



An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Pricing of Eircom's Civil Engineering Infrastructure

Non-confidential Respondents' Submissions to Consultation 20/81

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alternative operators in the communications market

**Consultation: Pricing of Eircom's Civil Engineering
Infrastructure ('CEI') - Ref: 20/81 and 20/100**

Submission By ALTO

Date: November 18 2020

ALTO is pleased to respond to the Consultation: Pricing of Eircom's Civil Engineering Infrastructure ('CEI'), CEI access in the context of the National Broadband Plan ('NBP') – Ref: 20/81

ALTO welcomes this opportunity to comment on this important consultation/call for inputs. We also acknowledge the additional time allowed to consider the important issues arising in the context of this particular consultation.

Preliminary Remarks

ALTO generally agrees with ComReg's findings in the context of the CEI paper but cannot agree with any position where cross subsidisation could occur in the market and remain unchecked or continue without proper regulatory oversight or the application of appropriate remedies.

ALTO also submits that in the event that cross subsidisation is allowed, either overtly or inadvertently as a result of this body of work, it might permit a situation where '*cherry picking*' could occur, thus creating ad-hoc commercial areas in the national map as opposed to intervention areas. This would not be a particularly welcome outcome for the market or for consumers. We note that this phenomenon is not in-fact limited to rural locations.

Response to Consultation Questions:

Q. 1 Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

A. 1. ALTO notes with concern that some of ComReg's assumption seems likely to facilitate or assume that cherry picking of the NBP IA will take place.

ALTO notes that statements made by Eircom to the Oireachtas that it costs circa €1billion for Eircom to roll out across the NBP IA and we believe if difficult areas are taken out of the mix or approach, then this cost figure could drop substantially.

We note that the NBP provider must provide its roll-out details to its competitors, and this creates opportunity and motive for a fibre landgrab in the more attractive areas of the NBP IA. We therefore are not in a position to agree with ComReg's comments at paragraphs 108 and 109 in the more attractive NBP IA areas.

NBI is a commercial operator notwithstanding it is rolling out network in the NBP IA. ComReg has not made any credible case as to why it should be entitled to favourable treatment at the expense of other operators. NBI must be required to make a proportionate contribution to common costs.

At paragraphs 51 and 52: ALTO is concerned as to whether there will be insufficient space within the duct if the copper is not withdrawn from the ducts. This is something that can be a bar to competition and progress if not reviewed and regulated properly. "Duct full" reports can often lead to findings that while the duct might be full, the network could be wholly redundant.

At paragraph 60: ALTO is concerned that given the considerable length of time since

the last CAM review, we agree fully with the European Commission comments for ComReg to revisit the access prices and quickly.

At paragraph 62: ALTO does not agree with ComReg's approach to apply all the common corporate costs of access network should be recovered from services sold in Commercial Areas. The cost of NBP to eircom over past years has been considerable and it is inappropriate for the commercial sector to effectively provide a further subsidise the NBP IA in the form of a cross subsidy.

At paragraphs 105 and 106: ALTO cannot agree with ComReg's assertion that it is highly unlikely that there will be competing wholesale NGA networks in the NBP IA (as defined) for the foreseeable future and within the current market review period. We expect that another provider which is likely to be eircom considering it already owns the duct and poles will deploy some duct and fibre within certain parts of the NBP IA.

Q. 2 Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

A. 2. ALTO disagrees with ComReg's preliminary views on the general cost methodology. The proposed approach is discriminatory and the treatment of common costs in particular will lead to inappropriate 'build/buy' signals. The approach proposed assumes common operating costs are not scalable which is contrary to all evidence including ComReg's approach elsewhere to operating cost scalability. The outcome of the proposed approach is to put a premium on FTTC pricing to cross-subsidise services in the NBP IA including CGA broadband and WLR. This is highly inappropriate and puts competitors of Eircom's in the NBP IA, in particular, at a significant disadvantage. The approach will also result in too high wholesale charges for FTTC which is not in the interest of end users or the promotion of efficient infrastructure investment.

Q. 3 Do you agree with ComReg's preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI's MIP access to CEI in the NBP IA and for NBI's transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

A. 3. ALTO does not agree with ComReg's preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI's MIP access to CEO in the NBP IA.

ALTO submits that Eircom is likely to expend considerable corporate management time addressing the various aspects of the NBP IA as the commercial area so the same overhead should apply. The ComReg proposal creates distortion of costs between the competitive areas and the non-competitive areas with operators in the competitive areas ultimately cross-subsidising both NBI and Eircom within the NBP IA. This can never be a proportionate or acceptable outcome.

ALTO submits that with regard to the transit aspects of NBI crossing the commercial areas for the purpose of providing backhaul or linkages between NBP IA we consider a smaller fee maybe merited if there are restrictions on the use of the facility. The level of discount should be modest as ultimately NBI is using the facility to compete with Eircom in the NBP IA.

Q. 4 Do you agree with ComReg's preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response.

A. 4. ALTO believes that as an initial step ComReg should assess the scale of historical under-investment by Eircom so that it is not rewarded for this. Dot Econ has recommended that ComReg carry out this exercise yet ComReg do not appear

to have conducted any analysis on this subject in the areas it matters i.e. the Rural Commercial and NBP IA footprints.

We further note that a hefty 25% pole replacement assumption has been applied to the Urban Commercial footprint. This looks like an extremely aggressive assumptions for an urban network that ought to be in good condition given FTTC network upgrades mostly occurred in the last 5 – 7 years. If this level of pole replacement is required to facilitate Eircom's urban FTTH rollout then those costs should be allocated entirely to FTTH where such replacement is above a normal run rate of a well-maintained network. FTTC (and other services) should not be contributing to this level of accelerated capex that is entirely driven by another service. If ComReg is not minded to take this approach (and we think this would be a serious error) we strongly recommend that ComReg review Eircom's actual pole replacement expenditure in the urban footprint on an annual basis and adjust an effected prices accordingly.

Q. 5 Do you agree with ComReg's preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI's MIP access in the NBP IA and (iii) the CEI costs for NBI's transit access in the Commercial Areas? Please provide reasons for your response.

A. 5. ALTO views are expressed on this issue in our response to Question 3 above.

Q. 6 Do you agree with ComReg's preliminary view that the existing regulatory asset lives for Eircom's poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

A. 6. ALTO submits that it is apparent that the asset lives of poles should either be extended beyond 30 years or alternatively ComReg should make adjustments for Eircom's historical under-investment which as noted by Dot Econ, it should not be rewarded for. If ComReg does neither it will be rewarding Eircom in the manner described by Dot Econ.

Q. 7 Do you agree with ComReg's preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI's MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

A. 7. ALTO agrees that for the build phase of the NBP IA process costs being managed efficiently for a Major Build project seems sensible and we also agree with transparency of the billing to ComReg. However, ALTO notes that once the build is complete the service billing should then be similar or the same to that provided to other large operators supporting several hundred thousand of downstream customers, and hence there should be alignment of approach across the industry, i.e., our experience of billing in Ireland is monthly electronic billing works well including at scale.

Q. 8 Do you agree with ComReg's proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

A. 8. ALTO views are set out in answer to Question 3 above. ALTO does not agree that the industry should cross-subsidise the NBP IA where NBI will be operating in its capacity as a commercial (i.e., profit making) entity. In accordance with

Regulation 16 there is no basis on which ComReg can confer special treatment on NBI in a manner that is contrary to the 2013 EC Recommendation. This is precisely what ComReg is proposing to do however and it has not provided any justification for this approach other than to suggest NBP IA is “non-commercial”. ComReg offers no explanation for why it considers this to be the case. For NBI the footprint clearly is commercial as a consequence of a government subsidy. The fact the government are subsidising NBI however, should not factor into ComReg’s decision about how prices are set in the NBP IA. In the context of the 2013 EC Recommendation that means NBI ought to be making a contribution to common cost recovery through access services in order to deliver a service that is profitable from NBI’s perspective.

ALTO considers that the Commercial calculation approach should be applied to the whole country and a modest discount allowed for the transit facilities. Indeed there will be times when commercial circuits that we buy will be for backhaul rather than break out to customers so commercial operators should be allowed to also buy such facilities at the reduced rates.

Q. 9 Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to poles and for NBI’s MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

A. 9. ALTO welcome’s aspects of ComReg’s proposals for cost sharing methodologies to set pole rental prices and would like to offer the following comments to the three proposals:

Proposal 1 - Per Operator Approach

ALTO views this approach as appearing to be most pragmatic in that each operator

pays an equal part of the rental, this tends to overlook the issue that it is likely that the outcome will nearly always favour the incumbent. For example, the likelihood is in the future Eircom will have copper on poles which we expect will continue to earn a return for many years to come as copper will certainly not disappear overnight. Eircom could in theory also add fibre to the pole for no extra pole rental costs. Thus, Eircom can continue to earn a revenue from copper whilst its growing its Fibre revenue. Whereas if an operator such as NBI were to add fibre to the pole it will take half the share of the pole rental. Regrettably, and for the above reasons ALTO does not consider this option viable.

Proposal 2 - Primary / Secondary user approach.

ALTO views this approach to be more likely to reflect the reality of pole usage. That is, where it would seem unlikely that Eircom would immediately curtail its copper revenues once another party such as NBI enter an area. As already set out above, ALTO also believes that in many areas there will be an incentive and opportunity for the incumbent to cherry pick customers and locations, as well as to serve leased line customers with fibre. Thus it seems more than likely to ALTO that the incentive for Eircom to add a fibre to the copper cable at least for the foreseeable future and beyond the term of this review. ALTO submits that it will be the actual pricing set by ComReg that will determine whether this is an excessive incentive to switch-off copper rather than the principle.

Proposal 3 - Per Customer Approach

ALTO submits that although this maybe the most complex pricing approach to implement its based on the overall outcome which is probably the best solution as such will be transparent and will avoid semantics that could be created in the previous solutions where outcomes could be based on detail of the process rather than the actual outcome for customers. ALTO agrees with ComReg's choice that this is the preferred outcome and this would also address our views that there is a considerable opportunity and incentive for Eircom to cherry pick the NBP IA. Hence this approach would help counterbalance the pricing, i.e., the more they cherry pick

the more the pricing load stays on them and vice versa.

That said we believe ComReg will need to consider whether the pricing should be applied on the whole NBP IA as one unit which could easily act to mask cherry picking, or whether the approach should be more localised which would likely give a more reflective and accurate signal for pricing.

Lastly with respect to pole pricing in the commercial areas, ALTO considers that all the costs as well as common costs should be applied to the NBP IA in the same way as the Commercial areas. We observe that the NBP has already consumed a lot of Eircom management focus and we consider that the NBI IA will continue consume a considerable amount of corporate and senior manage resource during the period of the review as this is a considerable threat to an incumbent's business. We note this features on the quarterly financial results published by Eircom as a threat. The NBP IA also covers the vast majority of the geography of the state so to suggest that it will not be a significant driver of common operating costs is simply not credible and it must pay its share accordingly.

Q. 10 Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI's MIP access to duct in the in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

A. 10. ALTO highlights its previous response. We consider that common overhead costs should be applied within the NBP IA the same as for the Commercial area with a discount scheme for transit services with no break-out.

We note ComReg's concern as to whether the per customer will be an overly burdensome approach for the pricing of duct rentals and if this were found to be the

case then ALTO supports a straight price per metre approach the same as for the Commercial areas would be a pragmatic and straight forward solution.

Q. 11 Do you agree with ComReg’s preliminary view on the use of number of customer lines and in particular the use of the number of each operator’s active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI’s MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI’s transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator’s active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI’s transit access in the Commercial Areas.

A. 11. ALTO notes though that there is a high risk this approach could be gamed as the overall approach could mask cherry picking. For example, difficult areas and possibly the most uneconomic areas to reach could be left to NBI, whereas other areas that may touch commercial areas, that are possibly circled by commercial areas such as the 340k area (we saw examples of this in Leased Lines consultations in the past) or sit on the route to other places could be viable to an incumbent in the NBA IA. Hence an overall approach to numbers could ultimately mask significant cherry picking.

ALTO also submits that ComReg should consider the implications of copper continuing for many years and beyond the period of this review. Unlike the UK where

the future copper withdrawal plans are being communicated, this is not happening in Ireland hence we must assume the copper is largely staying in place for the foreseeable future. Given the rollout of the NBI platform is expected to take seven years (possible reduced to 5 years according to the press) this is a long time. BT UK are rolling are now passing circa 416k customers premises a quarter year with fibre compared to NBI's 575k customers in 7 years. The long duration of the roll-out could have the consequence of continuing the value of copper and Eircom is currently better equipped to roll-out its own fibre access on an incremental basis to any areas within the NBP IA that become viable.

Given the opportunity and incentive for Eircom to continue its copper service until it can provide fibre, the per customer approach should count Eircom's active copper and fibre customers as one in the NBP IA rather than its active copper to NBIs active fibre customers. Additionally, ALTO notes that in the context of FTTC it is also open to Eircom for small villages or clusters of premises which would reduce costs by using the existing copper tails into the premises whilst providing the minimum 30Mbits required speeds.

These commercial issues also support the ALTO position that the Commercial Area should not cross-subsidise the Intervention Area.

Q. 12 Do you agree with ComReg's preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or under-charging by Eircom? Please provide reasons for your response.

A. 12. ALTO welcomes the fact that ComReg intends to monitor the outturns of active customer numbers (compared to the forecasts) on their respective networks

in the NBP IA on a quarterly basis and to update the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process at section 10.2.2 of the consultation paper so as to address any over or undercharging by Eircom.

As should be clear ALTO considers that areas of the NBP IA will effectively be competitive in certain areas so we consider that ComReg should be extremely careful in how it defines the services to be measured, for example to include: fibre; copper; Fixed Cellular; FTTC; and other network variants.

Q. 13 Do you agree with ComReg’s preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

A. 13. ALTO agrees that the rental pricing should still be differentiated by surface type. We submit that the work involved is quite different depending in the surface type, i.e., it is easier to construct and re-instate a trench in soil than it is to dig up a pavement or road including re-instating it back to its original state. ComReg’s proposal seems sensible in the circumstances.

Q. 14 Do you agree with ComReg’s preliminary view on a differentiated WACC rate of 4.03% for Eircom’s CEI in the context of access by NBI’s MIP NBP IA and for NBI’s transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

A. 14. ALTO believes that given there are unlikely to be any competitors to Eircom’s CEI investment in the NBP IA a lower WACC may be justified but there does not appear to be a compelling case for this. To the greatest extent possible ComReg should avoid discriminatory pricing approaches – in the main the overall approach

proposed does not do this with favourable terms to NBI to the detriment of OAOs (neutral outcome for Eircom) reflecting the general thrust of the consultation.

