the grey dashed line). In mid 1990s, as these investments approach the end of their useful lives, an escalation of annuity (back-loading) depreciation appears. In the chart, the blue bars become higher than the orange bars during the mid-1990s which also resulted from the decline in new investment (the dip in the grey dashed line) of that time.

214. Notably, the increase in new investment after the financial crisis in 2007 has led to a parallel increase in both the Straight Line and annuity based NBV, while the gap remained (as shown in the €100 simulation before). This indicates that the tilted

annuity trajectory calculated based on accounting NBV held in the regulatory accounts and calculated using Straight Line depreciation will necessarily be lower than the required amount of payment to fully recover historical investments. In the figure below another example for the trench asset "T-1-2-G1D" is provided.

✂

215. We have calculated the Straight Line depreciation values (the actual values likely to be held in the regulatory accounts) and annuity based NBV, respectively, in 2015 only for assets invested during 2010-2014. Aggregated figures for each asset class are presented in the figure below. The difference between the blue and orange bars are material (note the vertical axis is measured in millions), indicating undervaluation of the assets relative to the value that should be applied based on the annuity based depreciation schedule previously applied when setting prices. The figure indicates an under-valuation of NBV for the assets acquired during 2010 to 2014 of ✂.

✂

216. We estimate using the TERA model that the LLU price would increase from ✂ to ✂ after correcting NBVs used in the model for the years 2010 to 2014. A larger increase could be required taking into account earlier investment. However, the pattern of cost recovery implied by earlier regulatory approaches is less clear. A ComReg document refers to the earlier use of tilted annuities: "*Tilted annuities were also used in determining the LLU price in Ireland in 2003*."[90] In the absence of investigating the historical cost recovery approaches, we conclude that this issue is likely to lead to costs being underestimated to an extent.

A.2. Titled annuity depreciation and asset life uncertainty

217. ComReg has based its tilted annuity depreciation on a point estimate of the lives of assets. This approach will not create a revenue stream that in NPV terms will be expected to return the asset value (for replicable and non-replicable assets). This is because the annuity formula assumes that asset lives are known with certainty, when there is significant uncertainty in practice. Given the uncertainty, the correct level of compensation is equal to the expected value of the annuity revenues for different probable asset lives, which is above the revenue stream created by using the expected life in the annuity compensation.

[90] ComReg 10/10, para. 4.45.

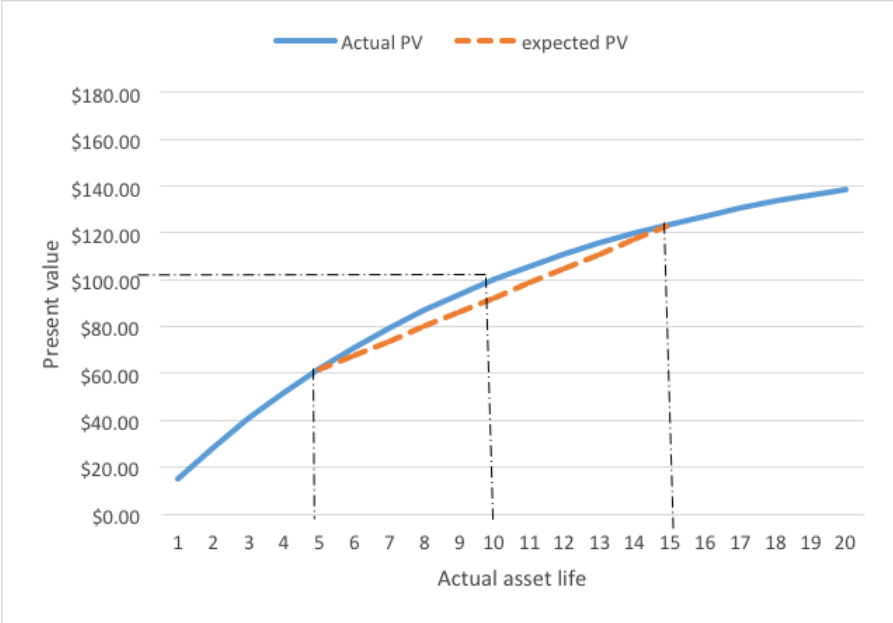
218. This point is well recognised in economic texts. For example, Salinger states that:[91]

> *"The annuity formula requires not only that capital have constant usage over its expected life, but also that the life be known with certainty at the time the asset is purchased. The forward-looking cost must be based on the time shape of the expected units sold, where the term "expected" is used in the mathematical sense. As of the date that an asset is purchased, the expected usage at some point in the future is the product of its usage conditional on survival multiplied by the probability of survival. Since the probability of survival necessarily decreases as the time horizon lengthens, constant usage during an asset's expected life implies declining expected usage over time.*
>
> *An example serves to illustrate this point. Consider an asset that costs $100 to purchase and that yields a single unit of output during its actual life. If, at the time the asset is acquired, it is known that the asset will last exactly 10 years and if it is expected that the forward-looking price will remain constant, then it is straightforward to use an annuity formula to calculate a forward-looking cost of $16.27. Note that the present value of 10 successive annual receipts of $16.27 starting one year after the purchase price are discounted at a 10% rate is $100.*
>
> *Now, suppose that the 10-year life is not a known life but, rather, an expected life. To keep matters simple, assume that the asset has a 50% chance of lasting only 5 years and a 50% chance of living 15 years. If the asset lasts only five years, then the present value (as of the time the asset is purchased) of the actual payments, assuming a price of $16.27, is $62. If the asset lasts 15 years, then the present value of the cash flows is $124. As of the time the asset is purchased, the expected value of the cash flows is $93, which is the average of the two. The important feature of this estimate is that it is less than $100. Thus, the $16.27 provides an adequate return when the ten-year life is known with certainty. In the example with uncertainty about the asset life, the $16.27 does not provide an adequate return.*
>
> *Although illustrated with a single example, this point is completely general."*

219. An illustration of the simple example from Salinger is shown below. Once the annual payoff (depreciation plus return on capital) is determined by the annuity formula, the actual present value of an asset will depend on the probabilistic distribution of its useful life. The contribution to the present value from a marginal increase in the actual asset life (say, a year) would diminish as the amount of future payments is fixed in nominal terms and thus subject to a discount factor (assumed

[91] Salinger (1999) "Lowering Prices with Tougher Regulation: Forward-Looking Costs, Depreciation, and the Telecommunications Act of 1996" in *Regulation Under Increasing Competition*, edited by Michael A Crew, p.53.

10% here). Consequently, the expected payoff from the $100 investment is always less than $100 in present value terms, after taking into account in the uncertainty of asset life (i.e. any point on the orange line will sit below the blue line).



220. Therefore, the use in the annuity formula of an expected life creates a bias downward in the price of the regulated service. This bias could be removed by formulating expectations of asset lives and determining annuity compensation to deliver expected recovery of the capital cost/asset value determined by ComReg.

221. This represents the asset life that would have to be assumed in order to provide the same amount of compensation as if the uncertainty associated with asset lives had been accounted for. We have investigated the effect of alternative distributions of asset lives on the required uplift in the annuity revenue stream to compensated for the uncertainty in the asset life.

222. The normal distribution has two parameters: the mean μ; and the standard deviation σ. In this study, μ is assumed to be equal to L, which implicitly assumes that the average life of the asset is correctly estimated.

223. Three different parameters for the standard deviation are estimated, with σ = 1, 2, and $\sqrt{L}$. The last parameter is taken from one of the Australian Energy Regulator's decisions in November 2013, whereby the standard deviation is set to the square root of the mean life in cases where the standard deviation is not known to the network service provider.[92]

[92] AER, Electricity network service providers: Replacement expenditure model handbook, November 2013, p. 19.

224. **Error! Reference source not found.**1 shows the percentage change in weighted average annual revenues that would be required for fair compensation, compared with the annual revenues at the corresponding expected lives.

225. All of the distributions in the analysis show that additional revenue is required in order to account for the uncertainty in asset lives. For example, for an asset with an expected life of 8 years, additional revenue of between 1.2% and 14% is required to account for uncertainty (given the range of uncertainty presented in the Table). The shorter the expected life of the asset, the greater the percentage increase in additional compensation required. Note also that the greater the variability in asset lives the higher the amount of compensation required (this can be seen by comparing the right hand columns with the middle columns). In the absence of information on the likely uncertainty in asset lives, the approach of the AER could be followed (i.e. the right hand column).

Table 11: Percentage change in weighted average annual revenue compared to revenue at expected life

Expected Life	Annuity at Expected Life	Normal distribution, $\sigma = 1$	Normal distribution, $\sigma = 2$	Normal distribution, $\sigma = \sqrt{L}$
3	0	13.5	17.7	18.8
5	0	4.0	18.3	21.2
8	0	1.2	5.8	14.0
10	0	0.7	3.0	10.0
20	0	0.1	0.5	2.6
30	0	0.0	0.1	1.1
40	0	0.0	0.0	0.5
50	0	0.0	0.0	0.2

Source: CEG analysis

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eircom

Concurrent upstream cost and downstream margin regulation for current generation broadband and voice in Ireland

Jorge Padilla and Lau Nilausen

28 May 2015

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Section 1

Introduction and summary

1.1 Fixed line broadband and voice form the primary product combination for the competition that European regulation intends to promote under the EU Article 7 Framework. In Ireland, ComReg regulates access to voice and broadband services on eircom's fixed network at various levels in the value chain. This is uncontroversial in a European context. However, eircom is subject to an unusual combination of both cost orientation and margin squeeze tests (MST) for these wholesale products and products further downstream. In this paper we assess the merits of this concurrent application of overlapping obligations.

1.2 Throughout this paper, we take as a given that regulation is necessary to ensure effective competition. Whether that actually is the case is outside of the scope of this analysis. Our focus is exclusively on whether concurrent application of cost orientation and MST obligations is proportionate to support competition in a market downstream from the regulated product.

1.3 We use the term "cost orientation" to imply recovery of a measure of long run costs compatible with a regulator's policy objectives. What those policy objectives are (e.g. emphasis on dynamic versus static competition) and how these are best reflected in that cost measure (e.g. historical versus replacement costs) is outside of the scope of this analysis.

1.4 Our analysis is set out as follows:

- First, we summarise the relevant Irish regulation;
- Second, we set out a standard stylised economic framework for assessing the merits of the concurrent regulatory obligations; and
- Third, we consider the applicability of this framework to the Irish regulation and conclude.

1.5 In conclusion, we find that the standard economic logic for not supplementing cost orientation with an MST also applies in Ireland.

Section 2

Regulatory background

2.1 eircom is subject to concurrent cost orientation and MST obligations for both standard (or current generation) broadband and voice services. We consider each of these in turn below.

Regulation of wholesale broadband access

2.2 In this section we discuss the current regulation on the wholesale broadband access (WBA) market as set out in ComReg's decision of 9th July 2014.[1] We first set out ComReg's decisions related to the WBA market and then ComReg's justification for the imposition of these remedies.

Current Regulation of WBA services

2.3 ComReg assessed in the WBA Decision that eircom has significant market power (SMP) for the provision of WBA.[2] Wholesale broadband access includes Bitstream access[3] and Bitstream managed backhaul (BMB).[4] ComReg imposed three remedies addressing eircom's pricing of WBA:

- A wholesale cost orientation obligation whereby eircom should recover no more than its actually incurred historical costs adjusted for efficiency;

1 ComReg 14/73R, Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream, Final Decision (the WBA Decision).

2 ComReg 14/73R.

3 Bitstream IP products are available over a range of bandwidths from 1Mb/s to 24Mb/s. Bitstream IP products are sold on a "contended" basis meaning that in areas of high demand, consumers download speeds may fall. Bitstream IP is available nationally.

4 BMB products are available either up to 8Mb/s or up to 24Mb/s. BMB products are sold on an "uncontended" basis so that throughput should be guaranteed. BMB is only available in Next Generation Network exchanges.

- A margin squeeze test based on the difference between the WBA price and retail broadband prices;[5] and
- A minimum price for WBA, set in absolute terms.[6]

2.4 The cost orientation and margin squeeze obligations are differentiated geographically between the Large Exchange Area (LEA)[7] and Outside the LEA.[8] The WBA pricing remedies in the LEA and Outside the LEA are summarised in Table 1 below.

Table 1 Summary of WBA regulation in the LEA and Outside the LEA

	LEA	Outside the LEA
Cost orientation	Prices may only exceed costs to the extent that any over-recovery is offset by under-recovery Outside the LEA such that there is no over-recovery nationally.[9]	Prices must be at or below costs[10] and cannot be increased without ComReg approval.[11]
Margin squeeze test	The difference between wholesale prices and eircom's portfolio of retail prices must be sufficient for a hybrid Equally Efficient Operator (EEO)/Similarly Efficient Operator (SEO) to be sustainable.[12]	The difference between wholesale prices and each individual retail price must be sufficient for a Similarly Efficient Operator to be sustainable.[13]
Minimum price for WBA	Fixed in absolute terms by ComReg.[14]	

5 Including line rental charges and costs where these are applied separately. This is referred to as the WBA Retail MST in Figure 1 below.

6 ComReg 14/73R, paragraph 5.39.

7 The LEA includes 100 exchanges serving 0.8m premises. This largely corresponds to where eircom faces wholesale competition either from operators using LLU or via cable infrastructure.

8 Outside the LEA: 1100 exchanges, 1.2m premises. The exchange areas not in the LEA.

9 ComReg 14/73R, paragraph 5.64.

10 ComReg 14/73R, paragraph 5.65.

11 ComReg 13/90, Wholesale Broadband Access: Price control obligation in relation to current generation Bitstream, Further Consultation and Draft Decision, paragraph 5.29.

12 ComReg 14/73R, paragraph 7.68.

13 ComReg 14/73R, paragraph 7.70.

14 Currently fixed as Euro 5.88 per user port plus Euro 8.14 per Mb/s (ComReg 12/32, paragraph 4.3). In ComReg 14/73R, ComReg decided not to revise these values (ComReg 14/73R, paragraph 9.32).

2.5 The geographical split between the LEA and Outside the LEA is dynamic. In addition to competition emerging from further unbundling or cable network roll-out, NGA deployment[15] within exchanges currently considered Outside the LEA would reclassify such exchanges to be within the LEA. This may ultimately remove the distinction between the LEA and Outside the LEA.

2.6 In addition to the remedies imposed in the WBA Decision, eircom's WBA products are subject to a number of direct and indirect constraints imposed through other regulatory decisions. These include:

- A margin squeeze test between WBA and White Label WBA (the WBA component part MST);[16] [17]
- A margin squeeze test for a basket of voice/broadband retail bundles based on a basket of eircom's wholesale inputs including WBA[18] (the Net Revenue Test);[19] and
- A margin squeeze test between WBA and LLU[20] access further upstream (the Wholesale Physical Access MST).[21] LLU prices are in turn also subject to a cost orientation requirement.[22]

15 ComReg 13/14, paragraph 4.86.

16 White Label WBA means that operators purchase eircom services that they are able to rebrand, with eircom carrying all voice/data traffic.

17 ComReg 12/32, paragraph 2.19.

18 ComReg 14/89, paragraph 6.188.

19 The Net Revenue Test currently covers all retail bundles containing an element of fixed voice. ComReg consulted on a new margin squeeze test that would sit in the FACO market (Market 2) and the WBA market (Market 5), that may lead to the removal of the Net Revenue Test in Market 1. ComReg 14/90, paragraph 30.

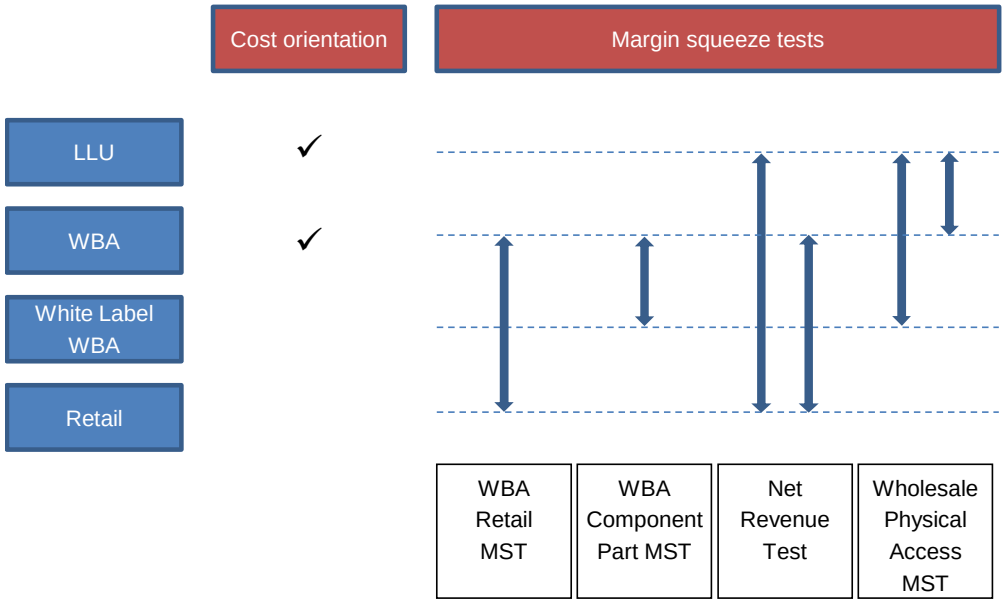
20 Local Loop Unbundling (LLU) provides access to the underlying physical network.

21 ComReg 13/14, paragraph 3.27. The requirement is to prevent a margin squeeze between Full LLU and any associated downstream services. The focus is on "naked" or standalone WBA, i.e. WBA without line rental.

22 ComReg 10/10, paragraph 1.17. eircom's current charge for LLU is below this maximum charge.

2.7 In combination, these regulatory obligations cascade down every level of the value chain to retail prices from the furthest upstream level of wholesale access to the local loop, as summarised in Figure 1 below. A number of the obligations overlap whilst being based on different cost standards[23] and cost modelling approaches.[24]

Figure 1 Broadband value chain regulatory overview



2.8 Finally, there is competition between current generation broadband and next generation broadband, which are regulated under separate regimes. This introduces a commercial constraint to the pricing of these products at a retail and a wholesale level in addition to the constraints imposed through regulation.

23 The LLU price cap is based on Bottom-Up Long Run Incremental Average Cost (ComReg 10/10, paragraph 1.17), the Line share price cap is based on Forward Looking Long Run Incremental Cost (ComReg 09/66, paragraph 3.195), and the WBA Cost Orientation obligation is based on Fully Allocated Cost, Historic Cost Accounting adjusted for efficiency (ComReg 14/73R, paragraph 6.36-6.37). These cost standards can lead to materially different values.

24 The Net Revenue Test (ComReg 13/14) for all retail bundles including broadband uses a combination of EEO and Reasonably Efficient Operator (REO) approaches (ComReg 13/14, paragraph 5.102). The WBA Retail MST uses a variety of EEO and SEO approaches depending on the geographic area (ComReg 14/73R, paragraph 7.67).

2.9 The extent to which other regulatory obligations may provide sufficient constraints on WBA pricing absent the WBA Decision is out of scope and not considered further. The same applies to whether the different approaches adopted in overlapping regulatory remedies implemented in different market reviews lead to consistent results. In the following the focus is on the appropriateness of imposing both cost orientation and downstream margin squeeze test obligations.