Q. 15 Do you agree with ComReg’s preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

A. 15. ALTO submits that while there is some logic to ComReg's preliminary view, the reality is not as simple as has been considered in the consultation paper. For example, should Eircom decide to reduce its maintenance programme which it has the opportunity to and might be incentivised to do to save costs, there is a substantial risk that should a severe weather event occur (such as experienced with Storm Darwin in February 2014) then a disproportionate number of poles may require unplanned replacement. ALTO’s expectation is that Eircom should roll-up these types costs into its annual account to set the cost of duct and poles for future years. Hence for equivalence we consider it should offer the same for other providers and roll the cost into the future rental pricing.

Q. 16 Do you agree with ComReg’s preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg’s proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

A. 16. ALTO notes that ComReg makes it clear at paragraph 681 that Eircom tends to capitalise the costs it incurs (to aerial cable assets) during its own cable deployment as part of the cable investment and thus eventually recovers the cost in the overall product cost. It therefore seems appropriate and fully equivalent that Eircom should do the same (if not already in place) for overhead drop wires to customers premises as it is Eircom that ultimately benefits from the capitalisation of this cost as it will recover its costs and a modest mark-up on this activity over the years.

Q. 17 Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI's MIP as an upfront fee levied on NBI's MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

A. 17. ALTO agrees that Eircom and NBI should be given the opportunity to find the most pragmatic settlement approach, subject to informing ComReg and that such an approach is compliant. Where agreement cannot be reached ALTO submits that ComReg should now mandate the approach to avoid the situation of a dispute delaying progress.

Q. 18 Do you agree with ComReg's preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

A. 18. ALTO submits that considering the critical nature of the NBP IA that it is essential that Eircom's costs are recorded to the appropriate regulatory standard and are transparent to ComReg and published to the appropriate detail within Eircom's regulatory accounting. ALTO agrees that this should be carried out annually so that the records are up to date and ComReg can monitor cost trends.

ALTO further submits that a separation of FTTC and FTTH costs and revenues in the regulatory accounts is long over-due as no meaningful conclusions can be drawn about the profitability of FTTC (a cost oriented service) while revenues and costs of both are aggregated and the majority of FTTC costs and revenues continue to be recorded in the Narrowband section of the regulatory accounts. This approach has in ALTO's view masked the excessive returns enjoyed by Eircom on FTTC for the last number of years. If the regulatory accounts are to be fit for purpose and shed light on such outcomes (and providing transparency is one of its primary functions), then the current accounts need significant improvements to be adopted.

ALTO also agrees that in the special circumstance of pole furniture costs being recorded to enable a choice of charging approach.

Q. 19 Do you agree with ComReg's preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg's proposal that Eircom should publish it on its website? Please provide reasons for your response.

A. 19. ALTO agrees with ComReg's preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation. This will allow Eircom to

adjust pricing as required and enable ComReg to monitor developments in what could prove to be an unpredictable market, allowing faster intervention if such is required. This would act to protect all parties on the market to include end-users and consumers.

Q. 20 Do you agree with ComReg's preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

A. 20. ALTO agrees with the proposed approach set out at paragraph 724 that prices for Generic Access to CEI should be directed for the first 5yrs subject to Eircom's obligation continuing for that period. ALTO submits that this should be subject to the safeguards described at paragraph 742 in that Regulation 13(4) and its successor in the EECC be used to swiftly address any issues during this five year period.

Q. 21 Do you agree with ComReg's preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI's MIP? Please provide reasons for your response.

A. 21. ALTO agrees with ComReg's preliminary view on the proposed price control application set out at Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726 – 737), regarding CEI access by NBI's MIP. Given the scale of the project and the possibility that costs will not completely align with expectation we consider it important that the Eircom provides proper and accurate updates to the ComReg PAM and DAM to ensure pricing is accurate.

Q. 22 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. 22. ALTO cannot agree with ComReg's approach to this Consultation or the position as set out in the Regulatory Impact Assessment – RIA.

ALTO submits that it is concerned that the Consultation paper and RIA, appear to conclude that Eircom will simply close its NBP IA copper access network and use NBI going forward.

ALTO submits that ComReg must have considered the obvious scenario that Eircom will seek to cherry pick the NBP IA and supply its own services. Hence we completely disagree with ComReg in Clause 762 where the prospects of entry by another operator are extremely limited as Eircom are very capable, and have the opportunity and incentive to directly compete with NBI on a cherry pick basis.

A very significant issue for ALTO and for the market is whether the incentives ComReg is trying to create for NBI will also benefit Eircom. For example, ALTO would expect Eircom self-supply would also benefit from the lower WACC proposal, etc.

ALTO submits that ComReg could inadvertently create distortionary market conditions by creating a cost subsidisation between the commercial area and the NBP IA by making operators such as ALTO members operating on the commercial area of the market pay Eircom's corporate overhead and not pay them in the NBP IA. This would be entirely inappropriate given the State has already had approval for State Aid - which we do not believe included this form of aid. The Consultation and

RIA does not address that its highly likely that considerable corporate time and cost in Eircom will be focused on the NBP IA. Evidence exists to the extent that Eircom view the NBP and NBI as a threat to its business and as a commercial operator NBI ought to be making a fair and proportionate contribution to common costs.

ALTO submits that the RIA has not properly considered alternatives to the current proposal on common costs and has given no consideration to the distortionary market effects the proposed cross-subsidy policy entails.

Q. 23 Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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. 23. Please see response to Question 22 above.

ALTO
18 November 2020

2 BT Communications Ireland Ltd.

BT Communications Ireland Ltd [“BT”] Response to the ComReg Consultation: Pricing of Eircom’s Civil Engineering Infrastructure (‘CEI’) CEI access in the context of the National Broadband Plan (‘NBP’)

Issue 1 – 18th Nov 2020

1.0 Introduction

We welcome this consultation concerning the pricing of Duct and Poles which largely seeks to set the rental pricing for the supply of Eircom CEI within both the National Broadband Plan Intervention Area (NBP IA) and the Commercial Area. BT supports the Government's NBP and welcomes the roll-out of high-speed broadband within the NBP IA area. Whilst we generally agree with most of the concepts addressed in the consultation there are areas where we have concerns and where we consider more work is required. Given that state aid has been provided for the NBP IA we consider the additional cross subsidy that ComReg is engineering from the Commercial operators is not justified and inappropriate. Whilst we acknowledge the ComReg plan to incentivise Eircom to withdraw its copper network, we are concerned that such could be gamed and ComReg should build in safeguards were such to occur. For example a regime based on the full NBP IA could easily mask significant competitive encroachment, which we are not saying is wrong, however the incentive regime may need to be reviewed more quickly than envisaged.

Our key issues are summarised below:

1. **Updated Commercial Area Pricing Model** – We welcome that ComReg has updated the pricing model regarding the Commercial CEI area given the reported availability of more recent data. In an evolving area this supports our concerns and those expressed by the European Commission in its response to both the BB consultation¹ and the Weighted Average Cost of Capital (WACC) consultation² for ComReg to update its data. Our only concern is that the rates should be lower as the operators trading within the Commercial should not be cross subsidising the NBP IA. Please see 2 below for our comments in this matter.

¹ Market Review – Wholesale Local Access (WLA) provided at a Fixed Location – Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products. Decision D10/18 – 19/11/2018.

² Review of Weighted Average Cost of Capital (WACC) – Response to Consultation and Final Decision – Mobile Telecommunications, Fixed Line Telecommunications, Broadcast Transmission. Decision D10/20 – 14/10/2020.

- 2. Cross -Subsidy** - A major concern for BT is that ComReg appears to be seeking for the industry to assist in paying part of the incentive fee for Eircom to withdraw its copper network within the NBP IA. Whilst ComReg do not directly ask for this contribution from commercial operators, the fact that ComReg is seeking for operators in the Commercial Area to pay Eircom's corporate overheads for CEI whereas these will not be applied in the NBP IA is a clear form of cross subsidy.

ComReg states that Eircom will need less corporate focus within the NBP IA so this overhead should not apply within the NBP IA. In our view this is not realistic. Any operator facing a circa 25% loss of its fixed line access base will consider this a major concern and will require considerable senior time to mitigate the impacts, indeed not be concerned would be irresponsible for that operator and raise fiduciary compliance concerns. Hence, we strongly disagree with the proposal for what is a cross-subsidy and seek for the Eircom corporate overheads to apply equally within the Commercial and the NBP IA.

- 3. Market Failure in the Commercial Area** - With reference to clause 766 within the Regulatory Impact Assessment of the consultation we understand that this consultation has been focused on the NBP IA rather than the Commercial areas, so the substantial market failure issues with the Commercial area have not been addressed in this consultation. It is our view that the current duct and pole offers within the Commercial area are substantially not fit for purpose, for example the product does not provide for operators to resolve duct faults within anything like an acceptable timeframe, effectively rendering the service unusable for many services.

Whilst we appreciate the considerable efforts of ComReg such as introducing a raft of remedies in the Decision D10/18 the market failure issues are not resolved. In many ways we view the Duct and Pole as a re-run of LLU in Ireland and ComReg now need a different approach to resolve what we consider is a major market failure. Whilst we welcome the price reductions announced in the consultation they alone will not address the market failure of the Commercial Area. We consider it

laudable for ComReg to apply so much effort to make the NBP IA work and the same effort and attention is now needed to prevent this continuing market failure.

4. **Urgent need for the CEI provider to substantially improve its product set.** We appreciate this consultation is primarily focused on the financial aspects of CEI, however in our view the CEI product needs to improve substantially, in many areas, but not limited to, Passive Access Records (PARS), ancillary pricing information, for the SLAs to be fit for purpose and for the removal of the many unnecessary aspects that make the product highly inefficient, slow and costly. This applies to both the NBP IA and the Commercial Area. For example in our view the PARS is substantially sub-standard which is creating inefficient planning and operators are having to print out low definition PDF files and patch maps together manually on paper, when most operators including ourselves and we believe Eircom would have state of the art electronic planning tools that work to high accuracy. We strongly believe that this data can be electronically communicated using a standardised electronic format from Eircom to operators and vice versa for updates. This would remove considerable inefficient manual handling and improve the accuracy of the planning. In our view these are major barriers to the effective supply of CEI and they all need to be removed for this market to succeed. Pricing is one element of making CEI work, and without all the key elements including those above CEI will struggle to succeed.
5. **Potential for Eircom to Provide fibre access in parts of the NBP IA.** We agree with the rationale for NBP and agree in many locations/areas it would seem unlikely that viable commercial demand will emerge, however we believe it is possible that a level of demand could emerge in some areas of the NBP IA to make a viable proposition for Eircom to decide to provide its own fibre access services. For example the construction of new housing estates, the closeness of existing fibre within the commercial areas (such as locations sharing boundaries with commercial areas) or even breaking out from a trunk network (akin to adding a new slipway to a motorway that is going through a rural area).

We are not aware of any legislation that prohibits Eircom from entering the NBP IA to provide fibre access service and indeed such a restriction or non-compete contract to prevent or restrict competition might raise competition law concerns. We also observed ComReg's leased lines (WHQA) consultations found that some areas without services are surrounded by other areas with services, so much so that ComReg designated these as competitive on the basis that the services could be extended into these areas. If they are not competitive then ComReg should not have defined them as competitive. We believe the same concept applies to broadband.

Incentive and Opportunity - Within the 2020 ComReg Fixed Access Call Origination (FACO)³ consultation table 66 on page 373 shows an Eircom target rollout of 2.4 Million premises, i.e. 100% of the country by 2020. Leaving aside whether there is such a target and hence an aspiration, Eircom has the advantage of experience gained from the 340k rural area and more recently its Irish Fibre Network (IFN) deployment. Eircom also owns the existing telecoms duct and pole network within the NBP IA giving it a natural advantage and a lower threshold for commercial viability within the NBP IA than other operators. Ultimately it seems likely Eircom would have the incentive and opportunity to deploy its own fibre in some localised areas within the NBP IA if aspects of it are or become commercially viable. If the level of such a deployment were small it may not impact ComReg's NBP IA pricing model, however we believe ComReg should reclassify these areas/addresses along the lines we suggest to our response to question 11.

Separately we would agree with ComReg that the impact of the incentive should be monitored at least annually to both help set CEI prices for the following year but also to monitor whether the ComReg approach requires updating, for example if Eircom or another operator starts to provide fibre services within the NBP IA.

6. Leased Lines (WHQA) services primarily address the business market and are largely fibre supplied hence we assume Eircom will continue running

³ Market Reviews – Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non-Residential Customers – Wholesale Fixed Access and Call origination. Consultation and Draft Decision - ComReg document reference 20/46 – 17/06/2020.

these services within the NBP IA. Indeed there could be enough commercial incentives for other operators to deploy fibre to large businesses such as data centre type sites within the NBP IA. For resilience reasons full diversity of supply could be required for such customer sites requiring more than one network operator to provide. It's not clear how the ComReg proposals address this market, for example would it be treated as Commercial or NBP IA.

In summary

Whilst we support the NBP IA and generally support the ComReg proposals (other than the Cross-Subsidy Issue) we agree close monitoring is required and we consider ComReg should keep its regulatory options open as further intervention could be required in the coming years.

2.0 Response to the Detailed Questions

Q. 1 Do you have any comments or views on the matters considered in this Section 3, including the regulatory objectives pursued by ComReg? Please provide reasons for your response.

BT Response

There are several clauses within section 3 which we would like to address with the following comments:

1. We are very disappointed with the standard of the Duct and Pole services offered by Eircom and our view is the service is still not fit for purpose, so ComReg's observation that there has been limited demand for access to Eircom's CEI is not a surprise and this situation is unlikely to improve. However it is a surprise and worrying that ComReg consider the market will take off given the supply issues. This situation is disappointing given the considerable work of ComReg in laying down many regulatory remedies such as in the 2018 Broadband Market Review D10/18. Hence in our view the Commercial CEI area remains incapable of operating properly and ultimately ComReg needs to find another way to make this market work. We simply don't know whether the same issues will be experienced within the NBP IA and if they do, the consequences for the NBP could be serious.