ComReg's justification for concurrent cost orientation and margin obligations

2.10 ComReg both explains the basis for its decision to impose a cost orientation obligation in isolation and in the context of the additional MST. Before the WBA Decision, no cost orientation obligation in the WBA market had been in place. ComReg's explanations are set out below.

Justification for introduction of cost orientation obligation

2.11 ComReg presents the following observations to justify its decision to impose a cost orientation obligation:[25]

- "In the WBA Market Decision, we define the WBA market as a national market where eircom has SMP";
- "eircom has around [Confidential]% of the WBA market nationally";
- "eircom has around [Confidential]% of the WBA market in the LEA";
- "eircom's wholesale prices are not fully constrained given they are above their likely actual cost adjusted for efficiency…in the LEA"; and
- "A national cost orientation obligation would allow eircom some flexibility as to how it recovers its costs i.e. possible cross subsidisation between the LEA and Outside the LEA".

[25] ComReg 13/90, paragraph 5.18.

2.12 ComReg argues that there should be an additional test Outside the LEA, because there are few broadband operators providing a wholesale service using either cable or LLU Outside the LEA.[26] ComReg therefore imposes the obligation that WBA prices Outside the LEA must be at or below costs. This remedy blocks eircom from over-recovering costs outside of the LEA and using the proceeds to cross-subsidise prices in the LEA. Cross-subsidies from the LEA to Outside the LEA would be permissible.[27]

2.13 We note that the first three of ComReg's points set out in paragraph 2.9 above simply address whether eircom has SMP, the fourth point reflects a perceived failure of past margin regulation to result in cost reflective wholesale pricing, whereas the fifth point states that eircom would retain some pricing flexibility even under cost based wholesale price regulation. It is therefore only the fourth point that directly addresses the merits of cost based wholesale price regulation.

Justification for concurrent application of margin squeeze test

2.14 ComReg then considers whether a retail MST is necessary, given ComReg's decision to impose wholesale cost orientation. It considers the case for a retail MST in both the LEA and Outside the LEA. ComReg argues as follows:[28]

- "Wholesale bitstream prices in the LEA do not appear to cover actual costs";[29]
- There is no requirement to be cost-orientated in the LEA, only that national prices in aggregate should be at or below national costs;
- "Retail constraints [from cable and LLU operators] would not transfer to wholesale Bitstream prices in the LEA without a margin squeeze test given the vertically integrated nature of eircom";[30]

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26 ComReg 13/90, paragraph 5.28.

27 ComReg 13/90, paragraph 5.21. Any use of this flexibility would be subject to the limits imposed through general ex post competition regulation. SMP in an ex ante regulatory context is assessed on the same basis as dominance in ex post competition regulation.

28 ComReg 13/90, paragraph 5.39.

29 We note that this appears inconsistent with ComReg's statement summarised in paragraph 2.11, fourth bullet.

30 This is the critical circularity in ComReg's argumentation. On the one hand, ComReg argues that margin squeeze based regulation does not sufficiently constrain wholesale prices. On the other hand, ComReg considers that margin squeeze based regulation is the vehicle by which retail competition constrains wholesale prices.

- "In the LEA, eircom Retail has around [Confidential]% retail broadband market share while UPC has approximately [Confidential]% retail broadband market share and the excess (around [Confidential]%) relates to OAOs providing retail broadband via Bitstream and LLU / Line Share";
- "In the WBA market, eircom has a market share of around [Confidential] which together with its vertically integrated nature is in a position to either price excessively or cause a margin squeeze";
- "The retail margin squeeze test should also protect operators that rely on LLU and line share wholesale inputs. This is particularly important in the LEA where most unbundling activity takes place";
- "The retail margin squeeze test should allow eircom to meet competition at the retail level in the LEA. There is evidence to suggest that, going forward, eircom might reflect the competition it faces inside the LEA in its wholesale prices. Therefore, the risk of wholesale prices being too high inside the LEA may be reduced";
- eircom may reduce wholesale prices to reflect retail market competition so that the risk of wholesale prices being too high in the LEA may be reduced; and
- Consistency with the approach to NGA services in the WBA market.

2.15 ComReg's arguments either address that eircom has SMP (bullets 4 and 5), that retail competition may not be reflected in wholesale prices such that a margin squeeze may occur (bullets 3, 6, 7 and 8), that current WBA pricing may be below costs and that the cost orientation obligation in the LEA may not actually be binding (bullets 1 and 2), and a need to ensure consistency with NGA regulation (final bullet).

2.16 The fact that eircom has SMP in the national market for WBA has already been addressed through the implementation of the cost orientation obligation and is therefore not in itself an argument for imposing an MST obligation in addition to this. We note that for NGA there is only an MST obligation and no cost orientation.[31] The imposition of an MST obligation for current generation broadband in addition to the cost orientation obligation is therefore not directly consistent with the NGA regulation. The remaining arguments all address the claim that the cost orientation obligation may not be a sufficiently binding constraint to prevent a margin squeeze.

[31] ComReg 13/11, paragraph 2.16.

2.17 Outside the LEA, ComReg notes that both cost orientation and margin squeeze regulation may not be necessary as "it could be argued that eircom is unlikely to price below its actual cost on a vertically integrated basis and that cost orientation at the wholesale level should ensure that it cannot price squeeze without selling below actual cost adjusted for efficiency (plus a reasonable rate of return)".[32] Despite this reservation, ComReg decides to apply both cost orientation and MST obligations based on the following arguments:[33]

- eircom has a high market share in the WBA and retail markets Outside the LEA. eircom therefore has the incentive and ability to foreclose competition in the retail broadband market;
- The operators Outside the LEA have a reasonable retail market share collectively, but a small retail market share individually. These smaller operators are vulnerable to exclusionary behaviour;
- The national cost orientation obligation may not prevent a margin squeeze Outside the LEA as eircom can comply with a national obligation whilst maintaining prices above costs Outside the LEA and below costs within the LEA. This could be implemented by cutting LLU prices, the main input into the WBA price floor, in the LEA. Such a strategy may cause a margin squeeze Outside the LEA; and
- Outside the LEA, a cost orientation obligation is not a guarantee against margin squeeze.

2.18 The first, second and fourth of these arguments overlap. These arguments state that wholesale cost orientation does not completely exclude the possibility of a margin squeeze. This reflects that eircom absent an MST obligation still would retain freedom to set retail prices.

2.19 The third argument suggests that setting relatively low wholesale prices within the LEA could provide headroom for setting relatively high wholesale prices Outside the LEA such that retail margins Outside the LEA would become insufficient. However, ComReg's regulation of wholesale prices Outside the LEA explicitly prevents over-recovery of wholesale costs Outside the LEA, as summarised in paragraph 2.12 above. eircom could therefore only impose a margin squeeze by setting retail prices that fail to recover eircom's total costs. As discussed further in Section 3, this is equivalent to the concern captured in the other three points presented by ComReg.

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32 ComReg 13/90, paragraph 5.40.

33 ComReg 13/90, paragraph 5.40.

2.20 ComReg suggests that it may be possible to avoid having a retail margin squeeze test Outside the LEA at some point in the future where "there is greater clarity on the actual wholesale bitstream costs".[34] ComReg's decision to impose a cost orientation obligation indicates that ComReg had sufficient clarity on the relevant cost measure to consider such an obligation to be appropriate. Moreover, ComReg argues that past MST obligations have not sufficiently constrained wholesale prices.[35] This contradicts the claim that a retail MST would be helpful in providing the desired clarity about wholesale costs in the present case.

2.21 In summary, ComReg's argument for implementing a margin squeeze test is that a risk of margin squeeze persists even with cost oriented wholesale pricing. However, ComReg's justification for introducing the cost orientation obligation was that a margin squeeze test would not drive wholesale prices down to costs. This suggests that introducing cost orientation in itself would provide additional margin ensuring downstream competitor viability.

2.22 We note that ComReg's decision to allow flexibility to over-recover costs in the LEA reduces the constraint imposed through cost orientation if considering the LEA in isolation.[36] However, eircom can only exercise this flexibility at the direct cost of reducing prices Outside the LEA. We discuss whether this flexibility affects eircom's ability and incentives to engage in margin squeeze in Section 4.

Regulation of Fixed Access Call Origination

2.23 To provide fixed voice services in the retail market, operators need wholesale access to the line (the wholesale equivalent of retail line rental) and wholesale access to call origination. ComReg regulates both of these services under the Fixed Access Call Origination (FACO) market. These are considered in turn below.

2.24 In addition to ComReg's proposed remedies in the FACO market, eircom would have to comply with a general requirement to not margin squeeze between any bundle of services that includes access to fixed voice services as part of the abovementioned Net Revenue Test.

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34 ComReg 13/90, paragraph 5.40, v.

35 See paragraph 2.11, fourth bullet above.

36 As noted above, any use of this flexibility would be subject to the limits imposed through general ex post competition regulation.

Wholesale fixed access

2.25 The wholesale service used to provide fixed access is known as Single Billing Wholesale Line Rental (SB-WLR). SB-WLR has been priced on a retail minus basis since June 2003 as part of the regulation in the Retail Fixed Narrowband Access (RFNA) market.[37] The latest RFNA market review was concluded in August 2014. In this decision, ComReg concluded that the retail minus regulation of SB-WLR in the RFNA market will stay in place until the FACO market review is complete.[38] SB-WLR is therefore part of the current FACO market review.

2.26 In the April 2014 FACO market consultation,[39] ComReg made the preliminary decision to impose the following price controls with respect to SB-WLR:[40]

- SB-WLR should be priced at least 14% below eircom's retail line-rental price. Ancillary services related to SB-WLR such as providing low cost telephone equipment should be priced at least 14% below eircom's retail prices;[41] and
- No retail margin squeeze between retail services and SB-WLR. This obligation currently resides in the retail market.[42]

2.27 In the FACO market review, ComReg noted that there may be other options for price controlling SB-WLR, such as cost orientation. However, ComReg decided that these other options should be consulted on separately.[43] The retail minus regulation was therefore considered an interim approach. Whereas SB-WLR is not currently subject to concurrent cost orientation and MST obligations, ComReg has completed a cost model for the eircom access network and intends to consult on moving to cost oriented prices in the second quarter of 2015. That would expose also SB-WLR to the issues associated with such regulatory overlap discussed in this paper.

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37 The level of the "minus" in the calculation has been either 8.5% (ComReg 03/24), 10% (ComReg 04/34), or 14% (ComReg 08/19).

38 ComReg 14/89, Table 1, page 17, as discussed further below.

39 ComReg 14/26.

40 ComReg 14/26, paragraph 2.56.

41 Originally imposed in ComReg 03/24, Section 2 (retail minus 8.5%), subsequently amended to retail minus 10% (ComReg 04/34), then retail minus 14% (ComReg 08/19). ComReg has not justified the values of 8.5%, 10%, or 14%.

42 eircom has been required to "not unreasonably bundle" since August 2007 (ComReg 07/61, paragraph 7.8). The details of the requirement to not unreasonably bundle were set out in ComReg 13/14, Chapter 4.

43 ComReg 14/26, paragraph 9.246.

Wholesale fixed calls

2.28 Fixed line calls can be acquired wholesale either through:

- A combination of fixed voice call origination (FVCO), transit, and fixed voice call termination (FVCT); or
- An end-to-end wholesale product called Wholesale Switchless Voice (Wholesale SV)[44] including these components as required for each call.

2.29 In the April 2014 FACO market consultation, ComReg made the preliminary decision to impose the following price control in relation to wholesale fixed calls:[45]

- Cost orientation for FVCO;[46]
- A general obligation "not to cause a margin squeeze". ComReg did not formalise a particular test but instead decided to consult on the form of any MST in Q2 2014;[47] and
- An MST between Wholesale SV and its underlying components.[48]

2.30 In addition to these, the retail fixed narrowband access market is also included in the abovementioned Net Revenue Test.[49]

2.31 Through pre-existing regulation, FVCT rates are also subject to cost orientation.[50] In the April 2014 FACO market consultation, ComReg proposed deregulating the Transit market, as it considered that eircom no longer has SMP in this market.[51] eircom's pricing of the individual components of fixed line calls would thereby be constrained by a combination of cost regulation and competition. The only way for eircom to enact a margin squeeze between the call components and Wholesale SV would hence be by reducing the price of Wholesale SV.

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44 Also known as "White Label Voice".

45 ComReg 14/26, paragraph 2.56.

46 Based on Top-Down Forward Looking Long Run Average Incremental Cost Plus (TD-FL LRAIC+), where the '+' reflect a contribution towards common costs.

47 ComReg 14/26, paragraph 9.263.

48 Originally imposed in ComReg 11/67.

49 ComReg 13/14, paragraph 3.1-3.21.

50 Fixed Termination Rates are based on Bottom Up (BU) – Forward Looking Incremental Cost (Pure LRIC) basis; ComReg 12/125, paragraph 2.42.

51 ComReg 14/26, paragraph 10.1-10.7.

Justification for a margin squeeze test in addition to cost orientation

2.32 ComReg considered that the combination of cost orientation on FVCO and retail minus on SB-WLR would not prevent eircom from imposing either a retail or wholesale margin squeeze.[52] ComReg had specific concerns for two types of margin squeeze:[53]

- Retail call and voice services being priced too low relative to the price of FVCO and other wholesale services. ComReg argued that this could potentially squeeze out eircom's competitors in the retail fixed voice and calls market; and
- Wholesale SV being priced too low relative to FVCO, transit and FVCT. ComReg argued that this could potentially squeeze out eircom's competitors in the wholesale transit market.

2.33 Both concerns relate to margins downstream of the FVCO, transit, FVCT charges that are constrained either by competition or by regulation. This concern is therefore equivalent, in principle, to that raised in relation to WBA.

52 ComReg 14/26, paragraph 9.260.

53 ComReg 14/26, paragraph 9.258.

Section 3

Economic analytical framework

3.1 This section sets out an economic analytical framework for assessing the merits of a concurrent upstream cost orientation obligation and a downstream MST. Specifically, we set out a model to address whether it is reasonable to regulate the downstream price set by a vertically integrated company in order to avoid a potential margin squeeze when the vertically integrated company is also subject to wholesale price regulation based on cost orientation.

Model specification

3.2 The economic framework is based on a model which addresses the following stylised economic scenario:

- Company A holds a monopoly position in the market for an upstream input, product X, which is essential to compete in the market for product Y (the downstream market);
- Company A is vertically integrated: it commercialises products X and Y;
- Company A competes with Company B in the downstream market; and
- Company B requires access to Company A's product X in order to be able to compete downstream.

3.3 The two companies interact based on the following parameters:

- w denotes the wholesale price for product X charged by Company A to Company B;
- p_A and p_B denote the prices set by Company A and B for product Y;
- c_X denote the long-run average incremental cost (LRAIC) of producing X; and
- c_{YA} and c_{YB} denote the LRAIC of product Y for companies A and B respectively.

3.4 Company A is subject to regulation such that w is equal to $c_X + \Delta$, where $\Delta > 0$ is the margin required for Company A to recover its opportunity cost of capital. Company A would therefore not invest in product X if it could not obtain the margin Δ.

Model analysis

3.5 A competition or regulatory authority could impose a lower bound threshold on p_A to prevent the exclusion of an equally efficient competitor to Company A. Such a downstream competitor would incur a LRAIC equal to c_{YA}. An intervention of this sort would require that:

$$p_A - w > c_{YA} \quad (1)$$

3.6 Equation (1) simply states that the margin between the downstream price charged by Company A and the wholesale price that Company A will charge the as-efficient competitor is sufficient to cover the LRAIC of Company A (and, hence, the LRAIC of the equally efficient competitor). Equation (1) is known as the margin squeeze test (or the imputation test).

3.7 Equation (1) defines a lower bound threshold for p_A. Rearranging Equation (1), this price must exceed $w + c_{YA}$. Formally,

$$p_A > w + c_{YA} \quad (2)$$

3.8 For the purposes of addressing the issue set out in paragraph 3.1, we replace w in Equation (2) with the regulated maximum price (i.e. $w = c_X + \Delta$). Equation (2) thereby becomes:

$$p_A > c_X + \Delta + c_{YA} \quad (3)$$

3.9 It follows that when the wholesale price is regulated to recover only LRAIC and the opportunity cost of capital, the MST, as defined in Equation (1), imposes no constraint on Company A's downstream price, p_A, other than it must cover the LRAIC of X and Y (c_X and c_{YA} respectively) and ensure a fair return on Company A's upstream investment (Δ).

Wholesale cost orientation increases the cost of imposing a margin squeeze

3.10 Absent regulation, a margin squeeze can be implemented by raising w whilst keeping p_A constant. Company A can thereby maintain an unchanged profitability on its own sales whilst making Company B unprofitable. There would thereby be no direct economic loss to Company A from such a foreclosure strategy.

3.11 However, such a zero loss margin squeeze strategy is not available to Company A if w is subject to a cost orientation obligation. A margin squeeze can then only be implemented through a reduction in p_A. Such a strategy would result in a direct economic loss to Company A ($p_A < c_X + \Delta + c_{YA}$). Wholesale cost orientation therefore introduces a direct cost of pursuing a margin squeeze. This is the logic reflected in ComReg's recognition that both cost orientation and MST obligations may not be necessary for the WBA regulation Outside the LEA.[54]

[54] See paragraph 2.15 above.

Regulated access reduces ability to recover short run losses from margin squeeze

3.12 LRAIC is a long run cost measure. In a network industry with significant investments, LRAIC will therefore exceed short term cash costs. Company A could therefore stay cash flow positive even if $p_A < c_X + \Delta + c_{YA}$. This implies increased ability to margin squeeze.

3.13 Pricing below long run costs in the short term to foreclose a competitor is only rational if the associated loss can be recovered in the long term. That requires an ability to set $p_A > c_X + \Delta + c_{YA}$ following the foreclosure of Company B. However, the upstream cost orientation obligation ensures that Company B can re-enter once Company A raises retail prices in an attempt to recover any short term loss. This again erodes any incentive that Company A may be perceived to have to set $p_A < c_X + \Delta + c_{YA}$.

3.14 Finally, a price of $p_A < c_X + \Delta + c_{YA}$ could be regarded as predatory by the relevant competition authorities if Company A is found to be dominant in the downstream market for product Y and has no objective justification for such a low price. This places limits on p_A even in the absence of an explicit MST obligation. Absent downstream dominance, a failure by Company A to recover downstream costs may not in itself be problematic. This reflects that lower prices offer benefits to existing consumers, may increase the number of potential consumers through improved affordability, and may help Company A become a stronger competitive constraint in the downstream market.

MST may limit pro-competitive pricing and competitive entry

3.15 Based on the above, one could consider whether a margin squeeze test requiring $p_A > c_X + \Delta + c_{YA}$ would simply require Company A to commit to act in its own long term interest whilst providing Company B with additional regulatory assurance. However, such an argument fails to reflect how competition in itself may affect c_{YA} and c_{YB} and how these are reflected in pricing. For example:

- c_{YA} and c_{YB} may include fixed costs. The higher the volume that Company A and Company B manage to sell, the lower their respective unit costs therefore become;
- Company A and Company B may thereby have a short term incentive to under-recover short term costs to build volumes over which fixed costs can be spread (economies of scale);
- Short run under-recovery at low volumes may therefore be consistent with long run cost recovery at higher volumes.