2. We agree with the European Commission comments to the BB Market Review and the WACC for ComReg to update its CAM model more up to date data and the comments have been vindicated in our view given the reduction in Commercial Duct process.
3. We do not agree with ComReg's approach that all the common corporate costs of access services should be recovered from services sold in Commercial Areas. We consider this wrong as the senior time and corporate costs for Eircom to manage and mitigate its risks in the NBP IA are likely to be considerable considering 25% of its access base is potentially changing hands. No operator would take this lightly.
4. As per our earlier comments we consider there will be areas of the NBP IA that could be viable to an operator with a lower commercial viability threshold in the NBP IA such as Eircom, and commercial viability can change on a local basis with the development of new housing estates, rural datacentres etc.

Whilst we can see some of the very difficult areas to reach meeting ComReg's assumption it seems highly likely that there will be a level of commercial entry to provide fibre access into NBP IA. Firstly note from statements made in the Oireachtas that it would have cost Eircom circa 1billion for Eircom to roll out across the NBP IA, hence if the difficult areas are taken out, this cost could drop substantially. Combined with Eircom appearing to have the lowest threshold of any provider in the country to enter the NBP IA given it already owns the CEI network and support network there could be an opportunity and motive for a landgrab in the more attractive areas of the NBP IA.

5. Although ComReg has not addressed the situation of cherry picking/encroachment of the NBP IA within its incentive approach for the withdrawal of copper, we believe ComReg does need to consider this outcome and the consequences both for a minimal and material encroachment. For example should these areas be refined as commercial.

Q. 2 Do you agree with ComReg’s preliminary views on the general costing methodology principles? Please provide reasons for your response.

BT Response

We agree with ComReg’s preliminary views on the general cost methodology principles to create send appropriate build-or-buy signals to alternative operators whilst also ensuring that Eircom does not over or under recover its costs.

Q. 3 Do you agree with ComReg’s preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI’s MIP access to CEI in the NBP IA and for NBI’s transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

BT Response

We do not agree with ComReg’s preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI’s MIP access to CEI in the NBP IA. Our primary view is the corporate overhead costs should apply equally to both the Commercial and NBP IA areas as the proposed solution is in effect an inappropriate cross-subsidy as discussed previously.

With respect to the transit aspects of NBI crossing the commercial areas for the purpose of providing backhaul or linkages between NBP IA, we consider a smaller fee maybe merited if there are restrictions on the use of the facility. The level of discount should be modest as ultimately NBI is using the facility to compete with Eircom in the NBP IA.

Q. 4 Do you agree with ComReg’s preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response.

BT Response

No comment.

Q. 5 Do you agree with ComReg’s preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI’s MIP access in the NBP IA and (iii) the CEI costs for NBI’s transit access in the Commercial Areas? Please provide reasons for your response.

BT Response

We are concerned to ensure that Eircom has the correct level of incentive to ensure it maintains its poles to an appropriate quality standard within the NBP IA and in the Commercial areas. Provided this is in place we would consider issues of underinvestment in the maintenance of poles and ducts to be unacceptable and the other operators within the NBP IA and the Commercial area should not bear the cost of such.

Q. 6 Do you agree with ComReg’s preliminary view that the existing regulatory asset lives for Eircom’s poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

BT Response

No Comment.

Q. 7 Do you agree with ComReg’s preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI’s MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

BT Response

We found the wording of this question a little confusing hence for clarity we have interpreted this question in line with the ComReg’s text of clause 418. I.e. firstly dealing with the process costs for the build phase and secondly the process costs. We understood the State Aid from the Gov’t was to help fund the build phase hence the ComReg approach appears additional to this. If the parties agree to adding aspects of the initial build process costs to the rentals within the NBI IA then such should be for the parties to agree. As regards ongoing process we would have expected the billing to be on a monthly rather

than a yearly basis in line with the approach for the rest of industry. This would avoid lengthy delays in processing the bills at year end and enable better real time management of costs, resolving any disputes prices at the time rather than at year end. ComReg could still view the totals at year end.

Q. 8 Do you agree with ComReg’s proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

BT Response

As per our response to question 3 we do not agree that the industry should cross-subsidise the NBP IA. We also consider that ComReg need to consider redefining any areas where another party offers Fibre broadband within the NBP IA as commercial and as we suggest in our response to question 11.

Q. 9 Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to duct as well as NBI’s MIP access to poles in the NBP IA in the Commercial Areas? Please provide reasons for your response.

BT Response

Comments to Proposal 3 – Per Customer Approach

We agree with ComReg’s preliminary conclusion that this the best approach as it’s based on the overall outcome which is probably the best solution as such will be transparent and will overcome the issues we identify below for proposals 1 and 2

Proposal 1 – Per Pole Approach

Whilst we can see the simplicity of the Operator per pole model, we note this could effectively benefit an existing copper operator as there would be no additional rental to the copper operator by adding fibre to each pole. I.e. Pole rental split by operator does not count the cables or facilities enjoyed by each

operator. It also enables a model for the copper operator to further sweat its copper asset whilst rolling out its own fibre. The copper could either be left in place for an extended period or withdrawn when all have moved to fibre.

Proposal 2 – Primary / Secondary user approach

This approach would treat the copper provider as the primary provider until the copper is removed at which time the fibre provider becomes the primary provider. This would seem to avoid the issue of proposal 1 above with the per operator approach, however this approach could lead to a far more aggressive approach to the withdrawal of end customer services, with some customers being force migrated to fibre to continue service. Additionally, what will happen concerning the rentals of other service products such as leased lines that are not within scope for the NBP.

In summary we consider proposal 3 – Per Customer Approach is the most appropriate as such is dependent on the outcome. However as discussed earlier in our response we consider ComReg needs to build into its model the possibility that another operator such as Eircom may enter parts of the NBP IA to provide their own fibre access. Please also see our response to question 11.

Q. 10 Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI’s MIP access to duct in the Consultation on pricing of Eircom’s CEI ComReg 20/81 Page 210 of 213 in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

BT Response

As per our previous response we consider that common overhead costs etc. should be applied within the NBP IA the same as for the Commercial area with a discount scheme for transit services with no break-out.

We also agree for ComReg to use a simpler approach for the Commercial area should the per customer approach prove too complex.

Q. 11 Do you agree with ComReg’s preliminary view on the use of number of customer lines and in particular the use of the number of each operator’s

active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI's MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI's transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator's active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI's transit access in the Commercial Areas.

BT Response

We agree with ComReg that the per customer approach based on the use of each operators number of lines and active customers on their respective networks is the best way forward although as discussed below we consider ComReg will need to closely monitor for Eircom fibre access deployment within the NBP IA which we believe should be addressed as discussed below.

We also believe ComReg should consider the implications of copper continuing for many years and beyond the period of this review given the NBP rollout is planned to take 7 years, plus at this time Eircom is designated the USO supplier and what are the plans for this?

Given the opportunity and incentive for Eircom to continue its copper service and possibly selectively deploy its own fibre services within the NBP IA, there are several considerations as to how to proceed.

- a. If Eircom reach the customer location first with their fibre then it seems likely that state aid should not be applied to these locations given they have been commercially deployed. Hence these locations should be deemed part of the Commercial Area and removed from the NBP IA. This scenario is probably the easiest.
- b. However if Eircom overlay NBI then ComReg will need to consider the best way to address this situation as such a commercial deployment by Eircom event would suggest the location is commercially viable. The best solution maybe to move this location/customer address to the

commercial area but the cost modelling for NBI would need to be reconsidered.

- c. Continue the per customer approach but count Eircom's copper and fibre customers in the NBP IA as they are both availing of the duct and pole facilities.

We also consider that ComReg should seek to understand whether the benefit it is looking to bestow to support the NBIs roll-out provides an increased opportunity and incentive to Eircom to roll-out fibre. For example will Eircom be able to avail of the same benefits of NBI. Our assumption is yes.

We are not saying this outcome is wrong as ultimately the aim is to provide high speed broadband to end users within the NBP IA, however the incentive approach for Eircom to remove its copper network appears to be a lot more complex than the consultation appears to suggest.

Lastly, ComReg raise a question as to how to measure the number of customers in the NBP IA. We would note that active customers are billed, and we would suggest ComReg look to pull both the wholesale and retail billing data which can be reverse engineered to find locations. We would expect there to be an increased use of the Eircode which should also help in this task.

Q. 12 Do you agree with ComReg's preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or undercharging by Eircom? Please provide reasons for your response. 135

BT Response

We welcome and agree with ComReg's preliminary view to monitor the outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over or undercharging by Eircom. A reason for supporting this ComReg proposal is our level uncertainty with this plan to incentivise the withdrawal of copper hence

measuring the NBP IA at quarter intervals should both enable ComReg to see if the pricing is correct and whether the whole proposal is working.

As per our earlier other responses we consider parts of the NBP IA could become competitive so we consider that ComReg should be careful in how it defines the services to be measured, for example to include both fibre, copper, Fixed Cellular, FTTC and other variants.

Q. 13 Do you agree with ComReg's preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

BT Response

We agree with ComReg's preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type. Our reason for supporting this is it's easier to dig up and re-instate a grass surface than concrete, pavement or a road.

Q. 14 Do you agree with ComReg's preliminary view on a differentiated WACC rate of 4.03% for Eircom's CEI in the context of access by NBI's MIP NBP IA and for NBI's transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

BT Response

We agree with ComReg's analysis that the Eircom duct and pole network may be more reflective of utility services, however we also know that the ducts and poles in the NBP IA and in the Commercial areas are the same product. Hence, we consider the lower WACC rate should apply to all duct and poles in both areas. Our view is a modest discount (not a reduction in the WACC) could be applied to the transit aspect given that NBI will be prohibited from offering services within the commercial area, however the discount should be small as NBI is still achieving commercial gain within the NBI IA.

In summary we consider the NBP IA should be subject to the same WACC as the Commercial area and vice versa.

Q. 15 Do you agree with ComReg’s preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

BT Response

We agree Eircom should be able to recover any additional costs associated with replacing a pole with pole furniture located on it for reasons of cost causation. However, it’s not clear to us how the capitalisation on Eircom’s systems will work as the other operator pole furniture remains in the ownership of the other operator. I.e. We are assuming Eircom’s costs are for the transfer of the furniture rather than to re-provide it.

Separately we are concerned that an additional condition needs to be added to the above. We are concerned that any attempt by the pole (or duct) provider to cut back on maintenance of the network or operate a sub-standard pole replacement programme could exacerbate the impact of a natural event such as very poor weather. Hence in our view it would be unfair to burden the NBP IA state aid provider to pick up further costs due to what could be considered a poor business decision by the pole provider. The impact of unplanned works tends to be higher than if the poles had been maintained within a scheduled fit for purpose work programme.

ComReg previously published the expected replacement rate for poles so it should be possible for ComReg to apply a test and apply a discount if the costs had been inflated due to poor maintenance etc.

Q. 16 Do you agree with ComReg’s preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg’s proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

BT Response

We agree with ComReg's preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge due to the principle of cost causation and the operator running the cable could also have self-provided this facility.

In the case of tree trimming associated with pole replacement, we agree with ComReg's proposal that such costs should be recovered as part of the pole rental charge. We understand the work will need to be carried out to enable the pole replacement and all cables/operators in the cable span will benefit. In many cases the operators may not be aware of the work so costs could be unexpected. For these reasons, and to save a huge amount of administrative work determining who to charge, adding the cost to the rental is sensible. We would not expect the costs to be considerable so the addition to the rental should be tiny.

Further related Issue

We also consider that the wholesale provider should cover the tree trimming costs for deployment of the network to the customers premises Network Terminating Point (NTP). This is the party that has responsibility to provide the service and ultimately the wholesale provider should benefit through recovering the costs in the wholesale rental costs. We are seeking for ComReg to clarify this matter through this consultation so that end customers are not faced with further unexpected costs and the delays that this causes.

Q. 17 Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI's MIP as an upfront fee levied on NBI's MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

BT Response

If Eircom is earning an income for its duct and pole network as today with its own services, has the upkeep of the duct and pole network not already been paid for in the existing pricing? Is this not how regulatory pricing works? Hence we don't believe Eircom should be paid to update its network to a standard that has already been paid for. However we consider that if the duct and pole network is to be augmented for NBI then an agreement should be attempted

between NBI and Eircom in the fee for this work. Otherwise ComReg should engage to help find a solution.

Q. 18 Do you agree with ComReg’s preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

BT Response

We agree with ComReg’s preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705. We also agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems.

In our view CEI is still in its infancy as demonstrated by the lack of demand identified by ComReg earlier in the consultation, hence it’s important for ComReg to build a bank of good quality financial data to inform and enable future regulatory decisions to assist the market.

With regards to the aspect of pole furniture provided by other operators we consider these assets would remain in the ownership of those operators so Eircom would not be reporting this, but it is clear Eircom will conduct work on these assets such as during pole replacement and we assume these are the costs that ComReg is seeking to isolate within the cost accounting system. We would completely agree for these costs to be transparent as they will be used to either charge the costs out or add to the rentals.

Q. 19 Do you agree with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this

Consultation? Do you agree with ComReg’s proposal that Eircom should publish it on its website? Please provide reasons for your response.

BT Response

We agree with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation.

This issue does raise a concern in that the existing services provided by Eircom should have been maintained to an appropriate standard over the years given the wholesale rentals that Eircom earns. Whilst we can understand the potential need for investment for certain aspects of the NBI deployment which they could also self-supply rather than using Eircom, we would be concerned if the investments are largely to bring the Eircom network to a standard that it should already be at and has already been paid for through rentals etc. This also leads to a further question that should Eircom then use these upgraded services for itself, would it then have to contribute to cost of any such upgrade.

Q. 20 Do you agree with ComReg’s preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

BT Response

We agree with ComReg’s preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724. The NBP IA is likely to require greater attention from the participants in the coming years whereas the Commercial Area is more likely to follow a traditional regulated service approach and so less pricing intervention will be required. We also support the ComReg safeguard described in clause 742 that Regulation 13(4) and its successor in the EECC being used to address any major concerns/issue during this period.

Q. 21 Do you agree with ComReg’s preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI’s MIP? Please provide reasons for your response.

BT Response

We agree with ComReg's preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI's MIP.

The State Aid nature of the NBP IA is supported by BT and we do appreciate this is a major undertaking by the State which has the right to expect an efficient and cost-effective deployment. For this reason we support ComReg's annual review process as it will be important to closely monitor the finances so that any price control adjustments that are required can be achieved promptly.