3.16 Operators may hence pass on expected future efficiencies into current period pricing. This is not only compatible with healthy competition, it also enhances consumer welfare as existing, and potentially additional, consumers benefit from lower prices, as also discussed in paragraph 3.14 above.

3.17 In the presence of such economies of scale, both Company A and Company B hence have a short term interest in setting prices below $w + c_{YA}$. However, Company A will thereby breach the no margin squeeze condition set out in Equation (2). The only way for Company A to maintain competitive downstream prices (i.e. $p_A = p_B$) is to reduce w such that $p_A > w + c_{YA}$. That implies $w < c_X + \Delta$. The MST thereby imposes losses on Company A for the provision of product X as a direct consequence of benevolent competition between Company A and Company B for the provision of product Y.

3.18 The risk of only receiving $w < c_X + \Delta$ limits Company A's incentive to make new investments upstream (as Company A no longer recovers its opportunity cost of capital) and its incentive to compete downstream based on existing investments. In addition, Company B loses the incentive to enter into competition with Company A on the provision of the upstream product X, since Company B can acquire product X from Company A for less than the associated costs.

3.19 Regulating the downstream price p_A set by Company A to avoid a potential margin squeeze is therefore unnecessary (for the reasons set out in paragraphs 3.11 to 3.14) and welfare reducing (for the reason set out in paragraphs 3.15 to 3.18) when the wholesale price w is regulated based on cost orientation.

MST may be shortcut for determining wholesale costs

3.20 As competition pushes prices down towards costs, an MST obligation may be an indirect way to estimate upstream costs. This can be seen by rearranging Equation (3) into:

$$c_X + \Delta < p_A - c_{YA} \quad (4)$$

3.21 The wholesale costs ($c_X + \Delta$ on the left hand side) may be inferred from the difference between retail prices and costs ($p_A - c_{YA}$ on the right hand side) once competition has pushed these to their minimum.

3.22 However, in the presence of an explicit cost orientation obligation upstream, such an indirect MST-based approach to deriving upstream costs is not necessary.

Section 4

Applying the economic framework to regulation in Ireland

4.1 The analytical framework set out in Section 3 includes a number of simplifying assumptions (i.e. a single upstream price and a single downstream price and no geographic differentiation in competition). In this section, we first discuss the applicability of the model in the context of Ireland's actual specific circumstances, as reflected in Section 2. Based on this, we then conclude on ComReg's decision to implement concurrent upstream cost orientation and downstream margin squeeze regulation.

The applicability of the model in the context of Ireland's specific circumstances

4.2 Below, we first identify the relevant cases of existing or prospective concurrent regulation in Ireland that we have been asked to assess. We then consider how the real life complications reflected within this regulation can be addressed within our stylised analytical framework, particularly in relation to:

- Several products being retailed together (bundling);
- Concurrent application of regulation at several layers of the value chain; and
- LEA/Outside the LEA geographical split.

Relevant cases of concurrent regulation

4.3 We have identified three actual and prospective instances of concurrent cost orientation and MST regulation. These are:

- Cost orientation of WBA with an MST vis-à-vis broadband retail prices;

- Cost orientation of FVCO and FVCT with an MST vis-à-vis Wholesale SV and retail voice prices;[55] and
- MST between SB-WLR and retail prices with a prospective cost orientation obligation for SB-WLR under consideration.

Several products being retailed together

4.4 The regulated products in question are typically retailed together. This implies potential economies of scope[56] and scale.[57] Operators may pass these benefits on through lower retail prices. This raises the challenge of how to allocate e.g. economies of scope achieved for the total bundle and reflected in the total bundle price to each individual bundle component. This may make retail prices (p_A and p_B in the model) difficult to accurately measure.

4.5 The problem of unpicking bundled prices does not undermine the validity of the model. Specifically:

- In case of bundling, any risk of margin squeeze would relate to the total bundle profitability. The retail prices in the MST should in that case be based on the weighted average price charged across the relevant operator's portfolio of downstream retail services.[58] The appropriate wholesale cost would then be calculated as a similar weighted average of upstream wholesale costs reflecting the inputs required to supply the abovementioned portfolio of retail products;[59] and

55 The combination of regulatory and competitive constraints on the fixed line call components is, in terms of the model, equivalent to an outright regulatory constraint on all components (i.e. eircom is prevented from raising prices). This is equivalent to concurrent application of a margin squeeze test when all upstream components are regulated.

56 Economies of scope reflect the reduction in average unit costs associated with spreading a fixed cost over more than one product (e.g. selling both fixed line access and broadband services).

57 Economies of scale reflect the reduction in average unit costs associated with spreading a fixed cost over more units of the same product (i.e. the benefit of selling more broadband connections).

58 See e.g. approach taken by the European Commission in Case COMP/C-1/37.451, 37.578, 37.579 — Deutsche Telekom AG, Commission Decision of 21 May 2003, recital 111.

59 A similar weighted average approach can be used if a single downstream product (e.g. a standard broadband product) is delivered based on different wholesale products (e.g. a mix of LLU and WBA reflecting an operator's network footprint within a national market).

- ComReg's approach to assessing the inclusion of unregulated products into bundles presumes that a single price for a bundle can be broken down into individual prices for each component part of the bundle.[60] Under that assumption, the model can thereby be applied individually to each component part of a bundle.

4.6 The fact that broadband and fixed line voice are retailed as bundles is therefore consistent with our analytical framework.

Concurrent application at several layers of value chain

4.7 Our economic framework considers only two levels of a value chain. This raises the question whether its findings carry over to situations with several subsequent upstream steps in the value chain. This would for example be relevant in the context of LLU based operators competing directly with WBA based operators at the retail level.

4.8 The issue of multiple levels of the value chain can be addressed within our analytical framework by considering each level consecutively. This assessment would start furthest upstream, in our case at LLU level, and assess the merits of an MST vis-à-vis the next regulated step in the value chain, in our case WBA, in circumstances where the LLU price is itself subject to a cost orientation obligation. One would then proceed to assess the merits of an MST between WBA and retail prices, given the implicit cost regulation imposed on WBA by the upstream regulation and/or any additional cost orientation obligation that may be imposed on WBA.

4.9 The cost orientation obligations impose price caps rather than an absolute price that must be maintained. Reliance **only** on cost orientation could thereby leave some scope for reducing upstream margins, for example between LLU and WBA.[61] However, eircom would only be able to *reduce* prices. Any attempt to reduce the price at any one level of the value chain would necessarily come at the cost of increased margins for those operators buying access further down the value chain. This constrains eircom's incentive to do so.

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60 ComReg 13/14, page 99: "The incremental revenues over the average customer lifetime (which can be different for different unregulated products) of any unregulated product in a Bundle must cover its own long-run incremental costs ('LRIC') including applicable avoidable retail costs".

61 The ability to do so would be subject to the limits imposed through general ex post competition regulation.

4.10 An MST obligation between the WBA price and the retail price may force eircom to reduce WBA prices in response to LLU operators putting pressure on eircom's retail prices and, by implication, the margin between retail prices and WBA.[62] The WBA price may then fall below its underlying costs. The MST obligation thereby blunts competition from LLU operators at two levels of the supply chain: 1) by reducing their ability to win retail users from WBA based competitors, and 2) by reducing their ability to compete with eircom in the supply of WBA.

4.11 An MST between retail and WBA prices also prevents eircom from responding to competitive pressure from WBA based operators. This is because any eircom retail price reduction intended to meet the competition will be reflected in lower WBA prices. WBA based competitors can thereby always maintain the same price difference vis-à-vis eircom at the same level of profitability regardless of eircom's prices. Moreover, a retail price reduction will not only reduce eircom's profitability on its retail volumes but also its profitability on wholesale volumes. This reduces eircom's incentive to respond to competition with retail price cuts.

4.12 An MST obligation that can override a cost orientation obligation thereby introduces an inefficiency by distorting competition in favour of operators that are no longer required to recover the efficiently incurred costs associated with their supply (in this scenario WBA based competitors) to the detriment of eircom as well as all other operators that continue to recover the cost associated with their chosen type of access (in this scenario LLU based competitors). This is consistent with the findings in our analytical framework.[63]

4.13 Where there is a cost orientation obligation at one level of the supply chain, an MST (between that level and the subsequent downstream level of the supply chain) is therefore not only unnecessary but also undermines the incentives created by competition for eircom's rivals to move up the ladder of investment. ComReg's observation that absent an MST "Retail constraints [from cable and LLU operators] would not transfer to wholesale Bitstream prices in the LEA without a margin squeeze test"[64] is therefore misguided in that such a transfer would deny efficient LLU based operators the ability to compete with WBA based operators. An MST between retail prices and WBA prices can thereby discourage upstream competitive entry and perpetuate the lack of upstream competition it was intended to address.

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62 As per ComReg's argument summarised in paragraph 2.14, third bullet.

63 See paragraph 3.18 above.

64 ComReg 13/90, paragraph 5.39.

LEA/Outside the LEA geographical split

4.14 ComReg differentiates WBA regulation between the LEA and Outside the LEA, reflecting different degrees of competition. ComReg permits cost over-recovery in the LEA if offset by under-recovery Outside the LEA. This introduces a link between the two areas and thereby raises the question whether a cost orientation obligation constrains eircom's incentives as in our analytical framework.

4.15 To understand the implications of the LEA/Outside the LEA split, it is helpful to first consider the constraint that a simple nationally based WBA cost orientation obligation would imply. In that scenario, there would be a single national average WBA cost recoverable with a single national price. This is directly consistent with our analytical framework. It is also in fact how eircom sets its current WBA price.

4.16 The question remains whether the LEA/Outside the LEA split in principle may relax the actual constraint imposed by cost orientation such that our arguments above may no longer apply. We find that this is not the case as:

- any increased recovery from within the LEA has to be offset on a 1:1 basis by under-recovery Outside the LEA. There is therefore no direct financial gain from increasing WBA prices within the LEA;
- any attempt at weakening WBA based rivals' competitiveness within the LEA therefore comes at the cost strengthening WBA based rivals competitiveness Outside the LEA; and
- any attempt at weakening WBA based rivals within the LEA is futile given that the LEA is characterised by competition based on LLU and alternative infrastructure.

4.17 eircom can hence only increase WBA prices where WBA has the least potential impact on competition if eircom at the same time reduces WBA prices where WBA has the greatest potential impact on competition. Any increase in WBA prices within the LEA will therefore by design be revenue neutral at the wholesale level and weaken eircom's overall competitiveness at the downstream level. The flexibility to set WBA prices above costs within the LEA therefore does not change the fundamental principle embedded in our analytical framework that the cost orientation obligation removes the ability to implement a zero loss margin squeeze strategy.[65] Our analytical framework is therefore directly applicable.

[65] See paragraphs 3.10 and 3.11 above.

Conclusion

4.18 ComReg's only argument for adding an MST to a cost orientation obligation is that a risk of margin squeeze may persist even if the upstream price is regulated at cost (see paragraphs 2.21 and 2.33). Logically, this is indeed the only risk that an MST can address once a cost orientation obligation is already in place.

4.19 In the sections above, we have:

- set out the Irish regulatory framework and the specific considerations reflected therein;
- considered an economic framework for assessing any need for an MST in addition to an upstream cost orientation obligation; and
- assessed whether this economic framework is applicable to eircom.

4.20 In conclusion, we find that the standard economic logic for not supplementing cost orientation with an MST also applies in Ireland. This reflects 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. 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. Such modest potential incremental benefits and significant costs suggest that adding an MST to a cost orientation obligation is not proportionate. This applies equally to broadband and fixed line call services currently subject to such concurrent regulatory obligations as well as to SB-WLR for which a similar combination of obligation may be applied in the future.

Concurrent MST and cost-oriented wholesale regulation

A paper prepared by Michael Rhodes[1]

1. Introduction

1.1. ComReg currently subjects eircom's price for its Wholesale Broadband Access ("WBA") service over its current generation network to a cost-orientation obligation. ComReg also supplements this obligation with a margin squeeze test ("MST") between eircom's WBA price and its retail price for current generation access ("CGA") based broadband.[2]

1.2. ComReg is now proposing to subject eircom's price for its Wholesale Line Rental ("WLR") service over CGA to a cost-orientation obligation and to supplement this obligation with an MST between eircom's WLR price and its retail price for line rental.[3]

1.3. For the reasons explained in this submission and in the accompanying Report by Compass Lexecon,[4] the imposition of an MST in these situations is unnecessary, disproportionate and impedes effective competition in the relevant markets. In addition, ComReg's approach in this regard is inconsistent with the approach adopted by the European Commission and National Regulatory Authorities in other EU Member States.

1.4. For these reasons, ComReg should withdraw the MSTs from services where it has subjected eircom's wholesale prices to cost-orientation obligations.

2. Compass Lexecon's principal findings and conclusion

2.1. In its Report, Compass Lexecon demonstrates, among other things, that:

(i) A zero loss margin squeeze strategy in respect of a particular service at the retail level is not available to eircom once eircom's provision of that service at the wholesale level is subject to a cost-orientation obligation. (Paragraph 3.11.)

(ii) The wholesale cost-orientation obligation ensures that competitors can re-enter if eircom were to raise its retail price in an attempt to recover any short term loss from margin squeeze activity. (Paragraph 3.13.)

(iii) Where there is a cost-orientation obligation at one level of the supply chain, an MST (between that level and the subsequent downstream level of the supply chain) is not only unnecessary but also undermines the incentives created by competition for eircom's rivals to move up the ladder of investment. (Paragraph 4.13.)

2.2. In light of these findings, Compass Lexecon concludes that the standard economic logic for not supplementing an upstream cost-orientation obligation with an MST applies in Ireland because such cost-orientation obligations significantly reduce the ability and incentive of vertically integrated operators to undertake a margin squeeze. (Paragraph 4.20.)

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[1] Company director of Kallipolis Ltd.
[2] ComReg Decision D11/14 (ComReg 14/73R).
[3] ComReg 15/67
[4] Compass Lexecon's Report entitled *"Concurrent upstream cost and downstream margin regulation for current generation broadband and voice in Ireland"* dated 28th May 2015.

2.3. The following sections of this submission summarize data which confirms that the national markets for both broadband access and line rental at the retail level in Ireland are competitive. This submission then rebuts each of the arguments put forward by ComReg for supplementing cost-orientation obligations in respect of WBA and WLR with an MST. This submission explains why (as Compass Lexecon anticipates) supplementing an upstream cost-orientation obligation with an MST has actually been detrimental to competition in Ireland. Finally this submission highlights the inconsistency between ComReg's approach to this issue and the approach of the European Commission.

3. Effective competition in the retail market for broadband access

3.1. I have set out in Annexes 1 to 3 of this submission certain data which confirms that eircom does not have SMP in the retail market for broadband services.

3.2. Annex 1 contains a related set of three graphs showing eircom's share of the retail broadband market in the period from January 2013 to March 2015 in areas labelled 'Urban UPC', 'Urban Non UPC' and 'Rural'. The Urban UPC graph shows that, over this period, in the areas in which UPC has rolled out its network, eircom's share of the retail broadband market has fallen from ✂ to ✂, whereas UPC's market share has risen from ✂ to ✂. eircom notes that ComReg has determined that the retail broadband market is national in scope.[5] As eircom prices its retail broadband services on a national basis (i.e. it does not offer different retail prices in different geographic areas) the very strong competitive constraint that UPC imposes on eircom in respect of retail broadband services is felt nationwide. In the circumstances, it is clear that eircom does not have SMP in the retail broadband market.

3.3. Annex 2 contains a bar chart depicting fixed broadband market shares at the retail level for the period from December 2010 to December 2014. Over this period, eircom's share of the retail fixed broadband market fell from 49.1% to 36.5%. This bar chart further supports the conclusion that eircom does not have SMP in the retail broadband market.

3.4. Annex 3 contains a bar chart depicting fixed broadband market shares at the retail level for consumers (i.e. non-business customers) for the period from December 2010 to December 2014. Over this period, eircom's share of this retail broadband market fell from ✂ to ✂. This bar chart also supports the conclusion that eircom does not have SMP in the retail broadband market.

3.5. In light of this sample of evidence about eircom's market position in retail broadband services, it is clear that the imposition by ComReg of *ex ante* regulation on eircom's provision of those services is unwarranted and disproportionate.

4. Effective competition in the retail market for line rental

4.1. I have set out in Annexes 4 and 5 of this submission certain data which confirms that eircom does not have SMP in the retail market for line rental.

4.2. Annex 4 contains a graph depicting fixed voice telephony subscriptions in the period from Q1 2012 to Q1 2015. This graph was originally published by ComReg as Figure 2.2.3 in its Quarterly Key Data Report (ComReg 15/49). This graph shows that, over this period, eircom's share of fixed line telephony subscriptions fell from 60% to 47%. Over this period,

[5] See for example paragraph 4.37 of ComReg 13/14

the total number of fixed line telephony subscriptions rose for 1,434,063 to 1,566,792– a rise of over 9%. Despite this growth in the overall number of fixed line telephony subscriptions in Ireland, the number of such subscriptions provided by eircom has fallen by approximately 125,000. Thus, although the market which was undergoing substantial growth in the period from Q1 2012 to Q1 2015, the number of fixed line telephony subscriptions provided by eircom fell by approximately 15% in that period. In the circumstances, it is clear that eircom does not have SMP in the retail line rental market.

4.3. Annex 5 contains a bar chart depicting fixed line market shares at the retail level for the period from Q1 2014 to Q1 2015. This bar chart was originally published by ComReg as Figure 2.1.1.2 in its Quarterly Key Data Report (ComReg 15/49). The revenue information published by ComReg is aggregated at the total fixed retail market level comprising revenue from narrowband services, broadband services and data services. Over this period, eircom's share of fixed line retail revenue fell from 47.0% to 46.1%. Whilst the available market information does not exclusively look at retail line rental the bar chart does provide further support to the conclusion that eircom does not have SMP in the retail line rental market.

4.4. In light of this sample of evidence about eircom's market position in retail line rental services, it is clear that the imposition by ComReg of *ex ante* regulation on eircom's provision of those services would be unwarranted and disproportionate.

5. ComReg's arguments for applying MST to broadband access in the LEA

5.1. In paragraph 2.14 of its Report, Compass Lexecon cites the reasons that ComReg has put forward to justify imposing an MST inside the LEA in addition to the WBA cost-orientation obligation.[6] Each of these reasons is now considered and rebutted in turn.

5.2. ComReg claims that *"Wholesale bitstream prices inside the LEA do not appear to cover actual costs"*. In the first place, it should be noted that this claim is contradicted by ComReg when it also claims that *"eircom's wholesale prices are not fully constrained given that they are above their actual likely cost adjusted for efficiency … in the LEA"*.[7] In practice, the purpose of the WBA cost-orientation obligation is, of course, to ensure that WBA prices (including the price for wholesale bitstream) are cost-oriented. Although ComReg has proposed that eircom may price WBA at above cost inside the LEA, for the reasons outlined in paragraphs 4.14 to 4.17 of Compass Lexecon's Report and also for the reasons outlined in paragraph 5.3 below, that avenue is not open to eircom. Therefore, this concern on ComReg's part is addressed by the cost-orientation obligation for WBA.

5.3. Compass Lexecon notes ComReg's claim that *"There is no requirement to be cost-oriented in the LEA, only that national prices in aggregate should be at or below national costs"*. For the reasons outlined in paragraphs 4.14 to 4.17 of Compass Lexecon's Report, eircom does not have the incentive to price WBA at above cost inside the LEA. Pricing WBA above cost in the LEA would require eircom to price WBA below cost outside the LEA. It would not be commercially rational for eircom to do this given that it faces more infrastructure based competition within the LEA and increasing its WBA prices would undermine eircom's competitiveness within the LEA. In addition, eircom does not in practice have the ability to price WBA at above cost inside the LEA and below cost outside the LEA. This is because, in order to set its WBA prices in such a way as to ensure that the amount by which its revenues

[6] These reasons are proposed by ComReg in 13/90, paragraph 5.39.
[7] ComReg 13/90, paragraph 5.18.

for WBA inside the LEA are above cost is cancelled out by the amount by which its revenues for WBA outside the LEA are below cost, eircom will need to know in advance the volumes of WBA services that it will provide inside and outside the LEA. Clearly, this information is subject to significant uncertainty (particularly under ComReg's implicit assumption that eircom would charge prices to an extent that would meaningfully affect demand). Given that eircom has neither the incentive nor the ability simultaneously (a) to price WBA at above cost inside the LEA, (b) to price WBA at below cost outside the LEA and (c) to ensure that its nationwide revenues for WBA in aggregate are neither above nor below cost, it should be no surprise that eircom adopts a nationwide cost-oriented price for WBA. In the circumstances, it is clear that the concern ComReg has raised in this regard will not arise in practice.[8]

5.4. ComReg claims that *"Retail constraints [from cable and LLU operators] would not transfer to wholesale bitstream prices in the LEA without a margin squeeze test given the vertically integrated nature of eircom"*. Yet, for the reasons outlined in paragraph 5.3 above, eircom will offer cost-oriented prices for wholesale bitstream inside the LEA due to the WBA cost-orientation obligation. Hence, again, the concern raised by ComReg in this regard will not arise in practice.

5.5. ComReg claims that *"In the LEA eircom Retail has around [Confidential] % retail broadband market share while UPC has approximately [Confidential]% retail broadband market share and the excess (around [Confidential] %) relates to OAOs providing Bitstream and LLU / Line Share"*. eircom does not have access to the market share data used by ComReg in this context. From its own market research which is summarized in section 3 above, eircom notes that in urban areas where UPC has built its network, UPC has a share of ✂ of the retail broadband market whilst eircom's share of that sub-market has fallen to ✂. In the circumstances, it is clear that eircom does not have market power in the LEA or elsewhere for retail broadband services and hence the market shares which were redacted from this claim by ComReg would not support the imposition of an MST in respect of eircom's retail prices for broadband in the LEA.

5.6. ComReg claims that *"In the WBA market, eircom has a market share of around [Confidential] % which together with its vertically integrated nature is in a position to either price excessively or cause a margin squeeze"*. For the reasons explained in Compass Lexecon's Report, as the WBA price is subject to a cost-orientation obligation, eircom will not be able to squeeze the margins of its downstream competitors without itself incurring significant costs which it would be unable to recover. Thus, the cost-orientation obligation at the wholesale level addresses this concern on the part of ComReg and so renders the MST unnecessary.

5.7. ComReg claims that *"The retail margin squeeze test should also protect operators that rely on LLU and line share wholesale inputs. This is particularly important in the LEA where most unbundling activity takes place"*. For the reasons explained in paragraphs 4.7 to 4.13 of Compass Lexecon's Report, far from protecting LLU and line share based competitors, the MST between eircom's WBA and retail prices blunts competition from such operators in two ways: (i) by reducing their ability to win retail customers from WBA based competitors and

[8] In addition, in respect of NGA broadband services, eircom did, for a period, seek to maintain a differential between the retail prices in urban and rural areas. That differential was found to be unworkable (not least due to the requirement for national marketing) and so was withdrawn.

(ii) by reducing their ability to compete with eircom in the supply of WBA. Thus, in this regard, the MST has the opposite effect to what ComReg proposes.

5.8. ComReg claims that *"The retail margin squeeze test should allow eircom to meet competition at the retail level in the LEA. There is evidence to suggest that, going forward, eircom might reflect the competition it faces inside the LEA in its wholesale prices. Therefore the risk of wholesale prices being too high inside the LEA may be reduced"*. If eircom were to *"reflect the competition that it faces inside the LEA in its wholesale prices"* then those prices would be cost-oriented. But that is precisely the effect of the WBA cost-orientation obligation. In addition, due to the MST, any retail price cut by eircom will lead to lower wholesale revenues and will enable eircom's WBA based competitors to respond to eircom's retail price cut whilst maintaining their own levels of profitability. The MST therefore makes it self-defeating for eircom to meet retail competition in this way. Accordingly, the imposition of the MST is both unnecessary and disproportionate given the WBA cost-orientation obligation and actually inhibits pro-competitive behaviour at the retail level.

5.9. Compass Lexecon notes ComReg's claim that *"eircom may reduce wholesale prices to reflect market competition so that the risk of wholesale prices being too high inside the LEA may be reduced"*. Given the WBA cost-orientation obligation (and in light of the reasons outlined in paragraph [5.3] above), eircom's WBA prices will be cost-oriented in the LEA. Hence, again, the imposition of an MST in addition to the WBA cost-orientation obligation is both unnecessary and disproportionate.

5.10. Compass Lexecon notes ComReg's proposal that an MST is justified for the sake of *"Consistency with the approach to NGA services in the WBA market"*. As noted in paragraph 2.16 of Compass Lexecon's Report, for NGA there is only an MST and no wholesale cost-orientation obligation. Thus the imposition of an MST on WBA services over the current generation network does not achieve consistency with NGA regulation.

5.11. In the circumstances and in light of Compass Lexecon's Report, it is clear that ComReg's arguments for supplementing the WBA cost-orientation obligation with an MST inside the LEA are without foundation.

6. ComReg's arguments for applying MST to broadband access outside the LEA

6.1. In paragraph 2.17 of its Report, Compass Lexecon cites the reasons that ComReg has put forward to justify imposing an MST outside the LEA in addition to the WBA cost-orientation obligation.[9] Each of these reasons is now considered and rebutted in turn.

6.2. Compass Lexecon notes ComReg's claim that *"eircom has a high market share in the WBA and retail markets outside the LEA. eircom therefore has the incentive and ability to foreclose competition in the retail broadband market"*. With regard to the retail market for broadband access, ComReg has confirmed that it is national.[10] As is shown by section 3 above, the impact of the effective competition that eircom faces in respect of retail broadband access services is felt nationwide and thus eircom does not have market power in retail broadband access services. For the reasons outlined by Compass Lexecon, once eircom is subject to a WBA cost-orientation obligation, it will in practice not be able to exploit any

[9] These reasons are proposed by ComReg in 13/90, paragraph 5.40.
[10] Ref. ComReg 13/90, paragraph 5.40

market power that results from its high market share in the WBA market. Therefore, by virtue of the WBA cost-orientation obligation, eircom does not have the ability to foreclose competition in retail broadband outside the LEA.

6.3. Compass Lexecon notes ComReg's claim that *"The operators outside the LEA have a reasonable retail market share collectively, but a small market share individually. These smaller operators are vulnerable to exclusionary behaviour"*. From the context, it is clear that the "exclusionary behaviour" in question is a potential margin squeeze. For the reasons outlined by Compass Lexecon, once eircom is subject to a WBA cost-orientation obligation, it will in practice not have the ability to engage in a margin squeeze in respect of retail broadband access services outside the LEA.

6.4. Compass Lexecon notes ComReg's claim that *"The national cost orientation obligation may not prevent a margin squeeze Outside the LEA as eircom can comply with a national obligation whilst maintaining prices above costs outside the LEA and below costs within the LEA. This could be implemented by cutting LLU prices, the main input in the WBA price floor, in the LEA. Such a strategy may cause a margin squeeze Outside the LEA"*. As is explained in paragraph 2.19 of Compass Lexecon's Report, ComReg's regulation of wholesale prices outside the LEA explicitly precludes over-recovery of wholesale costs outside the LEA. Furthermore, paragraph 5.3 above explains why, in practice, eircom cannot price differentially inside/outside the LEA and still comply with its WBA cost-orientation obligation nationwide. Finally, given that eircom is subject to LLU based competition inside but not outside the LEA, it would not be commercially rational for eircom to cut the price of LLU services inside the LEA (and thereby increase competition from LLU operators) merely in order to try to undertake a margin squeeze outside the LEA. In the circumstances, this concern on the part of ComReg is misconceived.

6.5. Compass Lexecon notes ComReg's claim that *"Outside the LEA, a cost orientation obligation is not a guarantee against margin squeeze"*. As Compass Lexecon's Report demonstrates, this unsubstantiated concern is in practice not correct.

6.6. In the circumstances and in light of Compass Lexecon's Report, it is clear that ComReg's arguments for supplementing the WBA cost-orientation obligation with an MST outside the LEA are without foundation.

7. ComReg's arguments for applying MST to line rental and call origination

7.1. In paragraph 2.32 of its Report, Compass Lexecon cites two concerns that ComReg has put forward to justify imposing an MST in addition to the proposed cost-oriented regulation of WLR.[11] Each of these concerns is now considered and rebutted in turn.

7.2. Compass Lexecon refers to ComReg's concern about *"Retail call and voice services being priced too low relative to the price of FVCO and other wholesale services. ComReg argued that this could potentially squeeze out eircom's competitors in the retail fixed voice and calls market"*. For the reasons outlined by Compass Lexecon, if eircom is subjected to a cost-orientation obligation in respect of WLR services (such as FVCO), it will not have the ability to engage in a margin squeeze in respect of retail call and voice services. Hence, the imposition (or retention) by ComReg of an MST in such circumstances would be unnecessary and disproportionate.

[11] These concerns are outlined by ComReg in 14/26, paragraph 9.258.

7.3. Compass Lexecon also refers to ComReg's concern about *"Wholesale SV being priced too low relative to FVCO, transit and FVCT. ComReg argued that this could potentially squeeze out eircom's competitors in the wholesale transit market"*. For the reasons outlined by Compass Lexecon, if eircom is subjected to a cost-orientation obligation in respect of the wholesale components which make up the 'white label' wholesale SV service, it will not have the ability to engage in a margin squeeze in respect of the wholesale SV service. Hence, the imposition (or retention) by ComReg of an MST in such circumstances would be unnecessary and disproportionate.

7.4. Therefore, in light of Compass Lexecon's Report, it is clear that ComReg's arguments for supplementing a WLR cost-orientation obligation with an MST are without foundation.

8. Removal of MST would actually increase retail competition

8.1. In paragraphs 3.15 to 3.19 of its Report, Compass Lexecon has explained why the MST may actually have the effect of limiting pro-competitive pricing and competitive entry. In particular, in circumstances where eircom's wholesale price is subject to a cost-orientation obligation, an MST blunts eircom's incentives to compete vigorously on price at the retail level.

8.2. As Compass Lexecon has explained, short term under-recovery of costs can increase volumes over which fixed costs can be spread. Such a practice enhances consumer welfare as it results in lower retail prices for existing and potential customers and thereby increases output.

8.3. In contrast with this scenario, the effect of subjecting eircom to an MST in circumstances where its wholesale price is subject to a cost-orientation obligation is to impose losses on eircom at the wholesale level if it seeks to engage in benign but more vigorous competition on price at the retail level. In such a situation, it is commercially rational for eircom to forebear from such benign but vigorous competition at the retail level and to suffer a reduction in its share of the retail market. As the data which is summarized in section 3 above confirms, this is what has happened in practice in respect of broadband access, particularly in urban areas where UPC has rolled out its network. In such areas, by March 2015, eircom's research shows that its share of the retail broadband market had fallen to ✂. Even in urban areas where UPC has not built its network, eircom's research shows that its share of the retail broadband market had fallen to ✂ by March 2015.

8.4. In the light of Compass Lexecon's Report and the trends in competition in the retail broadband and line rental markets, it is clear that not only is an MST unnecessary in circumstances where eircom's wholesale price is subject to a cost-orientation obligation, such an MST actually harms competition and thus reduces consumer welfare.

9. The MST does not meet the Three Criteria Test

9.1. Recital 27 of the Framework Directive[12] stipulates that *ex ante* regulatory obligations should only be imposed in markets where competition is not effective and where national and EU competition law remedies are not sufficient to address the problem. These principles have been incorporated into the Three Criteria Test which is applied by the European Commission

[12] 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.

and confirms that markets which are susceptible to *ex ante* regulation must meet the following cumulative criteria:

(i) The presence of high and non-transitory barriers to entry;

(ii) A market structure which does not tend towards effective competition within the relevant time horizon; and

(iii) The insufficiency of competition law alone adequately to address the market failure(s) concerned.

9.2. It is clear from the evidence cited in sections 3 and 4 above 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.[13] Indeed, the European Commission has confirmed that retail line rental markets *"at Union level"* do not meet the Three Criteria Test.[14] (The views of the European Commission in this regard are considered further in section 10 below.)

9.3. For the reasons outlined by Compass Lexecon, it is clear that due to the WBA cost-orientation obligation, eircom will not have the ability to engage in a margin squeeze in respect of retail broadband access services. Hence, the retention by ComReg of the MST in such circumstances is unnecessary and disproportionate. A corresponding conclusion will necessarily follow in respect of the MST for retail call origination and line rental services if eircom is subjected to a cost-orientation obligation in respect of WLR services (such as FVCO).

10. Approach of the European Commission

10.1. In October 2014, the European Commission published a new Recommendation on relevant markets in the electronic communications sector which are susceptible to *ex ante* regulation. In this new Recommendation, the European Commission states that:

> *"specific national circumstances may justify that a national regulatory authority could find that market 1 of Recommendation 2007/89/EC [i.e. retail line rental] or other retail markets related to market 2 of Recommendation 2007/89/EC [i.e. fixed-line call origination] are not yet effectively competitive from a forward looking perspective absent appropriate and proportionate wholesale remedies. National regulatory authorities could thus justify continuing ex ante regulatory intervention at wholesale level provided that the three-criteria test is satisfied in the national circumstances for the subsequent review period".* [15]

[13] In this submission, the question of whether the markets for WBA and WLR meet the Three Criteria Test is not addressed and is specifically reserved.
[14] Recital 25 of Commission Recommendation of 9.10.2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services.
[15] Recital 25 of Commission Recommendation of 9.10.2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services.

10.2. Thus the European Commission has in effect confirmed in its Recommendation of October 2014 that retail markets (including those for call origination, line rental and, by implication, broadband access) are no longer regarded as susceptible to *ex ante* regulation. If these retail markets are considered by a National Regulatory Authority not yet to be effectively competitive on a forward looking basis in a particular Member State, they should nevertheless only be subjected to appropriate and proportionate *ex ante* regulation at the wholesale level (and then only if the Three Criteria Test is satisfied in respect of such wholesale regulation).

10.3. The European Commission expressly proposed such an approach to ComReg in the context of its consultations on the Current Generation Bitstream Price Control[16] and the Retail Fixed Voice Access Market.[17]

10.4. In respect of wholesale broadband access, the European Commission stated in its letter to ComReg of 3 April 2014 that:

> *"The Commission therefore invites ComReg to reassess the appropriateness of the proposed margin-squeeze test and HCA methodology for valuing core network elements and consider whether a cost-oriented price regulation, applying to both the access and the core network and based on a proper cost model, as outlined in the Commission's Recommendation on non-discrimination and costing methodologies, would better meet the regulatory objectives of preventing excessive pricing and incentivising investment".*[18]

10.5. In respect of call origination and line rental, the European Commission stated in its letter to ComReg of 28 July 2014 that:

> *"The Commission urges ComReg (i) to complete the assessment of the (upstream) market for call origination as soon as possible, (ii) to notify the Commission, other NRAs and BEREC of it and (iii) to reassess whether the presently notified [retail] markets still warrant ex ante regulation without any undue delay"*.[19]

10.6. In respect of call origination and line rental, ComReg acknowledges (at paragraph 1.11 of Decision 12/14) that the European Commission has expressly encouraged ComReg to complete its analysis of the FACO markets and analysis of upstream remedies in the shortest timeframe possible and to reassess the need for *ex ante* retail regulation in the relevant retail markets in the presence of appropriate upstream regulation.

10.7. Thus, the European Commission has, in effect, directed ComReg that once the appropriate cost-oriented regulation is in place at the wholesale level, ComReg should forbear from regulating the retail markets for broadband access and line rental – and this includes forbearing from the imposition of an MST in respect of the relevant retail prices. ComReg is obliged, pursuant to Regulation 13(6) of the Framework Regulations, to take the utmost account of the European Commission's comments.

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[16] ComReg 14/73R, D11/14, (09/07/14) *"Wholesale Broadband Access: price control obligation in relation to current generation bitstream"*.
[17] ComReg 14/89, D12/14, (28/08/14) *"Market Review: retail access to the public telephone network at a fixed location for residential and non-residential customers"*.
[18] Annex 3 to ComReg 14/73R, D11/14, (09/07/14) *"Wholesale Broadband Access: price control obligation in relation to current generation bitstream"*.
[19] Appendix 3 to ComReg 14/89, D12/14, (28/08/14) *"Market Review: retail access to the public telephone network at a fixed location for residential and non-residential customers"*.

10.8. Finally, in this context, neither Compass Lexecon nor eircom is aware of a National Regulatory Authority in another EU Member State which currently supplements wholesale cost-orientation obligations with MSTs in the same manner as ComReg.[20] The absence of retail regulation in these markets in other Member States (and, in particular, the lack of an MST) has not resulted in anti-competitive effects or the exploitation of consumers due to the effective regulation at the wholesale level.

10.9. In the circumstances, it is clear that ComReg's maintenance of an MST in respect of broadband access in addition to the WBA cost-orientation obligation and its proposal to maintain an MST in respect of line rental even after it has introduced a WLR cost-orientation obligation are not only unnecessary and disproportionate but also inconsistent with the approach of the European Commission and National Regulatory Authorities in other EU Member States.

11. Conclusion

11.1. For the reasons outlined above and in Compass Lexecon's Report, it is clear that:

(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; 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.

11.2. Therefore, ComReg should withdraw these MSTs from services where it has subjected eircom's wholesale prices to a cost-orientation obligation.