Q. 22 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.

BT Response

We note that the approach to the Impact statement is often by reference to the discussion in the consultation hence we would also ask that our responses to the questions are also considered as part of our response to the Regulatory Impact Assessment. However we would additionally like to add the following key points:

- a. Firstly we would like to say that BT supports the NBP project and we generally support ComReg's intention and approach to create an environment to assist the success of the NBP. We acknowledge that such is complex and therefore welcome the opportunity to comment.
- b. As indicated in our many responses within this document we consider an impact to be considered is what happens if it does not go to plan. For example to BT it appears obvious that there will be a level of entry into the NBP IA by another operator which we believe is most likely to be Eircom. We consider Eircom has the lowest threshold for commercial viability within the NBP IA given it owns the duct and pole network, it has the experience and capability as demonstrated through its 340k and IFN roll-out and has both the opportunity and incentive.

Whilst we see this entry as limited and localised, such as for infill areas or areas close to commercial areas we do believe ComReg need to consider the implications should this occur. We have indicated our thoughts, which we agree need further refinement in our response to question 11.

- c. A reason why we consider the implications of another operator entering the NBP-IA to provide fibre access is what happens to the incentives that ComReg is trying to provide to the NBP provider. For example if the other party deploys first should this location/area be re-classified as within the Commercial Area otherwise would the incentives to support the NBI provider be inadvertently diverted to a commercial player. These are important matters and need to be considered.
- d. We would also like to make the point that there are very few communication providers/operators in Ireland that have the resources to undertake the deep financial analysis increasingly being demanded for these consultations. In our view this is effectively limiting the ability of smaller operators to engage properly and as such we consider a different approach is needed to engage the wider community of operators. For example to bring more of the financial modelling into the main consultation but in a simpler and more presentational (Ladybird) approach so a wider community can understand the real levers and drivers.
- e. With reference to clause 766 i.e. we understand this consultation has been focused on the NBP IA rather than the Commercial areas, so the substantial market failure issues with the Commercial area have not been addressed in this consultation. It is our view that the current duct and pole product offers within the Commercial area are substantially not fit for purpose, for example the SLAs offered don't allow operators to resolve duct faults within anything like an acceptable timeframe to provide a community of premises or business customer where repair a short repair time is essential. Whilst we appreciate the considerable efforts of ComReg such as in the Decision D10/18 we consider these remedies, whilst largely correct, are not being implemented properly. In many ways we view Duct and Poll as a re-run of LLU in Ireland and ComReg now need a different approach to resolve what we consider is a major market failure. Whilst we welcome the proposed price

reductions in the consultation they alone will not address the market failure of the Commercial Area. We are concerned the same issues will be found to exist within the NBP IA, so urgency is required to resolve these matters. If such don't exist within the NBP IA then it would seem appropriate for a regulatory investigation to commence.

Q. 23 Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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.

BT Response

We would like to offer the following comments to the Draft Decision:

Generally our view of the draft decision is reflective of our other comments to the consultation however we would like to make the following specific comments.

- a. We are disappointed that the consultation nor the draft decision addresses the market failure that is the CEI Commercial Area. Whilst it is helpful that the Duct prices are to reduce for the Commercial Area (with the exception that we don't agree with the cross subsidy to the NBP IA), there are still considerable issues that are causing the Commercial Area to experience failure and these need to be addressed by ComReg with the utmost urgency. Please see our introduction points 3 and 4 and our response to question 22.
- b. We fully support clauses 12.6.4 and 12.6.11 that Eircom is not allowed to raise additional duct and pole charges until it demonstrates to ComReg's satisfaction that the charges are valid. We would request ComReg add a further element to this requirement that any such approved additional charges should be published in a public domain price list the same as for other regulated services so that all operators may view the charges to assist their planning and costing of the service. It is a significant issue for BT and possibly other operators that they don't know the actual charges for the various ancillary aspects of

the Duct and Pole services. This seriously hinders deployment planning.

- c. We also consider that the Draft decision should look to include a clause for the CEI provider to provide Passive Access Records (PARs) in a sufficient format and also a down-loadable electronic format so that users of the CEI products can load this data directly into their systems to efficiently plan their deployments on their own Geographic Information Systems (GIS). In our view the current format is inefficient and creating a huge amount of unnecessary manual work and additionally it's not as precise as it should be without a lot of additional manual effort.
- d. We do not agree to a different WACC rate being applied in the NBP IA for the reasons previously outlined in our response to the questions, plus the Commercial Area is currently experiencing market failure and it should not be penalised further.
- e. We agree to 12.8.1 and similar obligations within the draft decision to seek a justification of the continued cost orientation of prices.

End

3 Eircom Limited (incl. BRG report)

eir

Response to ComReg Consultation:

**Pricing of Eir's Civil Engineering Infrastructure ('CEI')
CEI access in the context of the National Broadband Plan ('NBP')**

ComReg Document 20/81



18 November 2020

DOCUMENT CONTROL

Document name	eir response to ComReg 20/81
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The comments submitted in response to this consultation document are those of Eircom Limited and Meteor Mobile Communications Limited (trading as 'eir' and 'open eir'), collectively referred to as 'eir Group' or 'eir'.

EXECUTIVE SUMMARY

1. Duct and Pole products allow operators to reach customers with their services. These passive products provide the very backbone of Ireland's telecommunications reach. Irrespective of whether a pole or duct is located in the most remote part of rural Ireland or city landscape, their functionality remains the same. Furthermore, given the large capital (and sunk) cost associated with passive infrastructure deployment, regulators throughout the world (including through policy initiatives such as the Broadband Cost Reduction Directive) have tried to ensure that, wherever possible, existing passive infrastructure is used — that it is available at a fair price and reflects a sufficient return both in terms of the initial investment and cost of future investment.
2. In ComReg's Consultation, despite its own market analysis findings in 2018 and pricing approach in 2016, ComReg now proposes that a duct is a duct and a pole is a pole in all circumstances except where NBI is concerned. NBI's favoured regulatory prices, depending on the location in Ireland and NBI's reason for access, result in lower prices, sharing of costs and pricing options that are not available to any other operator in the market. These special discounted prices for NBI increase the risk of regulatory failure (i.e., that regulatory intervention leads to poor market outcomes for both industry and consumers). ComReg's proposed approach is counter to the typically desired policy outcomes, in that it fails to reduce duct and pole access prices for other operators seeking similar access to NBI in "commercial areas" — as such, it goes directly against the principles of the Broadband Cost Reduction Directive and foregoes the opportunity to ensure greater infrastructure-based investment (consistent with its Regulatory Objectives) from other operators.
3. The preferential terms of ComReg's proposed "per customer model", reflect discriminatory pricing options that ensure NBI will only absorb more costs depending on its relative success. The theoretical justification for this proposed approach, to ensure eir is not "over" incentivised to switch-off copper in these areas, fails to recognise that ComReg has imposed a series of other regulatory obligations that prevent eir from undertaking such an activity. There is for example only a passing reference by ComReg to eir's USO obligations. Moreover, eir has a number of further extant wholesale regulatory obligations in respect to voice and broadband services, which rely on copper. As such, the premise that pole and duct prices can somehow influence copper switch off is simply incorrect. The fact that ComReg's consultant, DotEcon, therefore presents this as the singular reason, upon which it considers that the "per customer model" is justified, is concerning.
4. Similarly, ComReg's consultant, Europe Economics, departs all too easily from its own previous advice to other regulators on the relevant considerations required in selecting appropriate peers to determine the hypothetical cost of capital for eir. The chosen peer group does not contain a single telecommunications provider (providing civil engineering infrastructure or otherwise) and the 'selected' parameters and resulting range of analysis

are materially below other regulators' recent determinations for telecommunications civil engineering infrastructure; telecommunications; and utilities. Finally, no consideration is given by Europe Economics as to the impact of ComReg's proposed new pricing methodology for NBI on the Weighted Average Cost of Capital (WACC).

5. As set out in the BRG Report, the extent to which both ComReg and Europe Economics portray that there is a reduction in risk for eir is completely overstated in two principal ways;
 - (i) the presence of NBI as a customer does not and cannot insulate eir's duct and pole business from fundamental risks that it currently also faces i.e., risks of substitution to other providers' civil engineering infrastructure (a possibility acknowledged by Europe Economics) and the risks of substitution to non-fixed-line technologies; and
 - (ii) ComReg's proposals for sharing common network costs associated with poles and ducts create additional risk in that until and unless NBI's network is successful in gaining significant end-user acceptance, eir will rely on its legacy copper products to cover its costs.

6. Further, ComReg and its economic advisers appear to have misunderstood the nature of the Irish State's step in rights, which merely reduce the risk of default by NBI rather than eliminating the risks identified in respect to input substitution and end-user demand. Of course, the lack of a default risk is already evident in appropriate peers by using investment grade telecommunication providers.

Material model errors

7. eir has identified four material modelling errors;
 - (i) the number of premises in the Intervention Area (IA) is materially over-stated at 537,000 premises. No consideration is given to vacant, off-network connections, or multiple dwellings. eir estimates that the appropriate number of premises is [REDACTED]. Taken together with a more appropriate, yet conservative take-up rate including the number of estimated active services in the IA at [REDACTED], this results in significantly higher prices than published by ComReg;
 - (ii) both the pole and duct models fail to consider the appropriate WACC that was mandated by ComReg when assets were deployed by eir. As the associated regulated prices set by ComReg ensure appropriate cost recovery over time, ComReg cannot just reset those 'tilts' today and assume that the current WACC of 5.61% has always been in existence. ComReg has acknowledged such unintended outcomes in the past. However, the models, as presented, are not capable of being amended and therefore are not fit for purpose to ensure eir's efficient cost recovery over time – particularly as ComReg has proposed that the models are updated annually;
 - (iii) the proposed regulated prices for NBI, presented to interested parties for consultation, are based on two very different volume assumptions. When consistent assumptions are used to the alternative cost modelling approaches it results in very different outcomes than those consulted on by ComReg; and
 - (iv) to reflect that fact that duct access is only likely in urban areas, ComReg states in the Consultation that the proposed generic duct access prices are based on commercial area costs. However, generic duct access is only likely to occur in urban commercial areas. As the Draft DAM in implementation takes a weighting of urban and rural costs in deriving those prices — given that the cost of rural commercial ducts is lower — it results in a material under-recovery of eir's costs when duct is accessed in urban commercial areas.

8. Taken together with the relevant adjustment to the underlying WACC (which the BRG Report conservatively estimates is more closely aligned with ComReg's recent WACC decision at 5.61%) and the required update to ComReg's market analysis, eir finds that further rounds of consultation are required with interested parties, consistent with the consultation procedures referred to in Article 6 and 7 of the Framework Directive.

ComReg's regulatory obligations

9. ComReg's proposed per customer approach is not in line with ComReg's regulatory objectives. In particular;

- (i) the per customer approach proposed by ComReg is totally inconsistent and contrary to any of the desired regulatory outcomes envisioned by Regulation 6 (1) of the Access Regulations;
- (ii) Regulation 8 (6) (a) and (b) which require ComReg to impose proportionate and objectively justifiable remedies, which are based on the nature of the problem identified. eir notes that ComReg defined a national WLA market on the basis of the national ubiquity of eir's civil engineering infrastructure (CEI) and did not determine in D10/18 that the geographic differentiation of CEI remedies was required to address differences in competitive conditions. ComReg's justification to charge different prices to NBI is not consistent with the nature of the problem identified in ComReg D10/18. In any event, the manner in which ComReg proposes to address any differing conditions, that it now believes to exist, is incorrect given the lack of assessment of such differing conditions;
- (iii) Regulation 13 (2) of the Access Regulations *"to allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project"*. ComReg and its consultants have completely failed to consider the implications of the per customer approach on risk and thus the WACC. Indeed, as evident from the Terms of Reference, it appears not to have even been in scope for consideration by ComReg's consultants;
- (iv) Regulation 13 (3) of the Access Regulations, which requires any price remedies imposed by ComReg to promote efficiency, sustainable competition and maximise consumer benefits; and
- (v) Regulation 16 2 (a) of the Framework Regulations, which provides that ComReg, in pursuit of its objectives shall apply regulatory principles by, amongst other things, **"promoting regulatory predictability by ensuring *a consistent regulatory approach over appropriate review periods*"** [emphasis added].

10. In addition, eir is surprised that ComReg neglected its duties, in choosing to outsource its obligation to conduct the regulatory impact assessment (RIA) with respect to the impact of ComReg's proposed approach on affected stakeholders. ComReg's consultants are not required to conduct their impact assessments to the standard placed on ComReg by the Policy Direction of February 2003 nor are they required to consider the totality of ComReg's proposed approach. Finally, as the Consultation clearly states *"[t]he views expressed by Dot Econ and Europe Economics are not necessarily the views of ComReg"*, it is unclear what ComReg's views are on the matter it wishes (and is required) to consult on. As the decision maker, ComReg remains the most appropriate party to conduct the RIA. eir awaits the correction and re-issue of the RIA in order to fully consider ComReg's position and submit views on that basis.

The way forward

11. ComReg's proposed approach completely fails to consider the difference between incentive and ability to switch off copper. While the timely retirement of copper services is an important part of the business case for the roll-out of fibre networks and is beneficial from a consumer, commercial and efficiency perspective, the current regulatory regime, with respect to obligations on legacy products in the WLA, WCA and FACO markets as well as the maintenance of the USO regime, will ultimately serve to inhibit migration and delay timely switch-off.
12. Given ComReg's objective to promote competition and investment, and in particular the deployment of very high capacity networks in line with the EECC, the focus of regulation should now shift from legacy services. ComReg should therefore take this opportunity to provide clarity on the conditions for copper switch-off and develop an overarching policy for same rather than attempting to ensure "optimal" switch off in a geographic sub-section of the national market through the further specification of CEI pricing for one particular access seeker. eir would welcome the opportunity to discuss the matter further with ComReg, including potential voluntary commitments, as to the conditions that must be in place at a minimum before copper switch-off could commence.
13. eir submits that there are other effective and sufficient options available to ComReg, which appropriately ensure both cost recovery and regulatory pricing stability and which better achieve ComReg's regulatory objectives. eir welcomes the opportunity to discuss these matters further with ComReg once it has considered eir's submission.

RESPONSE TO CONSULTATION

Q. 1 Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

14. eir has a number of comments on the matters considered in Section 3. eir considers that;
- (i) ComReg has failed to adequately justify how the specifics of NBP access necessitate a differentiated approach, in particular one that places additional risk on eir and results in a financial transfer from eir to NBI and the State;
 - (ii) ComReg appears to be materially altering the level of the NBP subsidy and thereby retrospectively distorting the conditions associated with the procurement process post contract award;
 - (iii) ComReg's proposed approach is not in line with ComReg's regulatory duties and objectives;
 - (iv) ComReg should take this opportunity to provide clarity on the conditions for copper switch-off and develop an overarching policy for same rather than attempting to use the blunt instrument of sub-national CEI pricing to incentivise switch-off, while disregarding the fact that ability and incentive are two very different things; and
 - (v) ComReg must first conduct a full review of the WLA market rather than attempting to impose geographically differentiated remedies by further specifying the associated pricing remedy in a sub-section of the national market.