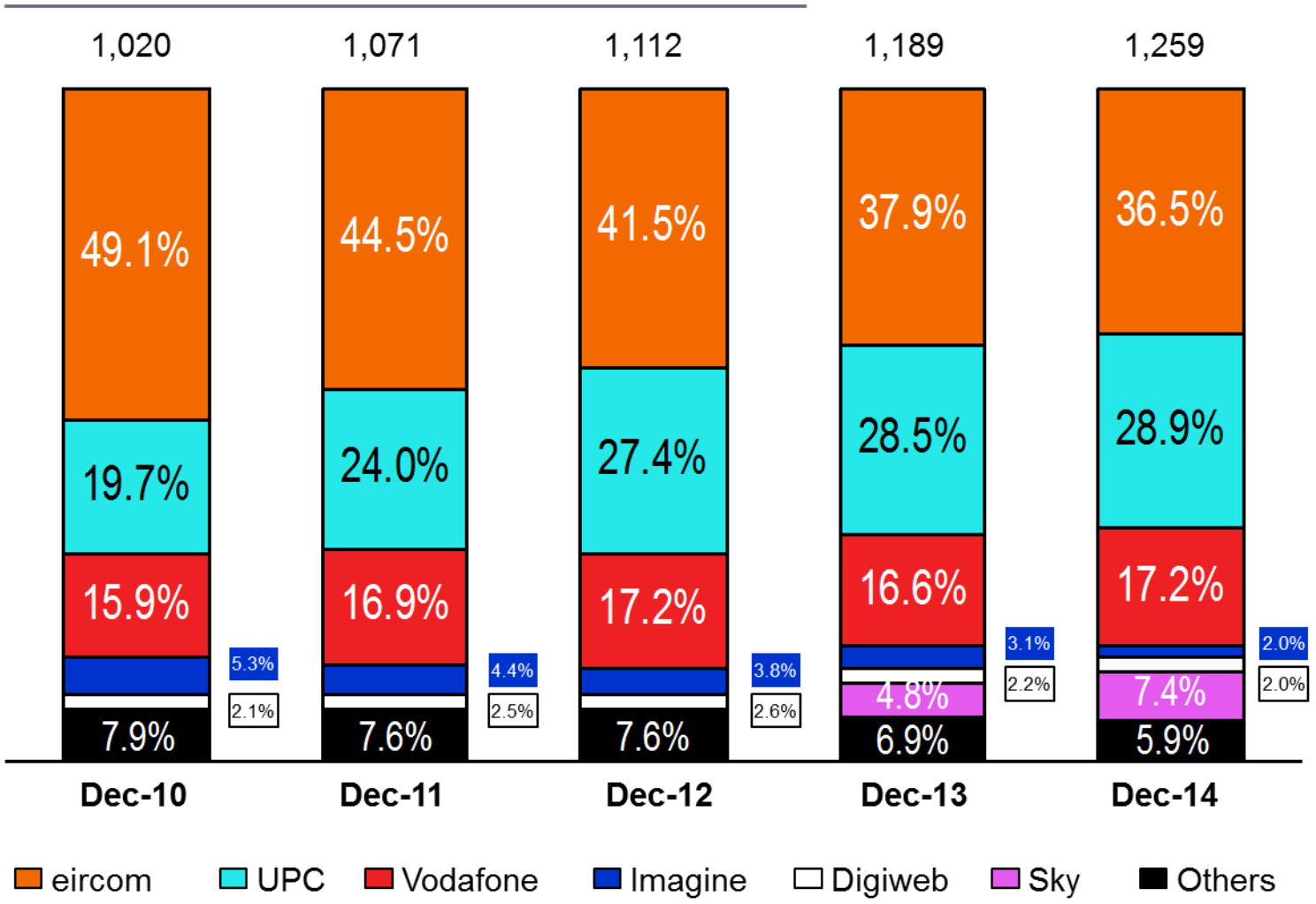
[20] Although the Dutch regulator, ACM, has imposed a non-discrimination obligation on KPN which includes a prohibition on margin squeeze, ACM has not imposed an economic replicability test on KPN.

Annex 1: Market Share Estimates in UPC and non-UPC areas

✂

Annex 2: Fixed Broadband Market Share by Retail Brand

(market size '000)

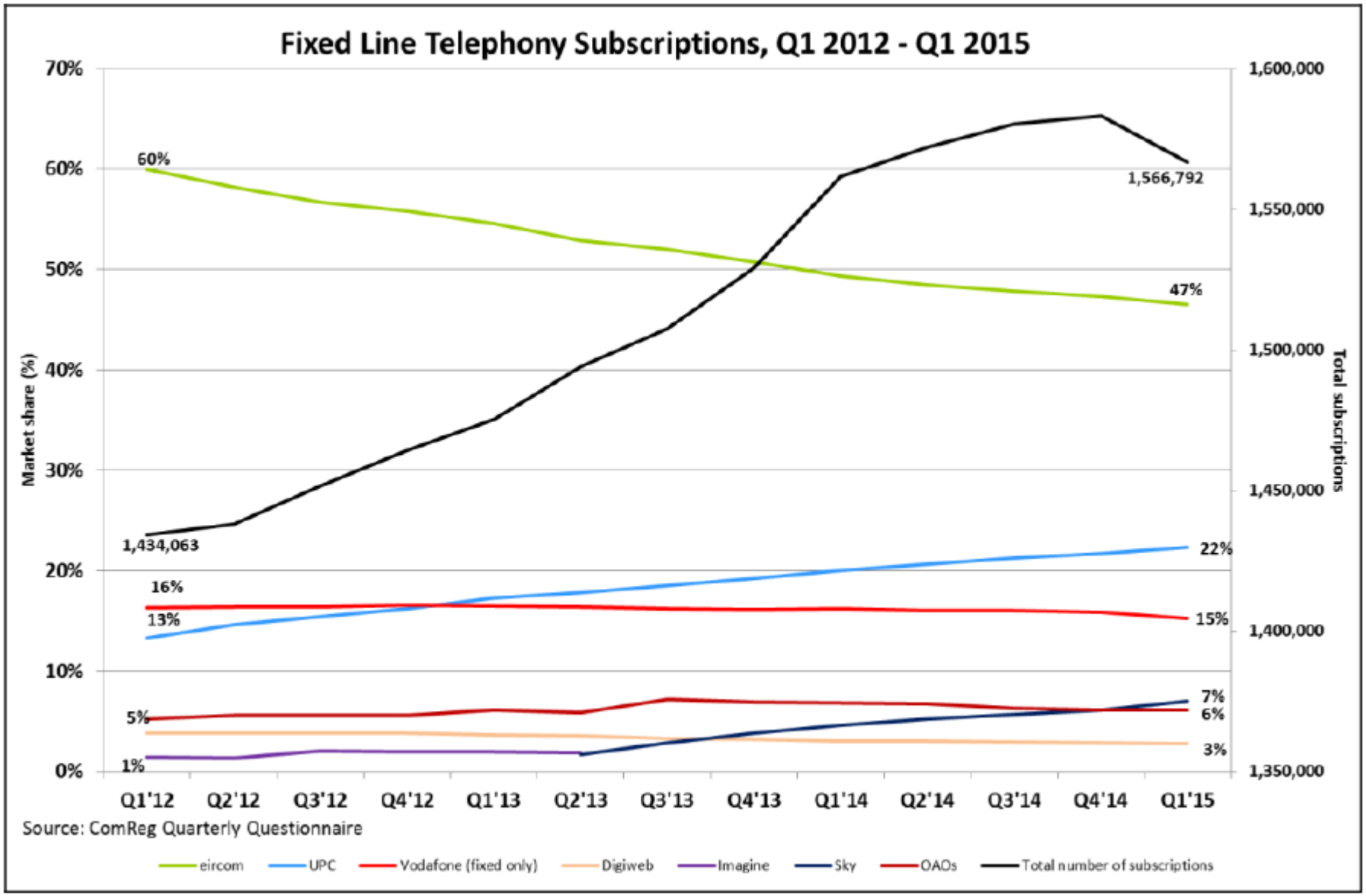


Source: ComReg Quarterly Data

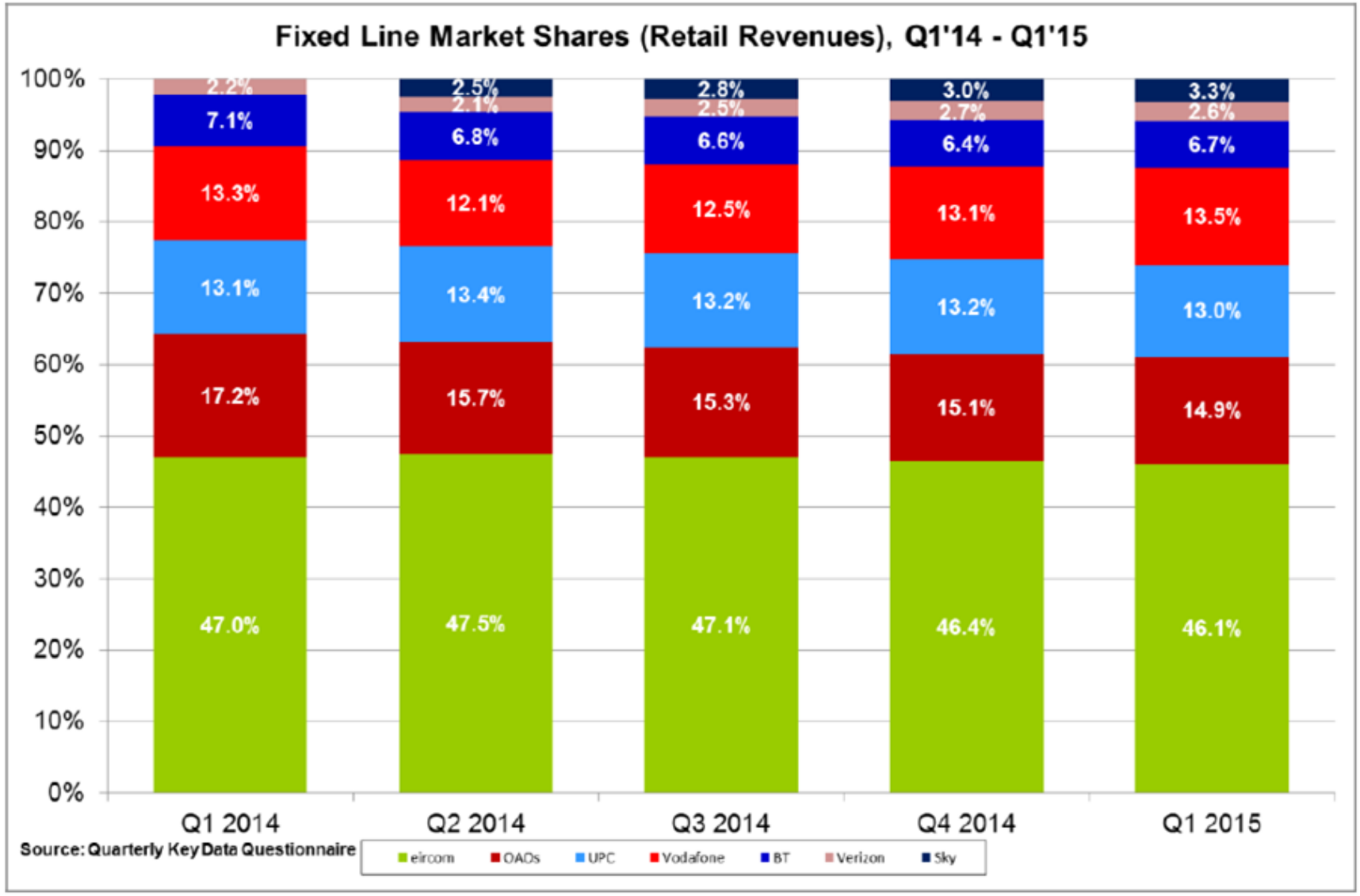
Annex 3: Consumer Fixed Broadband Market Share by Retail Brand

✂

Annex 4: Fixed Line Telephony Subscribers



Annex 5: Fixed Line Retail Market Shares



4: Enet

enet replies to ComReg consultation 15/67

Question 2

Do you agree with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and the ancillary services for Market 4 and SB-WLR? Please provide reasons for your responses.

Reply

enet agrees with and supports ComReg's preliminary view that cost orientated price control is appropriate for determining prices for CEI and ancillary services for Market 4.

We support this view because:

- There is no effective competition in the CEI market and thus no alternative temper to price squeeze or exorbitant charges being applied by the SMP operator to the detriment of end users.
- 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.
- ComReg has invested heavily in a complex cost oriented network model to support accuracy of price setting and this investment should be leveraged to deliver end user advantage.
- 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.

Question 3

Do you agree with ComReg's preliminary views that in general Eircom's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets? Please provide reasons for your response.

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Reply

enet agrees that the indexed Regulatory Asset Base should be applied to reusable assets.

We support this view because:

- It gives Eircom a fair return on investment already made.
- It give Eircom the appropriate return on future investment and encourages the efficient maintenance and renewal investment in the passive assets.
- It incentivises efficient operation on the part of Eircom.
- It gives predictability to the pricing structure.
- It facilitates accurate investment decision making on the part of other network infrastructure providers and users.

Question 4

Do you agree with ComReg's preliminary view that for Reusable Assets we should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets? Please provide reasons for your response.

Reply

enet does not agree that for reusable assets, any additional allowance should be made as described in 4.131 and further described in 4.132, 4,132 and 4.134.

We do not support the preliminary view because:

- 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.
- Even if it is demonstated that such a requirement exists, a replacement rate of 8% in addition to routine replacement is excessive. In the context of its regulated accounts, Eircom 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. For greater detail on this please see our reply below to question 14.
- The adoption of a BU-LRAIC+ methodology without any adjustment ensures adequate return and incentive for normal network operation as outlined in 4.127.
- There is no means of control as to where the funding emanating from the adjustment will be invested. Accordingly it may be used to offset existing,

targeted , service-related or Eircom directed growth investment, rather than being available for general NGA adoption.

- Specific and 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.
- Although not specifically addressed in Question 6, we support the rationale and proposals set out in 4.142.

Question 7

Do you agree with ComReg's preliminary view that an average price per service over the price control period is appropriate? Please provide reasons for your response.

Reply

enet agrees with the view that an average price per service over the price control period is appropriate.

We support this view because:

- It gives price stability and predictability.
- It gives operating and revenue stability to Eircom.
- Using an average continues to give the appropriate return on investment to Eircom over the full period of the price control.
- The proposed price control period is appropriate for such a decision.
- It eliminates administrative overhead for the duration of the price control period.

Question 14

Do you agree with ComReg's proposed approach for setting the price per pole? Please provide reasons for your response. If respondents have any alternative views regarding any of the assumptions used for setting pole access prices please substantiate your response with evidence, where appropriate.

Reply

enet agrees with the proposed approach for setting the price per pole. Our assumption is that where Eircom has at least one cable on a pole, it will carry an appropriate cost of use of that pole in its wholesale cost model.

We support this view because:

- It gives the appropriate return on investment to Eircom.

- It ensures other operators bear their appropriate share of the pole provision and maintenance costs.
- It is a flexible and adaptable methodology that is simple to apply for both Eircom and an OLO. Our 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. Specifically, we are assuming that the reference in Figure 40 to two cables is for illustrative accounting and calculation purposes, and that individual pole usage is subject only to engineering limitations. 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 cables using front and back of the pole without resorting to any extension brackets.

enet does not agree with the allocation for the replacement of an incremental 8% of the pole base attributable to the deployment of NGA.

We do not support this view because:

- Normal, efficient pole replacement and renewal is covered in the application of the RAB / BU-LRAIC+ pricing model.
- This additional 8% provision is not reconcilable with an appropriate normal maintenance and assurance programme delivering a stable and safe pole population.
- 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.
- 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%.
- 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.

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Question 15

Do you agree with ComReg's preliminary view that price per meter of sub-duct should be used for setting duct access prices? Please provide reasons for your response.

Reply

enet agrees with the view that a price per meter of sub duct should be used for duct access prices.

We support this view because:

- It drives efficient use of available duct space.
- As Eircom does not operate a duct space inventory or management system, there is no other viable methodology.

Question 16

Do you agree with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas? Please provide reasons for your response.
enet agrees that duct access prices should reflect the cost differences between Dublin and provincial area.

Reply

enet agrees with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas.

We support this view because:

- General traffic management, access times and working condition obligations drive additional build costs in Dublin, which should be fairly reflected in pricing.
- Footprint congestion under Dublin roadways and footways drives additional planning and construction costs, which should be fairly reflected in pricing.
- The cheaper operating conditions available in the provinces should be used to incentivise the focus of activity to outside the Dublin area in the interest of alignment with the Government Spatial Strategy and Regional Development plans.

enet does not agree that an adjustment of 5% to the RAB for underground civil infrastructure as per 4.134 is necessary. Eircom has access to other cost recovery methodologies where duct and pipes are damaged, primarily their Damage to Plant cost recovery and litigation process.

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Question 22

Do you agree with ComReg's preliminary views regarding the ancillary charges for Market 4 products and services? Please provide reasons for your response.

Reply

enet agrees 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.

We support this view because:

- It is fair and reasonable that necessarily incurred costs be covered.
- It is reasonable that Eircom expect and receive a rate of return on their endeavours.
- Cost orientation avoids price squeezing or exorbitant charging by the Eircom to the detriment of end users.
- It protects other access seekers in so far as there is an efficient operator check.
- It prevents any discrimination against a particular product set.

Question 24

Do you agree with ComReg's preliminary view that the price control period should be for three years but should remain in place any further notice by ComReg and that Eircom should review the inputs, costs and assumptions of the Revised CAM annually for material changes? Please provide reasons for your response.

Reply

enet agrees that a three year price control period is the minimum practicable.

We support this view because:

- It gives the required stability and predictability for proper investment decisions.
- It supports good business planning.
- The Copper Access Model will best serve industry if maintained current.
- Review of the CAM will avoid cost or price shock at the end of the price control period.

Question 28

Do you have any comments on the Regulatory Impact Assessment and in your opinion are there other factors which ComReg should consider in completing its Regulatory Impact Assessment? Please provide reasons for your response, clearly

indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.

Reply

enet agrees with the terms of the Regulatory Impact Assessment.

Question 29

Do you believe 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? Please explain your response and provide details of any specific amendments you believe are required.

Reply

Enet believes 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.

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5: Sky Ireland

COMREG CONSULTATION ON CURRENT GENERATION WHOLESALE ACCESS SERVICES: FURTHER SPECIFICATION & AMENDMENT OF PRICE CONTROL OBLIGATIONS IN MARKET 4 AND MARKET 5 AND FURTHER SPECIFICATION OF PRICE CONTROL OBLIGATION IN MARKET 2

1. Introduction

1.1. This is the response of Sky Ireland to ComReg's "*Consultation on Current Generation Access Services"* (Document No. 15/67) and its draft decision therein (the "Consultation").

1.2. Sky welcomes ComReg's proposed decision to adopt a new price control for Single Billing – Wholesale Line Rental ("WLR") services departing from the existing retail minus regime to one of cost orientation. Sky considers the implementation of a cost orientated price control for WLR is long overdue in particular given the extent to which the current price is over recovering costs as evidenced by ComReg's own analysis. In addition, the new price control will bring to an end eircom'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.

1.3. Sky favours a nationally averaged WLR pricing approach that includes the cost of provisioning and repair as proposed by ComReg and considers the proposal should be introduced no later than 1 January, 2016.

1.4. Sky is disappointed 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[1].

1.5. Sky considers given the obvious linkage between the cost orientation regime applicable to LLU and SLU pricing, the significant disparity between the price ceilings previously set by ComReg for the two services with the prices being proposed in the Consultation requires greater explanation from ComReg. Had the SLU prices (or indeed the SLU-LLU price gap) now being proposed been in place sooner it could have promoted greater wholesale competition in the access network, particularly across eircom's current FTTC footprint. However, given eircom's FTTC network roll out project is now largely complete and vector enabled, coupled with the fact that there has been significant uptake of eircom's product, the investment case for SLU has been substantially reduced.

1.6. As such the impact on the market of the newly proposed SLU price would seem to be limited to a relaxation of the margin squeeze test on eircom for Standalone Broadband ("SABB"). Sky consider that at a time when eircom's market power is on the rise a relaxation of its regulatory obligations are unwarranted as it is likely to lead to a further enhancement of that power.

[1] Sky's position in relation to this matter has been extensively outlined in both our response to the "Replicability Test" consultation of 30 October, 2014 and the 'WCA & WLA 13D Request' response of 22 May 2015. We do not propose to repeat the arguments laid out in those documents in response to this consultation but we would remind ComReg that Sky's view in relation to LEAs remains unchanged from the positions outlined therein.

2. WLR cost orientation

2.1. Sky summarised its position with respect to the need to move from a retail minus to cost oriented regime for WLR in its response to ComReg's '*Wholesale Fixed Voice Call Origination & Transit Markets'* consultation in April, 2014[2]. Sky refers ComReg to its response which addresses the issue of why cost orientation is required for WLR as all points made therein remain valid. Among the key points raised by Sky were:

- Cost orientation would likely lead to a reduction in wholesale charges which would ultimately benefit retail customers.
- Despite eircom 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 eircom) 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 eircom Retail over its competitors due to an asymmetry of information about future pricing would be removed under a cost orientation regime (e.g. eircom could plan retail price changes that impacted wholesale charges for OAOs that did not have insight to these plans).
- The sudden and surprise announcement that eircom was removing its €3 WLR discount (implemented in May 2013) from January 2015 highlighted the extent to which eircom could materially impact OAOs from a business planning perspective.

2.2. The urgency for a move to a cost oriented rate for WLR has been accentuated by eircom's increasing market dominance in the Wholesale Central Access ("WCA") market over the last 18 – 24 months. Sky provided evidence of that increasing dominance in response to ComReg's 'WCA&WLA 13D Request'.[3]

2.3. As noted in Sky's response to the qualitative section of the WCA&WLA 13D Request, the growth in POTS-based fibre broadband services delivered by FTTC technology at the expense of POTS-based copper DSL broadband services has resulted in a trend whereby the key elements making up an OAOs wholesale cost stack (e.g. WLR, port rental charges, WEILS) is subject to a decreasing degree of competition as eircom's market power increases[4].

2.4. Consequently, Sky considers that more stringent regulatory controls are required where the evidence points towards eircom's strengthening dominance. While a margin squeeze test ("MST") on bundled offers (including WLR) is important, when one of the key input costs to the MST is itself not cost oriented then the effectiveness of the test (the intent of which is to mitigate against an abuse of market power by the SMP operator) will be compromised.

2.5. This is because in practice if eircom is over recovering costs on its WLR, then it can use these excess returns to subsidise losses on other elements of the bundle so that overall the bundle is profitable. At the same time eircom's competitors have to pay the full cost of WLR (to eircom) but would not be able to subsidise other elements of the bundle in order to match eircom's retail offering, all else being equal. In this scenario, while eircom's bundle may pass the MST, its offer may not in fact be replicable by OAOs and this could arise as a consequence of WLR not being a cost oriented service in the bundle. As such a

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2 ComReg has published this response on its website in Document 14/99. See section 4 (a) of the Sky response in relation to the cost orientation of WLR issue.

3 Issued on February 19, 2015.

4 For a full explanation see Sky's response to questions 3 & 4 of WCA & WLA 13D Request.

MST on bundles that include WLR can better achieve the objectives its implementation seeks to realise when there is a cost orientation obligation on WLR.

Fault repair and provisioning costs inclusion

2.6. Sky supports ComReg's proposal to include the cost of fault repair and provisioning in the monthly line rental charge. 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. While connection promotions are often rolled over for extended periods, others have ended when it might have been anticipated they would continue to be in operation. As such 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.

2.7. 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.

2.8. Furthermore, customers not currently connected to the network are likely to enjoy greater choice and competition due to the lower switching costs incurred by OAOs. Currently, OAOs are more likely to target prospects with lower connection charges (thereby reducing SAC[5]) at the expense of higher connection charge customers. For example, an in-situ inactive line has a €17.75 connection charge while a new connection costs in excess of €90. This sort of price disparity could discourage some OAOs from competing for customers attracting the latter charges.

3. Nationally Averaged WLR Price

3.1. 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. As noted by ComReg, moving to the latter approach would exacerbate the rural-urban digital divide where customers using WLR as part of a POTS based retail broadband package would likely see a significant increase in the retail prices without any improvement of service.

3.2. Furthermore, as LEAs are currently inappropriately defined calculating the 'true' cost of LEA versus non-LEA WLR service provision would be equally flawed.

USO obligations linked to SB-WLR pricing

3.3. Sky also notes that as per eircom's Universal Service Obligation[6] for Access at a Fixed Location ("AFL") there is a requirement for Geographically Averaged Prices ("GAP") on eircom to ensure that basic telephone services (including line rental) are available at an affordable price to all subscribers irrespective of geographic location. As such, WLR pricing is inextricably linked to AFL pricing and any decision to implement de-averaged pricing may require consequential amendments to standing USO decisions which are not currently subject to consultation.

3.4. For example, if a de-averaged cost oriented non-LEA WLR price of €28.29 were to be introduced, this would likely add at least €10 to subscribers' retail bills in non-LEA areas. Given this could give rise to a potential 40% retail price increase the question of whether the 'affordability' principle would be compromised under the USO would arise were eircom to pass on the cost entirely to customers in these areas. Alternatively, if eircom chose

[5] Subscriber acquisition costs

[6] See ComReg Decision 10/14, 7 July, 2014

not to pass on the cost or were constrained from doing so due to the USO, eircom would likely fail existing MST obligations and risk breaching their obligations not to cause a margin squeeze under a number of ComReg decisions. It is clear therefore that the issue of AFL and de-averaging of WLR pricing cannot be dealt with independently of each other in the context of ComReg fulfilling its own statutory obligations e.g. promote competition, ensure affordable pricing of Universal Services.

3.5. Nationally averaged prices for AFL and WLR have allowed eircom to subsidise costs in uneconomic areas with excess profits from economic areas. In fact, 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), eircom has been significantly over recovering the cost of WLR/AFL service provision. This is likely to explain why eircom chose not to increase WLR charges in line with allowances under the Retail Price Cap[7] for several years and why ultimately it could afford to discount WLR pricing (in May 2013) within the LEA[8] as part of its NGA roll-out strategy.

3.6. In summary, Sky considers that a geographically averaged WLR price will allow eircom to recover its costs, fulfil ComReg's remit to ensure the principle of affordability is adhered to with respect to eircom's USO for AFL and will provide regulatory certainty that a de-averaged pricing regime may not achieve.

4. SLU v LLU pricing

4.1. Sky agrees with ComReg that it should maintain a cost orientation obligation on eircom's pricing of SLU and LLU.

4.2. However, Sky 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. Furthermore, it is unclear why ComReg has not examined the reasons for these significant changes in the Consultation. Indeed, ComReg has not even noted the existing ceiling for SLU pricing anywhere in the Consultation.

4.3. The gap between the LLU and SLU ceilings as laid out in Decision 01/10 resulted in a permissible pricing gap of **€1.88** between the services (see Chart 1 below). Based on pricing changes implemented by eircom in January 2013, the actual gap was reduced to just **€0.88**. The newly proposed price ceilings for the services will create a permissible gap of **€4.31**. This would result in LLU prices being 73% higher than SLU by comparison to an existing permissible premium of just 17%. Sky considers this magnitude of change requires a comprehensive explanation from ComReg.

4.4. As ComReg noted in Decision 03/13[9]:

> *"..where the SLU price reduces, Eircom must ensure price consistency with LLU and amend the LLU price where appropriate using the CAM[10]."*

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7 Eircom is permitted to increase line rental charges by CPI-0% per annum and any such increases would automatically flow through to the retail minus regime currently in place for WLR pricing.

8 From May 2013 – Jan 2015 eircom ran a WLR price promotion of €3 discount per month in LEAs which was motivated by its roll out of POTS based NGA services in these areas. If eircom had not been recovering the cost of WLR nationally, it would have not have been rational to forego the additional revenue in LEAs to subsidise any alleged losses in non-LEAs.

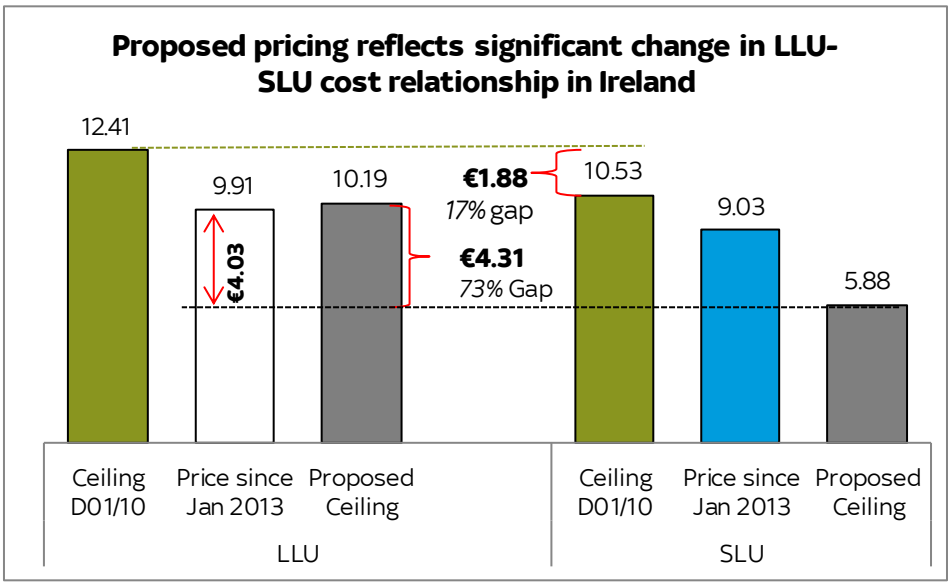
9 "Next Generation Access: Remedies for Next Generation Access Networks", Decision 03/13, paragraph 10.306-10.307

10 Copper Access Model

ComReg further noted:

> *"Given that SLU is a common input into both LLU and VUA products, ComReg considered that a consistency requirement between SLU and LLU on the one hand and SLU and VUA on the other indirectly implies a consistency requirement between LLU and VUA, where services are delivered over the same basic infrastructure which carry the same or similar cost characteristics." [emphasis added]*

4.5. The apparent divergence of those '*same or similar*' cost characteristics now requires some explanation from ComReg and/or eircom. This issue is of particular concern to Sky given that had the proposed SLU price ceiling (or one close to it) been in place prior to 2013 the prospect of greater wholesale competition inside the LEA would have been greatly enhanced. This would have been prior to eircom's roll out of its FTTC network which is now essentially completed. Furthermore, as the majority of the eircom FTTC network has been vectoring enabled, the opportunity for SLU investment cannot now be facilitated without seeing a degradation of customers' service as a consequence of switching off vectoring[11].



4.6. Furthermore, even as the National Broadband Plan gets delivered through the Government intervention strategy, Sky considers that it is unlikely SLU will be key element in any winning bidder's roll out strategy. This is because prominent bidders like eircom, SIRO and others have indicated that in rural areas a Fibre to the Home/Premises (FTTH/P) solution will be more cost effective than one entailing a FTTC cabinet strategy reliant on a last mile (eircom) copper solution. Consequently, 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.

4.7. As such the only practical impact of the newly proposed SLU price ceiling will be with respect to how it affects relevant margin squeeze tests. The foundation of the NGA SABB margin squeeze test is the SLU price. The newly proposed ceilings means that products/bundles derived from LLU/LS could now be at a relative disadvantage (from a pricing perspective) to eircom's NGA SABB by virtue of the widening of the gap between the ceilings. Under the new pricing proposal, eircom retail can reduce its NGA SABB by an

[11] As ComReg is aware, dual operator vectoring solutions are currently not technically possible.

extra **€2.43** (€4.31 *less* €1.88) per month relative to the price of a LLU bundle it is competing with.

4.8. Sky considers that the impact of the proposal therefore at best, ignores or at worst, totally undermines ComReg's Decision in D03/13 where ComReg noted:

> *"The importance of LLU prospectively means that relativity between copper and fibre pricing needs to be maintained for now. For this reason* ***we need to maintain the link between copper and fibre prices****. 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. This means that NGA prices in Market 5 cannot fall below a certain level without a reduction to the SLU* ***and*** *LLU prices (in Market 4)."*[12] *[emphasis added]*

4.9. ComReg further argued that maintaining the link between copper and fibre pricing in the manner described in the extract above would act as a competitive constraint on eircom's NGA (wholesale) pricing[13].

4.10. Given that SLU prices are set to fall significantly (to **€5.88** from **€9.03**), whereas for LLU/LS a ceiling (**€10.21**) that is greater than the current price (**€9.91**) for the service is being proposed, Sky considers it is incumbent on ComReg to address the apparent anomaly that scenario presents compared with its position as outlined in Decision 03/13.

4.11. In addition, it is also important that ComReg clearly outlines why, although it is maintaining a BU-LRAIC+ approach to LLU and SLU pricing as generated by the same Copper Access Model (CAM), the output from that model today is so substantially different with respect to the price of the two services when compared with previous cost reviews.

5. Access to eircom's cost models: The need for functional separation

5.1. ComReg notes that "*Similar, to deriving maximum monthly LLU prices, Eircom has access to the entire model* [Copper Access Model](*including associated costs*) *and the associated assumptions used in the modelling process in determining the current maximum charges*[14]."

5.2. Sky considers that were eircom operating its wholesale division independently of its retail arm then access to this model would only be required by its wholesale division. However, as Sky has previously noted, we remain concerned that many of eircom's wholesale pricing decisions appear to be driven more by retail rather than wholesale considerations[15] (e.g. removal of the €3 WLR discount and the increase in SABB pricing earlier this year appear to have been decisions taken at the 'corporate' level to benefit eircom retail).

5.3. Consequently, while ComReg may have previously adopted an approach of regulatory forbearance[16] with respect to placing obligations on eircom as a consequence of assurances it received from eircom with respect to its '*Voluntary Regulatory Reform*'

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12 Decision 03/13, paragraph 10.11

13 For example, see paragraph 10.74 of Decision 03/13.

14 Paragraph 6.104 of Consultation.

15 See paragraph 47-49 of Sky's response to the WCA/WLA 13D information request.

16 E.g. paragraph 7.31 of Decision D03/13, paragraph 134 of ComReg Strategy Statement 2014-2016

program, the merit of that approach must now be seriously questioned in light of recent developments.

5.4. On 14, August 2015 eircom's 'Head of Compliance & Equivalence' published a report ("Report on Non-Compliance") that highlights in Sky's view, deliberate and systemic failures on eircom's part to comply with its regulatory obligations for a prolonged period of time. While going into specific detail on the breaches of eircom's non-discrimination obligation as outlined in that report is not directly germane to a response to the Consultation and Sky is still in the process of reviewing this document, what it does highlight is that eircom's assurances over several years about wholesale reform are now entirely discredited.

5.5. In this regard, we note that ComReg outlined in its most recent strategic review that:

> *"At an appropriate time, we will consider conducting a strategic review of the progress of wholesale reform - including reforms undertaken voluntarily by Eircom as well as those that have been required by various regulatory decisions. Such a review could lead to a number of different outcomes. For instance, it might lead us to bring forward to consultations on some of Eircom's obligations, on the way industry forums operate or* ***even on the case for functional separation of Eircom Wholesale****."*[17] *[Emphasis added]*

5.6. Sky considers 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.

5.7. Firstly, given that eircom's wholesale and retail pricing decisions and analysis are currently known to fall within the 'corporate' division of eircom and that recent wholesale pricing decisions appear to have been motivated by retail rather than wholesale considerations, it is necessary for ComReg to put in place safeguards that limit the scope for eircom to abuse this internal management structure[18].

5.8. While margin squeeze tests do provide some cover to OAOs against potential eircom abuses, the reality is these tests are highly complex and can be manipulated (to ensure they are passed) through accounting practices (e.g. cost allocation methodologies). Where there is no clear delineation between retail and wholesale pricing functions in eircom the scope for and incentive to engage in such manipulation is greatly compounded.

5.9. Secondly, as a consequence of the revelations outlined in the Report on Non-Compliance, it is apparent that notwithstanding years of ex ante regulation being imposed on eircom there have been many instances of non-compliance. Given that ComReg appears not to have been aware of these ongoing breaches increases the urgency for ComReg to commence a review which considers how to address these compliance concerns as well as eircom's wider vertical integration incentives. Such a review would also need to consider appropriate remedies, including the potential functional separation of eircom's wholesale and retail divisions. Sky anticipates it will be in a position to expand further on this issue following a comprehensive review of the Report of Non-Compliance[19].

Sky **25 September 2015**

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17 "*Strategy Statement for Electronic Communications 2014-2016*", paragraph 135, 17 July, 2014.

18 Eircom's wholesale cost models have been deemed to be confidential from eircom's other retail competitors and but not from eircom retail.

19 Eircom are due to hold a workshop on 29 September, 2015 to explain the report in greater detail to interested parties.

6: Vodafone Ireland Ltd.

Introduction

Vodafone welcomes the consultation on eircom's wholesale access services. Vodafone believes the level of competition for fixed voice and broadband products is fragile and risks being undermined by low margins for access seekers and poor quality and poor provisioning from the SMP operator.

Vodafone have addressed the specific questions posed by ComReg however Vodafone also believe the underlying cost models needs to be addressed separately and Vodafone welcome the opportunity to access the models released by ComReg and will be commenting on them in detail at a later date. The response below therefore is based on the assumptions implied in the consultation document and do not represent any particular views on the robustness of the model itself.

Vodafone also believe that built into the price for the products under review is the assumption that the products will be provided in an efficient manner and faults and provisioning issues addressed promptly by the SMP operator. It is Vodafone's view that despite recent improvements by eircom, access seekers incur avoidable costs due to weaknesses in the provision and fault repair of regulated products. Vodafone believe ComReg need to incorporate performance assumptions within the regulated prices. Vodafone have benchmarked SLAs across a number of jurisdictions to demonstrate that the SLAs in place are limited and not effective and ComReg need to ensure access seekers have adequate SLAs in place to ensure products are not only at the correct price but also delivered within acceptable parameters.

Vodafone believe penalties/fines should be incorporated into the prices for non-delivery of products within agreed timeframes and to agreed standards. Vodafone believe ComReg have sufficient powers to impose such a performance regime and in the past have measured operator performance to key performance targets. ComReg also impose key performance targets on eircom retail for the purposes of USO however ComReg have not imposed similar performance measures on eircom wholesale. This is surely discriminatory on access seekers.

Q. 1 Do you agree with ComReg's preliminary view that the price control for SB-WLR should be amended from retail minus to a cost orientation price control? Please provide reasons for your responses?

Vodafone agrees with the move to cost orientation

Q. 2 Do you agree with ComReg's preliminary views that the cost orientation price control remains appropriate for determining the prices for LLU, SLU, Line Share, SABB Outside the LEA, CEI, dark fibre and the ancillary services for Market 4 and SB-WLR? Please provide reasons for your responses.