CEI access in the context of the NBP

15. NBI seeking access to eir's CEI is no different to any other operator and while the active services provided over the physical infrastructure may differ between geographic areas, the underlying passive service is no different.
16. The material difference that has arisen, since ComReg's review of the WLA market and imposition of the relevant pricing remedy, is that the winning bidder for the NBP has been publicly announced and has confirmed (but not guaranteed) that it will seek access to eir's CEI and begin deployment this year.

17. However, ComReg states that the points raised in paragraphs 88-94 of the Consultation are important for considering if a differentiated approach is justified and proportionate. In short those points are as follows;
- (i) the re-use of existing infrastructure is strongly encouraged by the Commission, in particular in the EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks ('the Guidelines')¹; and
 - (ii) access to eir's CEI by NBI differs significantly to generic CEI access in that NBI will seek long term and large scale access.
18. Aside from the award of the contract to NBI, these two points should already have been in ComReg's reasonable consideration when undertaking the WLA market review. However, ComReg specified a national market in ComReg D10/18 despite these matters.
19. eir previously raised concerns with regards to ComReg's failure to adequately consider the effect that the NBP would have on the WLA and WCA market. However, ComReg determined in its final Decision that due to *"the ongoing lack of certainty in respect of the NBP contract award, the timing of the NBP rollout and any resulting impact on competition, ComReg is unable to include the NBP in its assessment on a forward-looking basis with sufficient certainty and accuracy."*
20. The WLA/WCA market review was conducted with a three year horizon in mind and was notified to the European Commission (Case IE/2018/2115) on that basis. Moreover, ComReg acknowledged the potential impact of the NBP on the WLA market once rollout progressed at paragraph 4.112 of D10/18, stating that it would *"closely monitor developments as they unfold and will review its position where warranted."* However, it appears from recent correspondence received from ComReg that it has already pre-determined that it will wait the maximum 5 year period (although the extended review term is not yet legally effective until the EECC is transposed) before reviewing the market. It is unclear therefore what further material conditions need to occur before ComReg would *"review its position"*.
21. Furthermore, while eir notes that ComReg intends to carry out a Mid-term Assessment of the WCA market, the Mid-term assessment, as proposed, will simply reapply the geographic criteria determined in the WCA market and will not consider the WLA market in any way. This leaves a period of 2 years where market conditions have not been fully considered in respect of D10/18 and its original three year horizon.

¹ Communication from the Commission EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (OJ C 25/1, 26.1.2013)

22. Given that the contract has now been awarded and that National Broadband Ireland (NBI) has communicated its timetable for deployment, eir considers that the effect of the NBP should be taken into account in a new assessment of the relevant markets. This is discussed further in paragraphs 69-81.

The State Aid Guidelines

23. While eir notes that the Guidelines do recommend the use of existing infrastructure in the design of the measure, so as to limit distortions of competition, they do not, to our understanding, infer that such access would be at prices other than those already prevailing in the market — in this case the “generic access” regulated prices.
24. A guiding principle in the design of a State Aid scheme is that any State intervention should limit, as much as possible, the risk of crowding out or replacing private investments, of altering commercial investment incentives and ultimately of distorting competition in the target area subject to subvention. However, paradoxically, in ComReg proposing different cost allocation methodologies and WACCs (and justifying this based on the State Aid intervention) as the basis for setting prices for access products in the IA and for access in the rural commercial area, ComReg will significantly distort competition in the Commercial area and impact eir’s ability to invest and achieve a fair rate of return. This is further discussed in eir’s response to Question 11.
25. There are also potential distortive effects on competition in terms of all wholesale access services that will subsequently be provided in the IA. As per the Guidelines, the type of wholesale access obligations imposed on the subsidised network operator should “*be aligned with the portfolio of access obligations laid down under the sectoral regulation*” and “*subsidised companies should provide a wider range of wholesale access products than those mandated by NRAs under sectoral regulation to the operators who have significant market power since the aid beneficiary is using not just its own resources but taxpayers’ money to deploy its own infrastructure.*” The explicit requirement of the Guidelines is that NBI would be subject to the same access obligations in the IA as eir is in the WLA and WCA markets, including obligations to provide access to Bitstream/VUA and CEI. In fact, it has been confirmed by DECC that this will be the case as noted in the Commission Decision², which states at paragraph 60 that “*the new network will provide all the access products imposed in Ireland by the NRA on the SMP operator*” and “*access will include but not be limited to: access to ducts, poles, dark fibre, exchanges, including full and effective physical unbundling, as well as bitstream access, in line with the requirements of the Broadband Guidelines*” with “*wholesale access to all active and passive infrastructure whether new or existing [to] be granted for the duration of the contract.*”

² State Aid SA.54472 (2019/N) <https://ec.europa.eu/commission/presscorner/detail/en/ip196291>

26. In terms of pricing of wholesale access products provided by the subsidised network operator, it is advised in the Guidelines that these *“should be based on the pricing principles set by the NRA and on benchmarks and should take into account the aid received by the network operator. For the benchmark, the average published wholesale prices that prevail in other comparable, more competitive areas of the country or the Union shall be taken”*. It would follow that the relevant benchmark prices i.e., the upper limit for FTTH Bitstream and CEI in the IA would be the current wholesale regulated price for eir’s poles and provincial ducts. Indeed the Commission Decision notes at paragraph 64 that where *“a comparable regulated wholesale product exists, the wholesale access pricing will be comparable to the price of that regulated product.”*
27. NBI will therefore be obliged to provide access to these particular wholesale access products and would also be obliged to provide them at prices reflecting the benchmark regulated prices. This would be in the context of artificially lowering CEI input prices based on ComReg’s current proposal and allowing NBI to make a greater return (than it would have reasonably forecast as part of the tender process — based on the extant duct and pole prices mandated by ComReg pursuant to ComReg D03/16) on all higher level wholesale access prices.
28. Further eir notes that the NBP contract includes the following clawback mechanisms:
- (i) deployment clawback: a possible clawback of savings during the network build phase if at network deployment completion, the comparison of actual and forecast permitted expenditure and subsidy payments indicates that the total actual NBI expenditure is below the total NBI expenditure forecast in the project financial model over that period (i.e., an under-spend);
 - (ii) periodic internal rate of return (IRR) clawback: possible clawback if NBI achieves equity IRR higher than the one that has been set based on the financial model submitted at bid stage (base case IRR)³;
 - (iii) terminal value clawback: a possible clawback of benefits at contract expiry, for example where the terminal value of the wholesale network at the end of the contract term is significantly greater than the bid stage forecast as a result of higher-than-expected financial performance which is expected to continue after contract expiry; and
 - (iv) sales of share in NBI clawback; concerning the sale of 50% or more of the shares in NBI by the existing shareholders within the first 10 years of the contract period.

³ It is interesting to note that while the State contract allows for a fair bet return for NBI, ComReg has never considered such a methodology. In fact, despite the fact that eir’s FTTC investment has yet to make a return, ComReg continues to retrospectively distort investment decisions by applying cost-orientation at revised and lower WACC than would have been prevailing at the time eir’s investment occurred.

29. The mechanisms ensure that any extra profit will be shared between NBI and the State, with the first mechanism being of particular relevance in the context of ComReg's proposals. With respect to the forecast/estimated cost to pass a premise, the Irish authorities will be entitled to clawback 100% of the savings made against 80% of the overall costs and to clawback 50% of the savings made against 20% of overall costs where it was considered important for certain cost categories to provide clear commercial incentives to the NBI to maximise efficiencies. If there are any savings on the forecast/estimated cost to connect a premise the Irish authorities will be entitled to clawback 75% of the savings made, again providing NBI with a commercial incentive to minimise costs and also to seek the most efficient method to connect high cost premises.
30. However, ComReg's proposals partially remove the incentive for NBI to minimise cost by mandating a lower regulated price specifically for their purposes (this wind-fall saving could also act as a disincentive for NBI to seek actual efficient savings in its own cost stack) and given the design of the clawback mechanisms, the end result is a subsidy from eir to NBI and the State.
31. The benefit received by NBI need not be in the form of a direct payment from the government. The benefit offered to the firm can take any form, which affects the firm's profitability, such as lowering the cost of inputs. By way of illustration, the provision of goods and services at below-market prices or requirements on other firms or individuals to provide goods and services at below-market prices would be captured within this definition. eir considers that this would for example apply in the case where NBI is offered the benefit of access to eir's CEI at prices below the regulated (market) prices. Financial assistance provided in this manner can have the effect of distorting competition in the markets in which the firms compete.
32. In fact, as noted in the BRG Report, ComReg's approach to WACC and to network sharing costs produces the result that NBI will pay much less than any other access seeker, both for access to CEI in the IA and access to CEI through Rural Commercial Areas. The BRG Report estimates that this reduction in costs for NBI will be approximately €100m for pole access and €13 million for duct access (in net present value (NPV) terms). Further, the BRG Report states at paragraph 10 that *"[u]nless this reduction in payments by NBI relative to generic access seekers is objectively linked to different costs or a different risk profile associated with serving NBI, it might well be viewed as a subsidy from Eircom to NBI"* and that the *"use of the term "subsidy" is justified in this context because the prices available to generic access seekers are designed to provide Eircom a fair opportunity to recover its investment in CEI. Prices significantly below the level offered to generic access seekers do not provide this fair opportunity and so represent a subsidy to the access seeker that is offered such lower prices."*

33. It would therefore appear that ComReg’s proposed approach is incompatible with the conditions applicable to State Aid for the purpose of the deployment of broadband networks. The measure essentially constitutes a further subsidy provided by eir rather than through the use of public funds, thereby impeding eir’s ability to recover its own costs.

NBI access significantly differs from generic access

34. ComReg states at paragraph 91 that there are *“a number of reasons why access to Eircom’s CEI by NBI in the NBP IA (and for transit purposes outside of the NBP IA) differs significantly to the more general CEI access sought by other operators (excluding NBI), which has been very limited to date.”* ComReg’s reasons for this conclusion are twofold;
- (i) NBI will seek long term access to eir’s CEI, as the contract between NBI and the Department is set for 25 years; and
 - (ii) NBI will seek widespread and large-scale access to eir’s CEI and it will also require access to eir’s CEI outside the NBP IA for its transit purposes.
35. ComReg and its economic advisers, Europe Economics, therefore approach the issue of risk, and thus the issue of WACC, from the perspective of a stand-alone CEI business selling duct and pole access to NBI. The nature of the scale and timelines associated with the project, in conjunction with the fact that the State can “step-in” in the event that NBI fails to comply with the agreed terms and conditions of the contract, is used to justify ComReg’s incorrect claim that this business is essentially riskless.
36. It appears that ComReg and its consultants may be conflating the issue of project specific characteristics and project specific risk, with little attention paid to how the nature of the project, in this case NBI deployment, may affect the level of risk involved for eir other than a brief allusion to the fact that access will supposedly be “guaranteed” over a longer period and that the project is “riskless”. eir notes that the differing characteristics of NBI access, specifically the duration and scale of the access required, do not necessarily mean that the risks associated with that access are lower than those associated with generic access.⁴ As identified in the BRG Report, both Europe Economics and ComReg overstate the extent to which NBI reduces risk for eir’s “CEI business”, in two principal ways as follows;
- (i) the presence of NBI as a customer does not and cannot insulate eir’s CEI business from fundamental risks that it currently also faces; and
 - (ii) ComReg’s proposals for sharing common network costs associated with poles and ducts create additional risk.

⁴ Furthermore, based on the “Terms of Reference” for Europe Economics, ComReg 20/108, it appears that there was no scope for consideration required from Europe Economics regarding the impact ComReg’s preferred pricing methodology would have on the WACC. This, as identified by BRG, is a material error.

37. On the first point, and as noted in the BRG Report, there are two principal factors that distinguish the telecommunications environment from that of utilities and explain why comparisons of risks, and hence cost of capital, with those utilities are problematic. These are (a) the risks of substitution to other providers' CEI (a possibility also acknowledged by Europe Economics); and (b) the risks of substitution to non-fixed-line technologies. NBI is free to use alternative infrastructures (e.g., from ESB or Waterways Ireland) for some or all of its rollout. Moreover, customers may eschew fixed-line broadband (both copper and fibre) for LTE+, 5G mobile, 5G Fixed Wireless Access (FWA) and satellite broadband offerings.
38. On the second point, network costs are highly significant components of the overall cost of eir's CEI. Under ComReg's proposed cost sharing rules, at the point when NBI begins utilising eir's CEI, the flow of revenues from NBI to eir is only as stable and predictable as NBI's ability to acquire end-user customers. Until and unless NBI's network is successful in gaining significant end-user acceptance, eir will rely on its legacy copper products to cover its CEI costs.
39. On the issue of "step in", ComReg notes at paragraph 87 that the provision "*should reduce the risks involved for operators such as Eircom who is likely to become a significant provider of CEI in the NBP IA.*" However, the Irish state's backing of NBI only reduces the risks for NBI, not for eir's "CEI business".
40. In this context, it is critical to understand that the Irish State's "step in" rights merely reduce the risk of default, but they do not eliminate other significant risks as identified above e.g., if there is lower demand for FTTH in the IA than anticipated, this could still translate into lower demand for eir's CEI services and indeed lower payments for CEI in the immediate term, given the proposed per customer approach. This is irrespective of how NBI itself is shielded from risk. The BRG Report states that the risk of default in the telecom and utility sectors "*does not appear substantial, and so eliminating this default risk does not warrant a major reduction in the cost of capital relative to that of regulated fixed-line telecom and (especially) utility companies. Or putting it another way, the Irish State's "step-in right" just assures that money that would anyway have been owed by NBI continues to be paid, but offers no guarantees to the amount of demand (and therefore no guarantee that the CEI provider will recover its costs).*" Furthermore, an appropriate peer telecommunication comparator group with investment-grade ratings are already reflective of low default risk.

ComReg's role in the NBP

41. ComReg states that it is *“proposing to further specify the existing CEI price control obligation from the 2018 WLA / WCA Market Review Decision for the purposes of CEI access for the NBP.”*
42. First, eir does not consider it appropriate for ComReg to amend, in the proposed manner, the regulatory obligations for the WLA market given that they would lead to a geographic differentiation of remedies in the defined (national) market. This is discussed further in paragraphs 69-81.
43. Second, ComReg is entirely altering the underlying assumptions that feed into the standard regulated tariffs in an apparent attempt to produce the lowest possible price for the benefit of NBI specifically.
44. ComReg’s actions will ultimately result in a material altering of the level of the NBP subsidy. The potential effect of the proposal is in fact acknowledged by ComReg on numerous occasions throughout the Consultation, in particular in Footnote 48, where ComReg notes that *“the level of the CEI access prices directly affects the amount of subsidy that NBI requires”* although it goes on to state that *“the level of State subsidy is not relevant to ComReg’s role (it is the responsibility of the DCCAE) and it is not taken into account in ComReg’s review of the costing methodologies for determining CEI prices.”* ComReg is thus retrospectively distorting the conditions associated with the procurement process post contract award, although it states that its role is merely advisory.
45. eir agrees that the level of State subsidy is not relevant to ComReg’s role and should not be taken into account in ComReg’s review. However, it does not appear that this is in fact the case and eir notes that DotEcon specifically includes the effect of its proposals on the State and the level of the subsidy required in its impact assessment. In addition, ComReg has explicitly called out a change in its regulatory objectives with regard to the NBP IA, stating at paragraph 107, that promoting competition and encouraging efficient investment in this scenario now mean *“allowing for a **cost effective** deployment of NBI’s network”* [emphasis added]. This view is repeated at paragraph 726.
46. In the context of the proposals, eir considers that ensuring a cost-effective deployment of NBI’s networks cannot be taken to mean anything other than lowering NBI’s costs, specifically those related to CEI access, and thus directly lowering the level of the subsidy. As stated in the BRG Report, there are other options that can ensure this objective and *“There may thus be good public policy justifications for...moving to a per-operator (or what we call a per-operator plus model, as described in Section IV) that will significantly move NBI’s incentives towards those of an infrastructure owner.”*

ComReg’s Regulatory objectives

47. ComReg's stated regulatory objectives and the manner, in which these are apparently met by ComReg's proposals, are discussed at length in eir's response to Question 22. However, eir addresses two of ComReg's specific objectives, which appear to be the main focus of Section 3 and indeed the Consultation in its entirety, below.
48. ComReg appears to specifically focus on its regulatory objectives of promoting competition and encouraging efficient investment stating that the differences in approach are necessary *"in order to achieve ComReg's statutory objectives under Section 12 of the Communications Regulation Act of promoting competition and encouraging efficient investment."*
49. ComReg considers that these specific objectives take on a different meaning in the context of the NBP IA, concluding at paragraph 107 that it is now concerned with *"allowing for a cost effective deployment of NBI's network and avoiding inefficient duplication of CEI assets."* and further at paragraph 111 *"setting the right incentives for the transition from copper to fibre services in the NBP IA."*
50. eir considers that ComReg's conclusion with regard to the new interpretation of its regulatory objectives is flawed in the following respects;
- (i) the cost effective deployment of NBI's network was and is a matter for the Irish authorities and not ComReg; and
 - (ii) while copper switch off is a foreseeable eventuality, ComReg has not provided any clarity on the conditions for copper switch off. As such ComReg has not adequately considered the ability of eir to switch off the copper network. In the absence of such guidance, both ComReg and its consultants place too much weight on the supposed incentive mechanism associated with their proposals.

Cost effective deployment of NBI's network

51. eir does not believe that it is ComReg's role to ensure that the rollout of NBI's network is cost effective. eir therefore considers it strange that ComReg now believes it necessary to take it upon itself to ensure this objective by stepping in and tweaking the pricing of regulated passive access products, thus creating a more favourable environment for the winning bidder, NBI.
52. In addition, and as noted the BRG Report, ComReg fails to reflect that the choices it makes with respect to sharing rules also affect risk, and by doing so, they also affect the cost of capital.⁵ ComReg also fails to recognise that the policy objective of rapid fibre rollout might

⁵ See also footnote 4.

be better met if NBI faced incentives and constraints more similar to that of an infrastructure owner rather than an access seeker, i.e., by making NBI responsible for a greater proportion of the network costs – or in regulatory terms not acting in a discriminatory manner towards a single operator.

53. With regard to avoiding the inefficient duplication of assets, this is indeed a regulatory objective that ComReg should strive to ensure. However, ComReg’s proposed approach in this regard is flawed in two respects.
54. First, in the IA, NBI is already committed to re-using existing infrastructure given that the NBP scheme and selection process were specifically designed to attract multiple bidders over competing platforms to ensure value for money and to favour a cost effective deployment by incentivising the reuse of existing infrastructure, in line with the Guidelines. In particular, the Guidelines, at Recital 78 (f), state that “[s]ince the reusability of existing infrastructure is one of the main determinants for the cost of broadband roll-out, Member States should encourage bidders to have recourse to any available existing infrastructure so as to avoid unnecessary and wasteful duplication of resources and to reduce the amount of public funding”. eir notes that this particular facet of the project was communicated to the Commission in the notification of the scheme. As such, NBI as the remaining bidder to the tender process should have reasonably included CEI access costs either through its own deployment or third-party access. If NBI’s business case included access to eir’s CEI those costs should have been prudently based on the extant CEI prices (and approach) mandated by ComReg in ComReg D03/16.
55. Second, and with respect to the commercial area, ComReg’s approach appears to be conversely designed to actually create incentives for the duplication of CEI assets. ComReg considers that if NBI were to pay a share of the common network costs in commercial areas, it would reduce CEI access prices, which would in turn supposedly disincentivise competition in the CEI market.
56. However, and as noted in the BRG Report, it seems both unrealistic and undesirable to expect other firms, apart from utility companies, which would not anyway be access seekers facing a “build or buy” decision, to build out their own CEI. If it was a more efficient outcome for an alternative operator to enter the market and compete with eir, then there would be no need for regulated access to the eir’s CEI. It is precisely the fact that it would be inefficient to duplicate this passive infrastructure and that there is only a very limited prospect of entry from other telecommunications operators, which underpins ComReg’s position that regulated access to eir’s ducts and poles is necessary.
57. Consequently, ComReg’s proposal is not consistent with the policy objectives of either the State Aid Guidelines or the Broadband Cost Reduction Directive (BCRD), which both focus on the re-use of existing infrastructure, the latter in particular noting that it “can be

significantly **more efficient** for electronic communications network operators, in particular new entrants, to re-use existing physical infrastructures, including those of other utilities, in order to roll out electronic communications networks”.

Migration from copper to fibre

58. ComReg states at paragraph 111 that “[e]ncouraging efficient investment in the context of CEI access in the NBP IA means, in ComReg’s view, setting the right incentives for the transition from copper to fibre services in the NBP IA. In particular, setting CEI access prices too low might provide an inefficient incentive for Eircom to decommission the copper services too early, whereas setting the CEI access prices at a level that is too high, might cause the prices of copper services to be lower than they otherwise might have been and thereby delay the transition to fibre.
59. This particular issue is discussed at length in eir’s response to Question 9, but the proposed approach is trying to address a potential long-term issue with a complex approach involving CEI pricing that will knowingly result in the very issue highlighted by ComReg’s consultants, DotEcon, i.e., that the reduction of costs not borne by NBI will need to be funded, which in this specific case will result in the unrecovered shortfall being levied on eir alone.
60. In addition, the proposed approach completely fails to consider the difference between incentive and ability to switch off copper, which will only serve to exacerbate the issue of artificially low copper prices. ComReg’s proposal incorrectly assumes that eir actually has the ability to expedite copper to fibre migration. Given that eir is subject to existing regulatory remedies on legacy copper products in the WLA and WCA markets, it is proposed that it will continue to be subject to the entire suite of regulatory remedies in a sub-set of the legacy FACO market and given that USO obligations remain in place — it is clear that ComReg has failed to give the matter cohesive consideration. In fact ComReg notes at paragraph 122 that the proposals in the Consultation do not “take account of any actual or potential impacts arising from Eircom’s USO obligations.”
61. Moreover, for the period that migration remains customer driven, a consumer’s assessment of whether to switch to full fibre will depend on the relationship between the on-going charges for such a connection and the charges they pay for their existing connection. If the price premium for a full fibre connection is too high then adoption rates will be low — which can occur when regulated copper prices continue to decrease. As noted by ComReg in footnote 48, “[w]hile the level of the CEI access price(s) paid in NBI’s MIP has no direct impact on the prices that NBI charges for its wholesale services (as these prices are set by way of comparable regulated broadband services)”. However, this fails to consider that the wholesale access prices for FTTC have an impact on potential FTTH prices, which feed into NBI’s benchmark price (which it is required to charge) — these lower prices will ultimately

impact migration from copper to FTTH throughout Ireland and potentially undermine NBI's business case.

62. Finally, and as noted in the BRG Report, ComReg's cost model assumes that fibre network rollout will be complete at a point in time when the fibre network has only a 28% share of customers. Thus, the concern in relation to the per-operator approach providing excessive incentives for copper switch-off seems very misplaced in light of such assumptions. As identified in eir's response to Question 8, ComReg has erroneously applied inconsistent modelling assumptions in respect to presenting the regulated price path outcomes for the "per operator" and "per customer" approach.

An overarching policy for copper switch-off

63. The retirement of copper services is an important part of the business case for the roll-out of fibre networks and the faster that customer migration from copper to fibre occurs, the stronger the business case for investment in fibre becomes. Given ComReg's objective to promote competition and investment, and in particular the deployment of very high capacity networks in line with the EECC, the focus of regulation should now shift from legacy services.
64. Investment in fibre is part of a wider transformation of Ireland's telecommunications infrastructure, comprised of both the migration of voice services to IP technology and the overall withdrawal of copper-based services. While ComReg can support the first of these objectives through price controls (in the remaining regulated markets), or indeed the removal of same, a specific overarching copper retirement strategy, which underpins all other regulatory work items is also urgently needed.
65. It is anticipated that over the coming years, a move to operator led migration will be required. Although eir has commenced planning for the retirement of legacy services and facilities, and anticipates that over the next number of years there will be a growing number of geographic areas with widespread availability of NGA facilities such that it would be appropriate to retire access to legacy services and facilities, a final plan for the transition as well as an eventual date for decommissioning will need to be approved by ComReg.
66. However, in eir's experience the withdrawal of legacy services, which have been end-of-life for a number of years, remains problematic given a lack of support from ComReg. For example, in its review of the FACO market ComReg has proposed to maintain the obligation on eir to provide access to wholesale ISDN BRA despite having received a request from eir to withdraw the service under D05/15 in 27 May 2020. This means that ComReg is mandating access to wholesale ISDN BRA for a decade after parts are no longer available for this end-of life technology. In addition, eir remains subject to existing regulatory remedies on legacy copper products in the WLA and WCA markets and under the USO regime. It is also proposed that it will continue to be subject to the entire suite of regulatory remedies in a sub-set of the legacy FACO market. eir does not consider that a continuing focus on regulation of legacy services underpins the goal of effectively transitioning from copper to fibre.
67. eir is therefore considers that ComReg should specifically consult on an overarching copper switch-off policy that addresses all regulated markets. The policy objective of timely retirement, which is beneficial from a consumer, commercial and efficiency perspective would benefit more from such an approach than it would from ComReg's proposal to ensure "optimal" switch off in a sub-section of the national market through the further specification

of CEI pricing for one particular access seeker. eir would welcome the opportunity to discuss the matter further with ComReg and to discuss any associated voluntary commitments eir could make in respect to its copper switch-off programme.

68. Finally, eir notes that its proposals are consistent with the 2010 EC Recommendation which states that *“Operators currently enjoying access have a legitimate interest to have an appropriate time to prepare for the changes that substantially affect their investments and their business case. In the absence of a commercial agreement NRAs should ensure that there is an appropriate migration path put in place. Such migration path should be transparent and developed at the necessary level of detail so that operators currently enjoying access can prepare for the changes, including rules for any necessary joint work by access seekers and the SMP operator as well as for the precise modalities of decommissioning points of interconnection.”*

Requirement for a timely review of the WLA market

69. Essentially, ComReg’s change in approach to the pricing of CEI is due to the fact that the conclusion of the NBP contract means there is *“now sufficient clarity that its impact on CEI access at least may be assessed and reflected as and if appropriate in order to ensure that the costing pricing methodology determined for CEI access remains adequate for the purpose of ComReg’s statutory objectives”*.
70. eir notes that while the regulatory framework allows for the imposition of different geographic remedies in the same relevant market, this must be done on the basis of an assessment of the competitive conditions in the relevant market. eir notes that such an assessment was, for example, conducted in ComReg’s review of the WLA/WCA market but that ComReg determined that the WLA market was national in scope and did not consider geographically differentiated remedies other than to impose a retail margin squeeze obligation in the WLA market in the area corresponding to the Urban WCA Market footprint.
71. The SMP Guidelines state at paragraph 46 that *“[it] is only when the geographical dimension of the product or service market has been defined that an NRA may properly assess the competitive conditions on this market.”* The SMP Guidelines further state at paragraph 50 that *“[i]f regional differences are found, but not considered to be sufficient to warrant different geographic markets or SMP findings, NRAs may pursue geographically differentiated remedies. The stability of the differentiation — specifically the degree to which the boundary of the competitive area can be clearly identified and remains consistent overtime — is key to distinguishing between a geographical segmentation at market-definition level and remedy segmentation.”*
72. In addition, the BEREC’s Common Position on Geographic Aspects of Market Analysis states at paragraph 77 that *“different competitive conditions cannot be excluded in [ex] Market 4 if*

*inter-platform competition is strong enough to ensure effective competition on the retail market, absent regulation on the wholesale market” and “an NRA may decide, **on the basis of its market analysis**, to proceed to geographical differentiation and thus to the potential deregulation of parts of Market 4”.*

73. BEREC considers that the criteria for assessing the homogeneity of competitive conditions include;
- (i) the barriers to entry into the market;
 - (ii) the number of operators that exert a relevant competitive constraint on the SMP operator;
 - (iii) the market shares of the SMP operator and the alternative operators;
 - (iv) price differences; and
 - (v) other aspects that may derive from relevant competitive differences between the geographical areas (e.g. marketing strategies, commercial offers and functionalities of the offers, nature of demand, etc.).
74. BEREC also states at paragraph 162 that “[t]here are two possible ways of dealing with geographical differences in competitive conditions across a national territory. The first approach consists of differentiating geographical markets at the market definition stage. Those geographically differentiated markets **are then analysed on their own** and conclusions on market power are drawn for each of them. The second approach consists of defining one market, **analysing it** and then differentiating remedies to take into account geographical differences” [emphasis added].
75. eir notes that no assessment is included in ComReg’s Consultation with regard to the criteria identified by BEREC or indeed as to whether regional differences identified on this basis warrant different geographic markets or geographically differentiated remedies. eir therefore considers that ComReg’s current approach is flawed and that in order to impose geographically differentiated remedies, ComReg would need to reanalyse the competitive conditions in the entire WLA market to determine whether geographical differences warrant sub-national markets or sub-national remedies as the case may be.
76. eir notes that the Commission has previously specifically commented⁶ on ComReg’s approach to the geographic variation of remedies in its 2012 update of remedies in ex Markets 1 and 4. In 2012, the Commission noted that “*the imposition of appropriate regulatory obligations under the Universal Service Directive and pursuant to Article 16 of the Framework Directive has to be based on an assessment of the competitive conditions in the relevant market*” and stressed that “*the differentiation of remedies for the LEA should be*

⁶ Commission Decision concerning Case IE/2012/1381 and IE/2012/1382: modification of remedies related to the retail market for access to the public telephone network at a fixed location and the wholesale market for network infrastructure access.

based on a sound analysis of the competitive conditions in the LEA and asks ComReg to set out clearly in the final measure the different competitive constraints compared to the other areas.” The Commission invited ComReg *“to strengthen its analysis of all relevant structural and behavioural factors (before the final adoption of the revised remedies) to justify that existing variations of competitive conditions that have led ComReg to proposing differentiated remedies are not strong and stable enough to justify the definition of sub-national markets.”*. ComReg has had ample time to consider the implications of the NBP and to prepare its work-programme to take account of comments made by the Commission.