Vodafone agrees with maintaining cost orientation

Q. 3 Do you agree with ComReg's preliminary views that in general Eircom's Indexed RAB should be applied to Reusable Assets while a BU-LRAIC+ methodology should be applied to Non-reusable Assets and active assets? Please provide reasons for your response.

In principle, Vodafone agrees that the proposed approach is in the main aligned with the 2013 European Commission Recommendation. This is particularly true of ComReg's proposal to use a 'RAB' approach for the valuation of the ComReg defined Reusable Assets . Furthermore, Vodafone agrees with the use of a tilted annuity formula as applied to the Net Book Value (NBV) from Eircom Accounts (we assume this to be based on Eircom Historical (Separated) Cost Accounts (HCA's)) provides a very close approximation to the 2013 EC Recommendation on the use of results from regulatory Current Cost Accounts. With the main reason being that, operating correctly, CCA uses the Financial Capital Maintenance (FCM) principle which in principle, ensures that while the incumbent assets are revalued to Current Cost, the incumbent is strictly only compensated for investments actually made. Also while the timing of depreciation and capital returns to the incumbent can change using CCA, over an extended number of years it will result in only very marginally difference to what is generated using a HCA approach.

However, the definition by ComReg of reusable and non-reusable assets could do with a more detailed clarification and discussion. This is particularly the case as the suggested use of a "BU-LRAIC+" mode for Non-reusable Assets and Active assets is dependent on this definition.

Vodafone does not agree with the proposed use of Bottom Up (BU) valuation of non-reusable assets and as listed by ComReg in section 4.128 "..future investment that would be required to facilitate the deployment of NGA technology". 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 infrastructure based on NGA requirements. As to the precise replacements needs for NGA deployment, 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.

Vodafone accepts that in principle the premise that using a purely Top Down costing approach to Active assets, such as those required to supply POTS line cards, or Broadband access lines, would not enable a sufficient margin to encourage investment in alternative operator infrastructure.

But, in saying this it would appear that ComReg have not taken sufficient account of the Wholesale NGA market developments in this area and we strongly question the need for a Bottom-Up Approach in particular to "Other passive local loop assets and non-reusable civil engineering assets" . To provide a specific example, we would point out that the rationale for applying a BU Modelling approach between LLU and VUA appears directly at odds with the principle of 'replicable investment'. As ComReg stated in Section 4.105 of the Consultation document "The BU-LRAIC+ methodology is appropriate where the assets(s) concerned are replicable and where the objective is to encourage the deployment of alternative infrastructure". In the context that 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.

In addition, it is very difficult to understand why this principle has been applied to eircom's own potential 'replacement' investments. For example, what is the justification for "D-Side" infrastructure being included as 'non-replacement', given that Eircom current deployment of NGA does not require their replacement?

Q. 4 Do you agree with ComReg's preliminary view that for Reusable Assets we should take account of reuse and replacement of existing assets as described at paragraphs 4.132, 4.133 and 4.134 rather than assuming 100% reuse of existing assets? Please provide reasons for your response.

As stated by ComReg themselves in Section 4.142 where its acknowledges that ".. Eircom may have sweating its assets.." in recent years, with a logical conclusion of such a statement being that the additional Poles and Duct replacement is potentially more catch-up in nature and not being driving specifically by NGA replacement. But as stated, limited additional information has been provided as to the consequence or ComReg proposed treatment to deal with this situation.

Even it were accepted that for certain % of infrastructure that a Bottom Up approach were required Vodafone has two further observations:

- It is difficult to understand why this is required in in this situation as ComReg has already incorporated Eircom'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. It would appear to be the case that the majority of Eircom's NGA investments will have been completed within this time period, and thus Vodafone seriously questions the need or use of the BU approach.
- Also, the proposed BU approach is not consistent with the 2013 EC Recommendations and would ask that ComReg 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 Eircom would in the main be replacing much older assets that the average, therefore the impact on Eircom's Operating costs, in particular the cost of Repair and maintenance, would be much greater than the percentages of Poles and Duct 'replaced'.

In stating the above, it should be noted that Vodafone welcomes the proposed annual investment review, as detailed in Section 4.142, and would ask, from a transparency viewpoint, as much detail of this review be made available as possible.

Q. 5 Do you agree with the proposed principles, inputs and assumptions of the Revised CAM, as set out above in Chapter 5? Please provide reasons for your response.

Vodafone would state that our response has been given without the benefit of having completed a detailed review of the underlying model and as such is based purely on the TERA report (ComReg 15/67a) and the ComReg comments as per ComReg 15/67. In saying this, we welcome the use of a Top Down Based RAB, as well as the stated efficiencies adjustment. These should ensure that Eircom is rewarded for its efficiently incurred costs, while sending the most appropriate pricing signals in the market place, but we would question the logic behind the uplift of costs, and prices, for "non-reusable" assets and would strongly encourage a revisit of this by ComReg for the reasons outlined in our response to Question 4 above.

While, as stated we have not reviewed the underlying detailed model, we have a number of observations that we would like to bring to your attention for further consideration:

- As with any modelling approach, a comparison between the costing methodologies employed, as well as the results of the proposed modelling approach, and the costing methodologies as well as the outputs of Eircom annual regulatory accounts, would ensure that there is sufficient reassurance and reconciliations provided that at a both a macro and at an individual product level that Eircom is both rewarded for recovering it's (efficiently incurred) costs. In particular, this would provide the reassurance to the industry that any inefficiencies are not recovered from other wholesale products, while ensuring the Eircom has the necessary encouragement to continue with efficient investments and practices.

- It is noted that TERA's proposed allocations include a division of civil engineering costs between E and D side cables. However, this process for allocation is set out as part of the considerations for the Bottom Up aspects of the overall Cost Model. It would appear 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.

  It would seem useful to clarify this understanding, as if some engineering costs are to be calculated on the basis of a Bottom Up rather than a Top Down model, this could potentially have a material uplift in costs on an illogical basis.

Q. 6 Do you agree 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? Please provide reasons for your response.

Vodafone agrees in principle with ComReg's assumption that the volumes in the BU model could remain stable over the proposed price control period, and understand that recent trends do indicate that volumes in the TD model (for SB-WLR) should reflect projected volume decline.

However, 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. Of particular note is 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

Q. 7 Do you agree with ComReg's preliminary view that an average price per service over the price control period is appropriate? Please provide reasons for your response.

While in principle Vodafone agrees with ComReg's approach, we would encourage 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 being reported by Eircom. Given the level of potential upside to economic developments, with the obvious potential for increasing access line volume growth, we would expect that this has been incorporated into the calculation basis of the average service prices.

Q. 8 Do you agree with ComReg's preliminary view that the monthly rental charge for LLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets in the LEA? Please provide reasons for your response.

In principle Vodafone agrees with the overall approach adopted by ComReg, however we again refer you to our response to Q.4 above and we would question the logic behind the uplift of costs, and prices, for "non-reusable" assets and would strongly encourage a revisit of this by ComReg.

Q. 9 Do you agree with ComReg's preliminary view that the LEA footprint should be locked-in for the purposes of setting the LLU monthly rental price? Please provide reasons for your response.

Vodafone would make the following comments on market developments in the LEA. ComReg have previously asserted that in areas where UPC are competing with eircom there is a retail price constraint on eircom which may in turn limit the monopolistic incentive to increase wholesale prices. Recent price increases at retail and wholesale levels by eircom and by UPC show the market has changed. UPC have over the past 2 years increased their price and eircom have responded by reversing a 'discount' of €3 on SB-WLR and an increase on SABB of €2. Both the discount and reverse of the discount are manipulations of the wholesale price to allow eircom to respond to a price threat from UPC. These activities undermine the confidence of investors like Vodafone who make decisions based on regulated wholesale prices into the future. The changes also undermine the credibility of the regulatory fixed wholesale regime which allows these changes. The price changes have also led to higher prices for end user which goes against one of ComReg's main objectives to protect consumers. There is now no disincentive to eircom to increase its wholesale prices and in fact given its dominant position and the weakness of the competition in the market it is in their interest to increase prices.

Equally, Vodafone would disagree with ComReg that the launch of SIRO will act as a competitive constraint in the medium term. SIRO is still to roll out significant numbers of homes and will only do so in predefined urban areas. SIRO ambition is to pass 500,000 homes in the medium term which is only a quarter of the target set by eircom of 1.9ml homes. In fact it would appear, following the SIRO announcements, that eircom have increased their ambition in terms of homes passed for both FTTC and FTTH. There is a clear ambition of eircom in both LEA and non-LEA areas to reassert their dominant position.

Vodafone believe ComReg should monitor market trends in the LEA and non-LEA areas and keep under review the competition impacts of the split in terms of pricing.

Q. 10 Do you agree with ComReg's preliminary view that the maximum monthly rental charge for SLU should be based on the BU-LRAIC+ methodology for Non-reusable Assets and Eircom's Indexed RAB for Reusable Assets nationally, while lines longer than 1km should be excluded from the calculation? Please provide reasons for your response

While Vodafone accepting in principle the approach adopted by ComReg, we again strongly question the approach in using a BU-LRAIC+ methodology for Non-reusable Assets. Based on our reading of the ComReg Consultation and without having had the benefit of a detailed review of the underlying costing models, we understand that ComReg has already taken in consideration eircom'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.

Q. 11 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR nationally (with active equipment based on BU-LRAIC+ costs) or the 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? Please provide reasons for your response.

In principle, Vodafone agrees with the approach adopted by ComReg in the pricing of SB-WLR, but to comment further we would need to understand in greater detail as to the build-up of the SB-WLR cost stack. For example, in relation to the additional costs being assumed for Active SB-WLR Assets, as well as 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.

In addition 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.

Vodafone believe the SB-WLR should be significantly lower given the assumptions we have commented on before and would encourage ComReg to revisit the price set in the consultation and reduce it further.

Q. 12 Do you agree with ComReg's preliminary view that the monthly rental price for SB-WLR ISDN PRA and FRA services should be based on the higher of the Eircom's Actual Costs Adjusted for Efficiencies for the provision of SB-WLR ISDN FRA and PRA nationally (with active equipment based on BU-LRAIC+ costs) or the 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 ISDN FRA and PRA services in the LEA? Please provide a reason for your response.

Please see our response to Question 11 as our comments are equally applicable to Q.12.

Q. 13 Do you agree with ComReg's preliminary view that the monthly rental price for SABB Outside the LEA should be based on Eircom's Actual Costs Adjusted for Efficiencies with the active equipment based on the BU-LRAIC+ methodology for the provision of SABB Outside the LEA? Please provide reasons for your response.

While, Vodafone in principle agrees with ComReg's approach to the pricing of SABB we would question the need for a BU-LRAIC+ element to the pricing of this service. Again as detailed in our response to Q.4, ComReg stated in Section 4.105 of the Consultation document "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." This would appear not to be the case for SABB Active Assets in Non LEA areas. It would appear 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. This is obviously not the case, either for LEA or Non LEA areas. 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. We would therefore request ComReg to revisit this pricing approach.

Q. 14 Do you agree with ComReg's proposed approach for setting the price per pole? Please provide reasons for your response. If respondents have any alternative views regarding any of the assumptions used for setting pole access prices please substantiate your response with evidence, where appropriate.

Vodafone supports this approach but would again question the need for a 'non-reusable / replacement' % to be applied when developing the Poles pricing, please see our response to Q.3 and 4 for further detail.

Q. 15 Do you agree with ComReg's preliminary view that price per meter of sub-duct should be used for setting duct access prices? Please provide reasons for your response.

Vodafone supports this approach but would again question the need for a 'non-reusable / replacement' % to be applied when developing the Poles pricing, please see our response to Q.3 and 4 for further detail

Q. 16 Do you agree with ComReg's preliminary view that duct access prices should reflect the cost differences between Dublin and provincial areas? Please provide reasons for your response.

Vodafone supports this approach

Q. 17 Do you agree with ComReg's preliminary view that national price per meter is appropriate for setting dark fibre prices? Please provide reasons for your response.

Vodafone supports this approach

Q. 18 Do you agree with ComReg's preliminary views that the incremental cost methodology should remain in place for determining the appropriate monthly rental price for Line Share? Please provide reasons for your response.

Vodafone supports this approach

Q. 19 Do you agree with ComReg's preliminary views regarding the retail margin squeeze test between retail line rental and wholesale line rental and the associated inputs of the test? Please provide reasons for your response

While in principle Vodafone is supportive of the approach proposed by ComReg, we do require a more detailed understand from ComReg as to the workings behinds the calculation of the Retail Margin Squeeze. The current market situation is unacceptable for access seekers. 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. It is clear the retail margin squeeze model is not fit for purpose in the assumptions it uses to define an efficient operator. 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 close to an accurate reflection on the margin available.

In particular, we would draw ComReg's attention to the two areas as examples where the current working of the Retail Margin Squeeze needs modification:

- The use of EEO (Equally Efficient Operator) for the margin Squeeze between SB-WLR and Retail PSTN, which is a rollover of the existing regime, would seem to be at odds with the 2013 EC recommendations, in two parts. Firstly these cost 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 squeeze determinations use the REO (Reasonable Efficient Operator) principle.

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- In Section 5.260 of the Consultation document, ComReg highlight the requirement that Eircom need to exclude SLA related penalties from the Wholesale cost base. Vodafone would go further and question as to why these costs are not included in the Retail cost stack, for margin squeeze purposes. 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. 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.

Vodafone believe ComReg need to recognise the challenges facing access seekers with poor provisioning and fault repair processes. There has been no agreement on SLAs and ComReg need to step up and recognise that competition in the market depends not only on price but also on access seekers ability to establish a credible brand through quality delivery and fault repair to the end customer. Currently, this is not the case. There is an urgent need for ComReg to either recognise the costs implications of poor service and fault repair in the 'equally efficient operator' margin squeeze test or to introduce a penalty regime with clawback's on wholesale prices for non-performance of eircom to agreed, reasonable provisioning and fault repair targets.

Vodafone believe this is a major challenge to its continued participation in fixed markets and share with ComReg a summary of the findings of a study conducted by KPMG on behalf of Vodafone group on SLA performance across a number of EU markets. A summary of this study is included in Annex 1

Q. 20 Do you agree with ComReg's preliminary views that pre-notification and pre-clearance is appropriate for the retail margin squeeze test between retail line rental and SB-WLR? Please provide reasons for your response. We welcome the views of industry regarding the alternative approach of self-compliance as discussed above at paragraphs 10.45 to 10.48.

Vodafone supports this approach

Q. 21 Do you agree with ComReg's preliminary views regarding the wholesale margin squeeze test between POTS based VUA and standalone VUA / NGA Bitstream (including a contribution towards Managed VoB costs) and the associated inputs of the test? Please provide reasons for your response.

Vodafone would again state that our response has been given without the benefit of having completed a detailed review of the underlying model and as such is based purely on the TERA report (ComReg 15/67a) and the ComReg comments as per ComReg 15/67. In saying this, we welcome the overall costing and pricing approach but would require a review of the model detailed workings to comment further.

Vodafone welcome the additional information and welcome the ComReg preliminary views on the margin squeeze criteria. We do note however that the significant price increase of €2 per line, per month by Eircom earlier in 2015 which we believe has stalled the business cases for deploying VoIP and has negatively impacted on market developments and this needs to be addressed. Vodafone have concerns

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. Vodafone is particularly concerned that the SABB pricing of over €22 does not reflect the need to incentivise a move to standalone broadband with VoIP.

Q. 22 Do you agree with ComReg's preliminary views regarding the ancillary charges for Market 4 products and services? Please provide reasons for your response.

Vodafone would again state that our response has been given without the benefit of having completed a detailed review of the underlying model and as such is based purely on the TERA report (ComReg 15/67a) and the ComReg comments as per ComReg 15/67, but in principle, Vodafone is supportive of the approach adopted by ComReg. In addition, we would also see a need for ComReg to explain in greater detail now efficiency adjustments to the Ancillary Services cost base has been calculation to ensure alignment with the costing and pricing principle articulated by ComReg in this Consultation. For example, how has the 'appropriate' national LFI, as stated in Section 5.242 of this Consultation document, being incorporated into the charges and charging for Fault Clearance?

Q. 23 Do you agree with ComReg's preliminary view that circa €0.50 per line per month is appropriate to take account of SB-WLR connection costs in the SB-WLR rental charge? Please provide a reason for your response.

Vodafone would again state that our response has been given without the benefit of having completed a detailed review of the underlying model and as such is based purely on the TERA report (ComReg 15/67a) and the ComReg comments as per ComReg 15/67, but in principle Vodafone agrees with ComReg's proposal to include the connection, and assumes that this would also apply to the disconnection fees, in the line rental.

Q. 24 Do you agree with ComReg's preliminary view that the price control period should be for three years but should remain in place any further notice by ComReg and that Eircom should review the inputs, costs and assumptions of the Revised CAM annually for material changes? Please provide reasons for your response.

Vodafone welcomes ComReg's decision to allow access seekers review the models underpinning the key product cost prices. Vodafone believe 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. For this reason Vodafone believe the prices directed by ComReg following this review should only be in place for 12 months and ComReg should assess the efficient and appropriateness of the model and comments from industry in that 12 month period.

Q. 25 Do you agree with ComReg's preliminary views regarding the pre-notification timelines and pre-clearance / compliance obligations for the SB-WLR price nationally and for SABB Outside the LEA? Please provide reasons for your response.

Vodafone agrees with this approach

Q. 26 Do you agree with ComReg's preliminary view regarding the regulatory approval mechanism and where Eircom should be allowed to reduce wholesale price for SB-WLR nationally and for SABB Outside the LEA below the regulated price so long as it does not breach the price floor set by reference to the BU-LRAIC+ costs in the LEA and subject to ComReg's approval? Please provide reasons for your response.

While questioning the use of the BU-LRAIC+ costing approach, Vodafone agrees in principle.

Q. 27 Do you agree with ComReg's preliminary view that Eircom should not be allowed to give promotions / discounts with regard to SB-WLR connections? Please provide reasons for your response

Vodafone agrees.

Q. 28 Do you have any comments on the Regulatory Impact Assessment and in your opinion are there other factors which ComReg should consider in completing its Regulatory Impact Assessment? Please provide reasons for your response, clearly indicating the relevant paragraph numbers to which your comments refer, along with relevant factual evidence supporting your views.

Vodafone have no further comments

Q. 29 Do you believe 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? Please explain your response and provide details of any specific amendments you believe are required.

Vodafone agrees

Q. 30 Do you believe that 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? Please explain your response and provide details of any specific amendments you believe are required.

Vodafone agrees and has not further comment

Q. 31 Do you believe that the draft text of the proposed Decision Instrument for Market 2 is from a legal, technical and practical perspective, sufficiently detailed, clear and precise with regards to the specifics proposed? Please explain your response and provide details of any specific amendments you believe are required.

Vodafone agrees and has no further comment

Annex 1: SLA report

A benchmarking study of Service Level Agreements (SLAs) for fixed line access services across seven European countries[1] has identified that Ireland's SLA regime has a number of variances from those that exist in other benchmarked countries.