77. eir is therefore of the view that ComReg’s meeting of its existing regulatory objectives, require it to conduct a full review of the WLA and WCA markets, particularly given the fact that the NBP will have a significant impact on both markets and was not considered at the time of the previous review, given the lack of clarity around the contract award.
78. As noted by ComReg, the contract between the Minister and NBI has now been concluded. However, ComReg has chosen to assess its impact on specific pricing remedies rather than the underlying market review upon which these pricing remedies rely. ComReg has advised⁷ eir that the next review of the WLA market is now not due for completion until 2023 alongside a full review of the WCA market. This leaves a period of 2 years where market conditions have not been fully considered in respect of D10/18 and its original three year horizon.
79. In addition and as markets continue to evolve, including the number of listed markets susceptible to ex ante regulations, the piece-meal and ill-sequenced review of pricing remedies rather than the underlying market reviews will likely result in regulatory failure.
80. In this context, eir notes that the Draft Recommendation on relevant markets susceptible to ex ante regulation and the associated Staff Working Document, which are due to be adopted by the end of this year, foresee the possibility that NRAs may consider delineating a separate CEI market and that this may be of particular relevance in Member States where one ECS provider owns physical infrastructure, which is ubiquitous and suitable for the deployment of alternative fibre networks.
81. eir considers that the award of the NBP contract and the commencement of NBI route preparation/survey work and rollout constitute material and major developments in the relevant markets, which in conjunction with the future direction of travel for EU regulatory policy, warrant a market review to be commenced now, in advance of the 5 year review timeline.

⁷ Letter from Eric Tomkins to Kjeld Hartog dated 4 August 2020

Q. 2 Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

82. eir broadly agrees with ComReg's preliminary views on the general costing methodology principles. The two principles that ComReg articulates, after a review of the costing methodology applied to setting prices for pole access and duct, is consistent with that imposed in D03/16, in that;
- (i) a bottom-up model of network assets together with a variant of long run average incremental costing (with a mark-up for fixed and common costs) methodology should be applied where assets are non-reusable; and
 - (ii) a top-down model using actual costs as recorded in the historic cost accounts should be used where assets are re-usable.
83. However, eir does not in principle consider that it is appropriate, as proposed by ComReg, to adjust those costs evident in eir's HCA for efficiencies. There is a real danger that ComReg's level of efficiency adjustment could lead to unrealistic and unattainable levels of "hyper-efficiencies" resulting in under-recovery of properly incurred efficient costs. It is inaccurate to present a cost recovery methodology as HCA and then to go further and assume "hypothetical" efficiencies by eye.
84. eir has undergone a transformative exercise over the past number of years to attain cost efficiencies and better working practices — ComReg cannot, through a desktop exercise, assume that further levels of efficiencies are attainable. Such efficiencies must be explained in detail by ComReg and cogently justified. In addition, when dealing with legacy copper technologies — even in terms of duct and pole engineering — ComReg should consider that the associated labour cost is likely to increase over time as knowledge and expertise in the field continues to decline.

Q. 3 Do you agree with ComReg’s preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI’s MIP access to CEI in the NBP IA and for NBI’s transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

85. eir partially agrees with ComReg’s proposals on the costing methodology that should apply in the case of NBI’s IA access. However, as discussed in eir’s response to Question 1, ComReg has failed to identify why the geographic boundaries are not yet sufficiently stable so that they only allow for the imposition of geographically differentiated remedies in a national market rather than the definition of sub-national geographic markets.
86. eir does not agree with ComReg’s proposals on the costing methodology that should apply in the case of NBI’s transit access in the Commercial Areas.
87. In respect to generic access, eir notes that the proposed methodology is consistent with D03/16 and the 2013 EC Recommendation. eir agrees that this is appropriate. However, in respect to generic access, eir considers that ComReg has made a number of errors including a material error in its demand assumption which results in prices being at least **5%-25% lower (depending on surface type)** than required for eir to recover its costs.
88. The broader issues identified in paragraphs 85-87 are discussed in turn below.

NBI’s IA access

89. ComReg proposes that prices paid by NBI for access to eir’s CEI in the IA should make no contribution to eir’s common corporate costs. This proposal has its origins in ComReg 16/96, when the consultation on pricing services in the WLA and WCA markets included indicative rates for FTTC VUA and Bitstream prices. However, it is worth giving context to this development. During the extended engagement that resulted in D11/18, eir demonstrated to ComReg that the indicative rates presented in that consultation had the clear effect of stranding a large share of eir access network costs when implemented alongside SB-WLR prices set earlier in D03/16.
90. ComReg then proposed to partially address that error in the joint operation of the two price controls by setting prices for FTTC services (which are only offered in Commercial Areas) that recover a higher contribution to common corporate costs than the national average per access path that is recovered from the D03/16 rates for SB-WLR. However, the FTTC prices ultimately set in D11/18 at the end of this engagement still recover only a level of direct copper access network cost below the national average recovered from SB-WLR.
91. Now, in the current Consultation, ComReg proposes that the very CEI that currently only supports SB-WLR and some legacy ADSL broadband in the IA will cease to make any

contribution to eir's common corporate costs. In the discussion from paragraph 267 to paragraph 283 ComReg simply re-states the D11/18 assertion that eir's common corporate cost will not be re-covered from services sold in the IA – and records DotEcon findings that this decision should also apply to CEI services sold to NBI in the IA. There is no discussion or recommendation in either the Consultation, or the economic advice provided by ComReg's consultant, as to how the common corporate costs will be recovered across the range of active and/or CEI services. This is necessary because national wholesale local access is mandated, where wholesale prices are controlled at cost, retail prices controlled by a cap, and in the presence of a continuing universal service obligation to provide access at a fixed location within the IA at a single national price.

92. In the context of the current Consultation it is not acceptable for ComReg to simply state that *“all corporate common costs should be recovered from service provided in commercial areas, only”*. ComReg must also lay out for consultation how those common costs will be recovered from controlled prices for CEI and active services in the urban and regional (SMP) markets. eir cannot accept the bland statement that common corporate costs will not be recovered from CEI services in the IA until ComReg has laid out a comprehensive proposal as to how these costs will be recovered across all access services subject to price control, across the commercial areas.
93. ComReg has inconsistently described its proposal in the Consultation with respect to Generic Access in the IA. In paragraph 264 of Consultation, ComReg proposes that Generic Access to CEI in the IA would not make a contribution to recover common corporate costs. However, in paragraph 265 and Table 7 it states that the matter is not material and to allow their recovery. eir notes that as the likely demand is immaterial that it will not be a significant issue but requests ComReg to clarify its position before making a final determination.
94. However, consideration needs to be given by ComReg as to whether additional access from an operator, specifically in the case of pole access, represents a second operator (even in the circumstance when NBI and eir are already on the pole) or third operator. The issue is further problematic in that if the generic operator is deemed to be the second operator when eir undertakes its copper switch off then the generic operator becomes the sole bearer of the remaining cost– this is despite NBI's presence— at that time if NBI is being charged under the per customer model it is unclear what price the generic access operator will be charged. Similarly, in the case where the generic access seeker is considered the second operator it is unclear which regulatory prices will apply in the circumstance where eir undertakes its copper switch off. Such issues need to be consulted on by ComReg as they occur irrespective of the per customer or per operator method.

95. Furthermore, it is not clear whether ComReg expects eir to publish, should ComReg make a final decision (if appropriate), a revised and different set of CEI prices for Generic Access in the IA. If ComReg considers that eir must publish a separate set of these prices, considering the issues identified above, ComReg must first consult transparently (including the respective CEI rates) with interested parties consistent with the consultation procedures referred to in Article 6 and 7 of the Framework Directive.

NBI's Transit Access

96. As discussed in Question 9, ComReg has incorrectly identified the competition concerns upon which it relies to justify the imposition of Pure LRIC for NBI access to CEI in the non-IA. ComReg's preliminary position is based on the view that the per operator model distorts competition in the commercial area in respect of a) excess revenues generated by eir which are used to cross-subsidise other regulated wholesale products and b) operator's incentives to build their own civil engineering infrastructure.
97. First, it seems both unrealistic and undesirable to expect other firms, apart from utility companies, which would not in any event be access seekers facing a "build or buy" decision, to build out their own CEI. ComReg and DotEcon's logic appears to be that, it would be preferable to set higher access charges for eir's CEI in order to attract new full infrastructure players. This contradicts to the overall objective for the CEI access regime as well as the policy objectives of the Commission to avoid unnecessary duplication of physical infrastructure as evident in the aims of the Guidelines and the BCRD. See also paragraphs194-205.
98. Second, even during short periods in which eir might be able to generate more revenue from CEI than previously anticipated, it would continue to be constrained by a regulatory framework that would prevent it from undertaking the kind of pricing behaviour that has been highlighted by DotEcon and ComReg. eir notes that the prices for its regulated wholesale access services are set by cost-orientation, so there is no additional revenue that can be used to distort the market. In any event, the underlying wholesale prices can be updated to ensure holistic cost recovery. See also paragraphs206-211.
99. In addition, the costing methodology for NBI's "transit" access of commercial areas must reflect the benefit they derive from investments already made by eir, as well as the degree to which NBI will use their cable network to compete with eir in other markets. Both DotEcon and ComReg fail to consider that, while the terms of the NBI contract limit its offerings in the wholesale high speed broadband market to the premises in the IA, there is no limitation (as far as eir is aware) on NBI offering services such as mobile backhaul or other services in the WHQA market once their infrastructure is in place.

100. Given the higher density of mobile mast sites in rural Ireland that will arise from the deployment of 5G services – and the high capacity (above microwave radio levels) backhaul required, it is clear that there are likely to be a significant number of mast sites outside the Commercial area.
101. A costing methodology that allocates none of the fixed and sunk costs of eir's CEI from the "transit" service of the Commercial to NBI charges for crossing that area is clearly discriminatory and results in the distortion of competition for these backhaul services – whether they be provided as Ethernet, xWDM, or as dark fibre. In simple terms, while "transit" represents one of the reasons why NBI requires access, it is more accurate to describe it as just as CEI access. This is consistent with other operators' use of CEI (including eir itself) irrespective of the purpose for which they are using that access.

Generic Access

102. ComReg states, in paragraph 287 of the Consultation that it *"proposes to replace the existing pricing structure for poles and ducts by determining a national price, set by reference to the costs associated with the Commercial Areas"*. eir considers that as generic CEI access will only likely occur in Commercial Urban Areas that as the prices derived in the DAM are based on a blended cost of Urban Commercial and Rural Commercial areas it will result in an under-recovery of eir's efficiently incurred costs. As the cost of rural commercial duct is significantly lower than urban duct the derived national prices are on average 5-25% lower (depending on surface type) than the Urban Commercial costs and will, if implemented, result in a material under recovery of eir's costs.
103. Given the materiality of this under-recovery, at a minimum, ComReg must publicly correct the proposed duct prices by either setting separate duct prices depending on the geographic location or to set the duct prices on the urban commercial area costs as this is the most likely footprint in which duct access will be required by other operators.

Q. 4 Do you agree with ComReg’s preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response.

104. eir is in broad agreement with ComReg’s preliminary views in relation to the costing principles that should apply to re-usable and non-reusable CEI assets. ComReg finds both that Reusable CEI Assets should be valued based on a RAB and set by reference to eir’s HCAs on the one hand, and that Non-reusable CEI Assets should be valued on the basis of a RAB approach based on replacement costs on the other. However, it is not generally possible to establish in advance which assets will be re-used and which will not and the degree of forecast variance changes depending on the CEI. The relevant considerations for Pole and Duct are considered separately below.

Poles: IA

105. In the case of pole costs it became clear as eir moved to deploy rural FTTH that the 92% reuse set by ComReg pursuant to ComReg D03/16 was a substantial under-estimate of the rate at which poles are required to be replaced to allow safe deployment of extensive new fibre cable overhead ribbons.

106. [X] [REDACTED]
[REDACTED] eir estimates that a re-use estimate of around 85% in this area appears appropriate based on an expedited 7 year roll-out by NBI.

107. Outside the business as usual pole replacement cycle (and associated replacement rate), the incremental pole replacement is solely driven by NBI’s desire to deploy fibre on eir’s poles. eir’s existing copper services do not benefit from those fast-tracked pole replacements. In that sense, ComReg’s proposal that NBI will in all cases pay for that incremental pole replacement charge is correct. However, as discussed in eir’ response to Question 9, ComReg’s proposed per customer approach is flawed. eir proposes instead that it would be appropriate to move to a per operator plus model — under this approach the incremental

pole replacement rate is also still borne by NBI (similar to the per customer approach) but the shared costs are allocated 50:50 until eir completes its copper switch off.