- **No SLAs exist for some services:** There is no SLA in place for non-standard Leased Line access orders (i.e. any requiring construction), or for repair of a fault only affecting a Bitstream DSL service and not the underlying physical voice line (i.e. Broadband only fault). Similarly, there are no SLAs for Service Availability on Leased Lines (an important metric for Enterprise customers) or on ULL. In addition, there are no specific SLAs for recurrent faults, though these are not common in the countries reviewed. However, in cases where no service availability SLAs exist and no recurrent fault SLA exists, as in Ireland for ULL and Leased Lines, intermittent faults that cause significant customer impact cannot be claimed for by the access seeker unless they breach an individual fault repair time commitment. In the case of Leased Lines, a penalty for a fault may only be claimed on a specific circuit once per month.

- **No performance data is published by ComReg on how eircom performs against the SLAs in reference offers.** This is a consistent weakness in the SLA regimes across most of the countries benchmarked. This has a number of potential adverse impacts. Firstly, it may be more difficult to validate whether the SLAs in place are functioning effectively (by creating incentives for acceptable service). Secondly, greater transparency on actual performance against SLAs may provide an early signal of the need to revise SLA levels or address specific areas of poor service performance. Thirdly, collecting and publishing performance data of similar services across countries may help quickly identify efficiencies and/or inefficiencies of service delivery and highlight the relevant effectiveness of specific country SLA regimes. Lastly, greater transparency will help ensure that all access seekers are provided equivalent service performance for specified regulated services (a key requirement for effective competition).

- **The penalty structure for a number of SLAs in Ireland differs from the approach used in other benchmarked countries:** There are accepted levels of SLA breach for a number of SLAs. Standard Bitstream provisioning SLAs only have penalties apply where eircom breaches delivery SLAs in over 10% of all aggregated orders that the access seeker places with eircom, and Service Availability commitments only apply where Eircom fail to meet them in more than 5% of cases.

- **There are examples where SLAs exist but have no associated penalty if a breach occurs.** For example, there is no associated penalty for the Bitstream order SLA.

- **The Force Majeure provisions in Ireland appear to be more generously applied compared to other countries. This means that the delivery of a significant range of services is exempted from the SLA regime when force majeure (storm mode) is deemed to have occurred:** The reference offers allow for a general application of force majeure to all service delivery in instances of poor weather.

- **There are a number of SLA outliers compared to other countries benchmarked:** The Bitstream delivery timescales for a standard order – 10 working days – are twice as long as the shortest SLA for the same service which is found in Spain. Also, there is a lengthy repair time for

[1] The countries were reference offers were reviewed were Ireland, Czech Republic, Germany, Italy, Portugal, Spain, and UK.

ULL – up to 10 working days (or 11 working days if the access seeker does not provide line test data), which is 5 times longer than in some other European markets. Finally, the Leased Line SLAs for Order, Provide and Fault Repair are in the range of 20% - 60% longer than the equivalent commitments in some other markets reviewed.

Detailed Findings

Incomplete coverage of SLAs in reference offers

A review of the Eircom reference offers highlights that SLAs are not consistently applied throughout the lifecycle of the fixed access products. In key areas of fault restoration (bitstream) and service availability (ULL and Leased Line), there are no SLAs available in Ireland at all, while in the case of bitstream order validation there is an SLA but no associated penalty.

The table below sets out the SLA coverage available in Ireland, and puts this into the context of the SLA coverage available in the other six markets under review.

Table 1: Availability of SLAs and associated penalties, by access product

MARKET	ULL				Bitstream				Leased Lines			
	Order Validation	Maximum Provision Time	Service Availability	Fault Restoration	Order Validation	Maximum Provision Time	Service Availability	Fault Restoration	Order Validation	Maximum Provision Time	Service Availability	Fault Restoration
Ireland												
Spain												
UK*						*					**	
Germany												
Portugal		***				***				***		
Italy												
Czech Republic												

Key

SLA with penalty available | SLA with no penalty available | No SLA available

Notes

* The UK Bitstream SLA has no maximum lead time for an installation appointment; but a penalty is available if the appointment is missed.

**Ethernet Leased Lines obtained from BT under the EAD contract have no service availability metric; an SLA with no penalty is available for PPC and RPC circuits (out of scope of this report).

*** There is no penalty available if an individual installation appointment is missed; however, there is a separate penalty based on percentage of appointments met.

How does Ireland compare against SLAs for similar services in other benchmarked countries

As discussed above, the SLAs available to access seekers in Ireland are not always in line those that exist in other benchmarked countries. For easier comparison, a set of summary tables outlining Ireland's headline SLA levels, and their variance from the country that has the most favourable (i.e. with shortest time interval) SLA levels for comparable services. We note that it is not always possible to make a direct comparison of SLAs across countries as the equivalent service offers can different across countries. For example, the underlying infrastructure used for leased line access products can vary in technology (fibre / copper, Ethernet etc.) and bandwidth between markets (for comparability, we have attempted to use the SLA for copper Leased Lines of approximately 155 Mb bandwidth). In other scenarios where the underlying technology is similar, the SLAs can still be measured differently. For example, in Ireland the bitstream fault repair SLA is to have 100% of faults repaired within 10 working days where the access seeker provides line test data, but this is extended to 11 working days where no line test data is available. This is not a distinction made in the other markets reviewed.

Table 2: Comparison of key SLAs in Ireland with other benchmarked countries

		Best Practice	Ireland	Variance (absolute)	Variance (%)
Bitstream	**Order (working days)**	*1*	**1**	0	0%
	Provide (standard order) (working days)	*6*	**10**	4	80%
	Provide (non-standard order) (working days)	*6*	**N/A**	N/A	N/A
	Service Availability (percentage)	*99.90%*	**99.50%**	0.40%	0.40%
	Fault (hours)	*24*	**N/A**	N/A	N/A
ULL	**Order (working days)**	*1*	**2**	1	100%
	Provide (working days)	*6*	**6**	0	0%
	Service Availability (percentage)	*99.94%*	**N/A**	N/A	N/A
	Fault (hours)	*24*	**240**	192	900%
Leased Line	**Order (working days)**	*10*	**12**	2	20%
	Provide (working days)	*30*	**39**	9	30%
	Service Availability	*99.93%*	**N/A**	N/A	N/A

(percentage)				
Fault (hours)	*5*	**8**	3	60%

= SLA but no penalty in Ireland

= No SLA in Ireland

Recommendations

We have identified a number of actions that could lead to significant benefits for service providers and consumers. Regimes that embed certainty in the methods of measuring performance levels, as well as the application and calculation of consistent penalties for poor performance, are likely to benefit both fixed line incumbents and access seekers and ultimately improve customer experience. This will allow better planning and forecasting and remove the time and cost of protracted negotiation over contract performance.

The following recommendations would help improve the overall structure of the SLA regime in Ireland for fixed line services and work toward greater harmonisation across Europe. Please note that these recommendations will only apply where Significant Market Power (SMP) has been found and an SLA is seen as an appropriate remedy.

- ***Adopt a standard set of principles for fixed access reference offers***: Across the fixed product lifecycle we have identified some general principles that we believe national regulators should consider to increase certainty and transparency in the service guarantee regimes.
  - SLAs should cover the full lifecycle (i.e. ordering/provision, service availability and fault management) of the product so that the end-to-end customer experience is protected by contractual guarantees.
  - Regimes should have clearly defined processes for measuring performance, as well as calculating, claiming and paying penalties, which keep overheads to a minimum for both the incumbent and the access seeker.
  - Compliance with SLAs should be measured using consistent methodologies that are mutually agreed with impartial methods for "stop-the-clock" periods. Various methods for this are currently in use and this can lead to unclear responsibilities between the access seeker and provider which may lead to longer overall customer outages.
  - There should be timelines to confirm orders. Reasons for rejection should be provided and, where appropriate, alternative procedures proposed. SLAs should preferably apply per fault/event/line and not in aggregate or for average performance.
  - Penalties should be set at levels that incentivise good performance and provide adequate financial compensation to access seekers in the case of SLA breaches.
  - Penalties should be automatically paid by the incumbent when they fail to meet their SLAs (rather than access seekers having to submit penalty claims).
  - Incumbents should provide reports on actual performance against SLAs.
  - Regimes should be free from ambiguity, clearly identifying exceptions and 'step-out' clauses where they may be legitimately applied and provide appropriate regulatory oversight as needed to limit opportunities for gaming.
- ***Collate and publish incumbent service performance***: In order to improve transparency and enable the identification of potential discriminatory practices, regulators across Europe need to collate and publish incumbent service performance data in a clear and comparable way. The information published should include wholesale performance and the corresponding performance for the incumbent retail offers. We understand that service performance information is already being collected in some countries but is not currently published.
- **Investigate the underlying reasons for the large variations in regulated quality metrics for equivalent services in different countries**: this will allow identification of where it may be possible and beneficial to harmonise towards better guaranteed metrics for customers and access seekers.

At the European level, we also see a role for the European Commission and BEREC. We recommend the following European-wide initiatives:

- Define and publish on a regular basis **a standard set of Key Performance Indicators (KPIs)** for each EU28 country, independently measured and audited, and in a format that allows cross-country comparison of SLAs and incumbent performance against regulated SLA targets.
- Monitor and drive progress towards **harmonising key regulated quality metrics** for fixed access wholesale products in regulated reference offers. Any inability to harmonise, caused by excessive cost, or extenuating local factors should be well understood and publicised.

A list of more specific recommendations for regulated SLAs is set out below. It will be for NRAs to assess the costs of implementing these recommendations against the benefits that they can bring for consumers. Although it should be noted that embedding more certainty in the SLA process and making it more efficient will lead savings for both incumbents and access seekers.

Table 3: Specific recommendations

	Target	Focus Areas for SLA design
Order Validation	Maximum time to confirm an order and provide an appointment for provision, measured from date of receipt of order	■ A definite timeframe for responding to an order request. ■ Validation of an order to include agreed technical information. ■ Where an order is rejected, a detailed explanation to be made available (e.g. lack of availability or an error on the order form). ■ For some products (e.g. duct access), it may be possible for the incumbent to provide an alternative solution if an original order is impossible to fulfil. ■ More complex products (e.g. leased lines) may benefit from the order process being split into a number of stages (e.g. confirmation of receipt, site survey, etc.).

	Target	Focus Areas for SLA design
Provisioning Time	Maximum lead time by which an order must be provisioned, measured from date of receipt of order	■ It will help both parties to have a detailed written understanding of what circumstances will lead to an order being placed into a category requiring construction or an extended SLA timeline. ■ When an order is made and a product is categorised as requiring a certain level of construction work, it will help both parties to record evidence of the need. ■ It is more beneficial for consumers to have "provisioning" SLAs measured against an agreed delivery date and also within a maximum interval from placing the order. This gives the consumer both certainty in receiving service within a short time period, and also the ability to plan for the switch over day and any technician visits that may be required. ■ Access seekers and the incumbent should consider whether providing order forecasts could help to smooth the provisioning process. ■ The SLA would be more constraining if measured as a 100% commitment for each individual order as opposed to being measured on an average success rate. ■ Situations where 'Stop the Clock' is permitted should be clearly defined.
Fault restoration	Maximum time for repairing a fault, measured from fault being reported	■ There should be clarity over whether a fault SLA relates to complete outages only or also to service degradation. If the former, a separate degradation SLA could also be defined. ■ An SLA on the frequency with which faults can be raised against a specific circuit should be considered. ■ The SLA will be more constraining if measured as a 100% commitment for each individual fault as opposed to being measured on an average success rate (an individual customer may receive poor service without this affecting overall performance averages). ■ Situations where 'Stop the Clock' is permitted should be clearly defined.
Service availability	Commitment for the average service availability per circuit during a defined period	■ A service availability SLA is more relevant for customers if it is clearly defined for individual circuits and for circuits with redundant lines. An SLA for average service availability across all lines may also be desirable, but is potentially less relevant for managing specific end customer issues. ■ Service availability may be more commercially relevant when measured over a monthly or quarterly period rather than an annual period (as is standard in many reference offers).

We reviewed publicly available reference offers in seven countries for ULL, bitstream and leased lines (described in more detail in Table 2.1), in order to compare the non-price terms and conditions available in Ireland with regulated conditions in six other EU markets. The seven European countries reviewed were Ireland, Spain, UK, Germany, Portugal, Italy, and Czech Republic. We have sought to identify any variances in the quality terms and explore their potential impacts

The quality metrics examined relate to four stages in the lifecycle of wholesale fixed access products (Order, Provide, Fault, and Availability) and are set out in Table 3.1. The table outlines the most commonly defined approach to measuring the associated SLAs, although differences in SLAs can exist for reference offers for different products.

Table 4: Product lifecycle for fixed wholesale access products

Process	Process Description	Key SLA Metric
Order	After receiving a customer order, the access seeker places a request with the incumbent operator to provide a service via the incumbent's infrastructure. At this point, the order may be accepted if the infrastructure to the customer premises already exists. If additional cables need to be installed to a location that has not previously had broadband, the order may still be accepted (with or without an additional fee for construction, depending on the market); or the order may be rejected.	Maximum/average number of days to confirm an order from receiving the initial request.
Provide	When an order has been accepted, the incumbent operator completes any activities necessary to provide the service to the new customer. This generally involves some kind of physical intervention — a switch over may be required at the incumbent operator's exchange location. Depending on the situation, a visit to the end customer may be required, either to install a router, or to perform work on the physical cable connecting to the consumer premises.	Maximum/average number of days to provide an order from receiving the initial request.
Fault	After a service is successfully provided and functioning, there will be occasions when faults in the service arise. When these occur, the fault management procedure can involve several groups — the end customer contacts the access seeker to register the fault, which in turn may need to contact the incumbent operator to resolve a fault. When the fault is resolved, the incumbent communicates this to the access seeker, which then reaches out to the customer again.	Maximum/average number of hours to repair a fault once it has been reported.

Availability	Availability is the proportion of time a circuit / service is 'up' and providing a good service. It is therefore a measure of the percentage of time that a particular circuit, or group of circuits, can be used by the downstream customer.	Percentage of time that a circuit is functioning properly.
Cease	When the end customer cancels their service with the access seeker and / or looks to obtain broadband services from an alternate provider, the access seeker will in turn end their line rental arrangement with the incumbent operator.	No common metric used.

Most favourable SLA reference

Table 5: Comparison markets for most favourable SLAs

		Most favourable SLA level	*Most favourable SLA market*	Ireland
Bitstream	**Order (working days)**	*1*	Eircom (Ireland)	**1**
	Provide (standard order) (working days)	*5*	Telefonica (Spain)	**10**
	Provide (non-standard order) (working days)	*6*	Telefonica (Spain)	**N/A**
	Service Availability (percentage)	*99.90%*	Telefonica (Spain)	**99.50%**
	Fault (hours)	*24*	Telefonica (Spain) / Deutsche Telekom (Germany)	**N/A**
ULL	**Order (working days)**	*1*	BT (UK) / Telefonica (Spain)	**2**
	Provide (working days)	*6*	Telefonica (Spain) / Eircom (Ireland)	**6**
	Service Availability (percentage)	*99.94%*	Telefonica (Spain)	**N/A**
	Fault (hours)	*24*	Telefonica (Spain) / Deutsche Telekom (Germany) / BT (UK)	**240**

Leased Line	**Order (working days)**	*10*	Deutsche Telekom (Germany)	**12**
	Provide (working days)	*30*	BT (UK)	**39**
	Service Availability (percentage)	*99.93%*	Telefonica (Spain)	**N/A**
	Fault (hours)	*5*	BT (UK)	**8**

= SLA but no penalty in Ireland

= No SLA in Ireland

Table 6: Reference offers reviewed – Where no reference is given the RO is not published online and may need to be requested from the local network operator

Source title	Product	Year	Country	Authors	Reference
OBA	ULL, Bitstream	2013	Spain	Telefonica	http://www.cmt.ex/c/document_library/get_file?uuid=e5c25d64-eea9-440c-aaca-0c34adc1469e&groupid=10138
ORLA	Leased Line	2010	Spain	Telefonica	http://www.cmt.es/c/document_library/get_file?uuid=b8fe2e9a-de81-40e1-950a-5c5b16e2b4fd&groupid=10138
MARCO	Duct Access	2013	Spain	Telefonica	http://www.cmt.es/detalle-orferta-marco?p_p_id=101_INSTANCE_1Two &p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-3&p_p_cold_count=1&_101_INSTANCE_1Two_struts_action=%2Fasset_publisher %2Fview_content&101_INSTANCE_1Two_urlTitle=macro-2009&_101_INSTANCE_1Two_type=content&redirect=%2Fvigente-marco
LLU	ULL		UK	BT	
WBC	Bitstream		UK	BT	
EAD	Leased Line		UK	BT	
TAL	ULL	2009	Germany	Deutsche	http;//www.wholesale-telekom.de/produkte/teilnehmeranschlussleitung/

				Telecom	teilnehmeranschlussleitung/
IP-Bitstromzugang	Bitstream	2010	Germany	Deutsche Telecom	http;//www.wholesale-telekom.de/produkte/vorfeistungen-feur-isdp/ip-bitstromzugang
CFV	Leased Line	2012	Germany	Deutsche Telecom	http;//www.wholesale-telekom.de/produkte/carrier-festverbindung
Kabelkanaele	Duct Access		Germany	Deutsche Telecom	
ORALL	ULL	2013	Portugal	Portugal Telecom	http://www.ptwholesale.telecom.pt/GSW/PT/Canais/ProdutosServicos/OfertasReferencia/ORALL/Orall.htm
ADSL WS	Bitstream		Portugal	Portugal Telecom	
ORCA	Leased Line	2013	Portugal	Portugal Telecom	http://www.ptwholesale.telecom.pt/GSW/PT/Canais/ProdutosServicos/OfertasReferencia/ORCA/ORCAl.htm
ORAC	Duct Access	2013	Portugal	Portugal Telecom	http://www.ptwholesale.telecom.pt/GSW/PT/Canais/ProdutosServicos/OfertasReferencia/ORAC/ORACl.htm
LLU	ULL	2013	Italy	Telecom Italia	https://www.wholesale.telecomitalia.com/it/c/document_library/get_file?uuid=55011817-f8a8-44de-8b18-2d4cb295133d&groupId=10165
Bitstream	Bitstream	2013	Italy	Telecom Italia	https://www.wholesale.telecomitalia.com/it/c/document_library/get_file?uuid=dc95f04f-9967-46ef-bab5-cf76595e444d&groupId=10165
Leased Lines	Leased Lines	2013	Italy	Telecom Italia	https://www.wholesale.telecomitalia.com/it/c/document_library/get_file?uuid=8b2b7a3f-0dc0-4de6-8d70-87cbb976be10&groupId=10165
Duct	Duct Access	2013	Italy	Telecom Italia	https://www.wholesale.telecomitalia.com/it/c/document_library/get_file?uuid=dbd9ee02-8d04-4d9e-9653-d0bb911641ee&groupId=10165
LLU	ULL	2013	Ireland	Eircom	http://www.ericomewholesale.ie/Products/Broadband/Local_Loop_Unbundling/

Bitstream IP	Bitstream	2013	Ireland	Eircom	http://www.ericomewholesale.ie/Products/Broadband/Bitstream_IP/
Leased Line	Leased Line	2013	Ireland	Eircom	http://www.ericomewholesale.ie/Products/Data/Leased_Lines/
Duct	Duct Access		Ireland	Eircom	
DSL	Bitstream		Czech Republic	Telefonica	