108. [REDACTED]

109. [REDACTED]

110. [REDACTED]

Poles: Commercial Area

111. In respect to the Rural Commercial area, the amount of pole replacement outside of the business as usual testing cycle will be low given that these have largely been recently replaced as part of eir’s deployment of FTTH in this area. Therefore, the % of re-usable poles in this area will be higher. The corollary of this is that the historic cost per pole of the re-usable poles in the transit area will be substantially higher than the (NBV of) the historic cost per pole of the re-usable poles in the IA.

112. However, eir does not agree that these rural commercial areas should be assumed to have 100% re-usable poles as proposed by ComReg in paragraph 310 of the Consultation. This

proposal is wholly inconsistent with ComReg's stated position in paragraph 212 of the Consultation which notes that "[t]he main economic reason to use a BU model is the need to send a build-or-buy signal to alternative operators who may want to replicate the asset and to send the right signal to Eircom when existing network infrastructure needs to be renewed". Consistent with this view, in the medium to long run, a proportion of these poles will need to be replaced. Consequently, ComReg must allow for some element of forward looking future capex to be priced into the replacement of that infrastructure.

113. One significant issue for modelling purposes not recognised by ComReg is that as prices are based on a tilted annuity, the model will need to be updated to reflect the WACC that was in existence at the time that eir replaced these poles. Failing this adjustment, it would be inconsistent with Regulation 13 (2) of the Access Regulations "to allow the operator a reasonable rate of return on adequate capital employed". This is further discussed in eir's response to Question 5.
114. In respect to the Urban Commercial area, eir has made a significant start to the IFN deployment of Urban FTTH in these areas. This means that while indicative pole re-use information is available this will continue to change as eir's fibre deployment continues to expand. [X [REDACTED] X]

Duct: IA

115. For NBI's IA access, underground assets should be valued at historic cost and rental charges set on the basis that 100% of the asset is re-usable. This costing approach is then consistent with the requirement (as set out in paragraph 107) on NBI to meet the full cost of blockage clearance and other remediation up-front. From a cost recovery perspective, eir is only passing through the relevant external contractor charges to NBI. As such, eir does not agree that such charges need to be pre-approved by ComReg.
116. As NBI is the only operator that will derive any commercial benefit from the investment in underground asset remediation (eir would not undertake this at any scale for the remaining life of rural copper), no costing or pricing decision that requires eir to share the risk of this remediation can be justified.

Duct: Commercial Area

117. Whereas the rural FTTH deployment generally deploys overhead fibre ribbons to serve the premises passed, these ribbons are generally reached from the OLT sites where FTTH is launched by duct routes that have only ever carried copper cable. The costs of upgrading this duct to carry fibre optic cable in sub-duct (testing, manhole repair, blockage clearance, re-instatement, local authority licence fees, traffic management, re-instatement, and

provisions for “long-term damage”) has been substantially higher than 5% of the current cost of the duct route used.

118. From a forecasting perspective, as there is no business as usual testing of duct it is difficult to accurately estimate the % re-usable. The relevant percentage on any given route can vary significantly. In addition, it is difficult to determine (and there are associated time delays) whether on average in a given year or over a three year pricing period, whether the actual non-reusable was greater than provided for in the regulatory price path. This is likely to result in an under-recovery of eir’s efficiently incurred costs.
119. As such, eir proposes that consistent with the IA method, that operator access to underground infrastructure will be required to meet the full cost of blockage clearance and other remediation up-front. This is the case because that operator will likely be the only beneficiary of that new investment. The rental charge recovers a contribution to the historic investments by eir – including recent clearance of blockages and repair of manholes – and those charges should be set to reflect the share of benefit the operator derives from those investments. Similar, to the IA duct access, the additional investment required for operator access will simply be a pass-through of external rates to the operator.
120. A potential alternative to this approach is to value all ducts at CCA in the Commercial Area. This would reflect the forward looking cost of duct replacement and reinstatement and provides the correct build-buy signal to other operators in respect to NGA deployment without resulting in paying for the required remediation up-front as proposed in paragraph 119.
121. eir is open to considering co-investment opportunities in respect to its duct access, which require additional remediation in commercial areas with other operators in order to deploy its FTTH network.

Q. 5 Do you agree with ComReg’s preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI’s MIP access in the NBP IA and (iii) the CEI costs for NBI’s transit access in the Commercial Areas? Please provide reasons for your response.

122. eir is in broad agreement with ComReg’s preliminary views on the proposed depreciation approaches to determine the annuity charged for generic users’ use of eir’s CEI. However, eir has identified a material error in the model, which is inconsistent with ComReg’s stated position in the Consultation and its regulatory objectives.
123. In respect to the proposed straight-line depreciation approach for NBI’s MIP access in the IA, eir does not agree that this is the appropriate approach. ComReg’s proposal is not consistent with the EC 2013 Recommendation and leads to unstable CEI prices, which in turn impact the price of other regulated wholesale services.
124. Finally, ComReg has failed to adjust the initial Regulatory Asset Base/NBV in all footprints as required by the EC 2013 Recommendation.

Tilted annuity

125. eir agrees that the use of a tilted annuity is appropriate in the case of generic access to CEI and NBI’s access to CEI in the Commercial area. The benefits of using a tilted annuity are further discussed by ComReg’s consultant TERA in 2016 in their report entitled *“Report on the determination of appropriate costing and pricing methodologies for the copper access network in Ireland”*.
126. Furthermore, eir agrees with ComReg’s statement in paragraph 319 of the Consultation that *“when making an investment, an operator will support financial costs related to the dividends requested by its shareholders or the interest paid to the banks that are lending money to the operator. This financial cost must be considered to make sure that the operator is fully recovering its costs. The sum of the two items (depreciation charge and cost of capital) is called the annuity”* [emphasis added]. A similar position is also recognised in ComReg D03/16 *“that deviating between alternative tilted annuity approaches over the asset life for each asset may lead to an expectation of under-recovery and underinvestment, and we would generally agree with this”*. It is therefore a material error in ComReg’s modelling and its consultation process that no consideration is given to the fact that the appropriate WACC rate has not been adjusted in the model to reflect the higher rate when eir undertook its historical investment. At present the model assumes that the lower WACC was always in existence. The computation of the tilted annuity, in terms of return without amendment, will not work on that basis. This is further compounded by ComReg’s proposal that the WACC should be updated in the models each year once implemented – this is

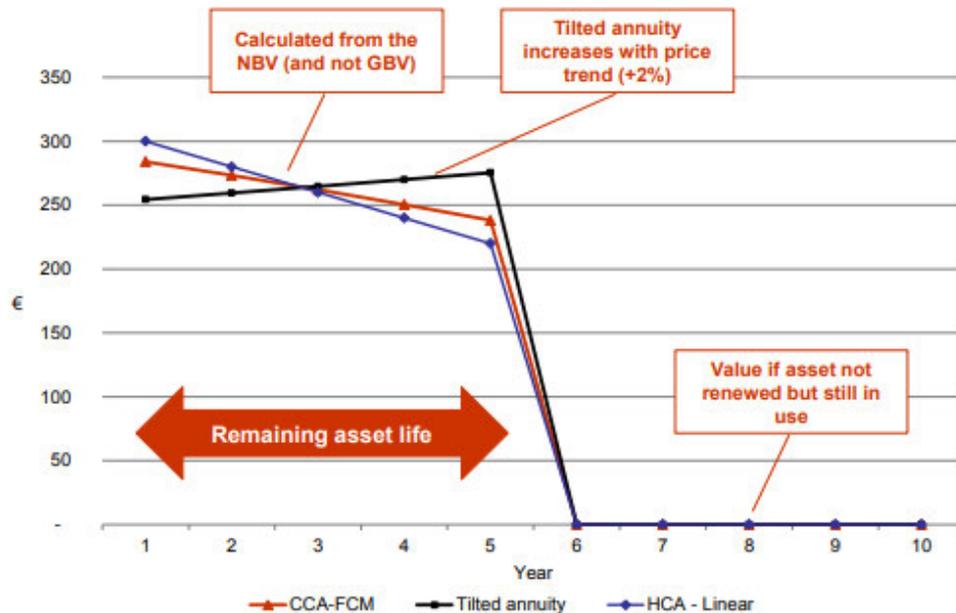
incorrect and further related adjustments are required. ComReg's proposals are inconsistent with Regulation 13 (2) of the Access Regulations. This also directly contradicts market realities mandated by ComReg and regulatory consistency between pricing review periods.

127. Effectively such updates imply (updating the WACC retrospectively into existing pricing decisions) that the investor could annually liquidise their assets including unwinding debt obligations and re-capitalise and invest in telecommunications infrastructure afresh each year (as if previous price paths and build/buy decisions were just artificial and without consequence). This is not credible or consistent with ComReg's regulatory objectives. In particular;
- (i) there is a difference between the actual cost of capital and the theoretical WACC proposed for regulatory purposes; and
 - (ii) given that the network asset bears a significant upfront cost, which is sunk once deployed, it is a material consideration. In addition to the long payback period for CEI means the appropriate WACC is significant and a relevant factor to when making an investment.
128. Based on the available versions of the PAM and DAM it is not possible for eir to undertake an assessment of this impact on the regulated prices using the tilted annuity approach, which eir agrees is the correct depreciation methodology, as proposed by ComReg. It is concerning that the model is not capable of such scenario adjustments and without appropriate incorporation eir submits that the model is fundamentally flawed and not fit for purpose.
129. ComReg's proposal is also inconsistent with the 2013 EC Recommendation, which states that "[t]he initial RAB would then be locked-in and rolled forward from one regulatory period to the next". ComReg proposes to continually update the RAB within the regulatory review period and therefore it is not apparent how the 2013 EC Recommendation, which ensures "adequate remuneration for the SMP operator and at the same time provide regulatory certainty for both the SMP operator and access seekers over time" could be achieved by ComReg's proposed approach.

Straight line depreciation

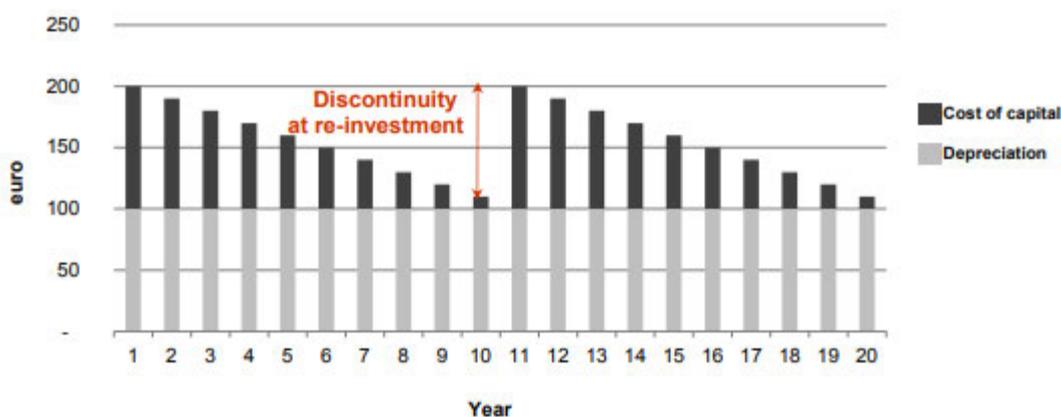
130. eir agrees that NBI should pay for the incremental capex charge associated with pole replacement. However, eir does not agree that it is appropriate to use a straight-line depreciation on the NBV. It is important to note that despite ComReg's claim of "*the primary objective for ComReg in respect of CEI services provided in the NBP IA is to ensure that the SMP operator (Eircom) can recover its efficiently incurred costs, which is most appropriately addressed by either a HCA (straight line) depreciation approach or a standard annuity approach*" [emphasis added], that the tilted annuity also ensures exact cost recovery but with different depreciation profiles – as recognised by ComReg's consultant in 2016.

Figure 6. Depreciation profile with HCA, CCA-FCM and Tilted annuity methods (assuming a 2% index)



Source: TERA Consultants

131. Furthermore, the straight-line depreciation method fails to generate the smooth prices over time provided by the superior and preferred tilted annuity methodology favoured by other regulators. As CEI prices also inform associated wholesale prices such as CGA and WLR in the IA, those prices will also fluctuate as a result. As recognised in TERA’s 2016 paper *“The issue with this approach is that, when the return on capital employed is included to derive annuities, these annuities do not evolve in a smooth way: the annuity is very sensitive to investment cycles”*. This in turn impacts the associated cost recovery of wholesale services which rely on that CEI.



Numerical example: an asset with price equal to 1000, with lifetime equal to 10, WACC=10%
Source: TERA Consultants

132. The benefits of the tilted annuity methodology include that it calculates annuities, which increase every year with price trends (index). This method is generally used in bottom-up models but has been used by ARCEP in a top-down model since 2005.⁸ This would be consistent with ComReg’s proposed approach to use top-down information.
133. Furthermore, as stated by ComReg’s consultants, TERA, “[a]s a conclusion, when applying a Top-down approach in combination of the BU-LRIC+ approach for some assets, the CCA-FCM or the tilted annuity methods are recommended. There should be a preference for the tilted annuity method as this would provide consistency with the method selected for bottom-up models” [emphasis added]. In this context, it is important to re-emphasise that ComReg in this Consultation are also proposing a Top-Down approach in combination of a BU-LRAIC+ approach in setting CEI prices.
134. Finally, ComReg states in paragraph 347 that “using a straight line depreciation approach to inform CEI prices in the NBP IA would seem to be reasonable as it maintains consistency with the existing cost recovery principles used to recover these costs from wholesale access prices, and would also be easier to reconcile with Eircom’s HCAs”. eir does not agree with this as the extant methodologies use tilted annuities. eir will respond separately on this matter if evident in ComReg’s Access Network Model consultation.

Inconsistencies with the 2013 EC Recommendation

135. The Consultation references its purported consistency with the 2013 EC Recommendation including that “[t]he approach adopted for costing Eircom’s existing CEI access services is also consistent with Paragraph (35) of the 2013 EC Recommendation, which recognises that CEI are assets that are unlikely to be replicated and, consequently, the valuation of these

⁸ ARCEP decision 05-0834

assets should follow an approach that: ‘...sends efficient market entry signals for build or buy decisions and avoids the risk of a cost over-recovery for reusable legacy civil infrastructure’. However, no mention is given by ComReg to the immediate preceding sentence to which that quote actually refers — which states *“[i]n the recommended costing methodology the Regulatory Asset Base (RAB) corresponding to the reusable legacy civil engineering assets is valued at current costs”.*

136. In order to calculate the current costs as provided for in the 2013 EC Recommendation and accompanying Staff Working Paper⁹ in practical terms means that *“[t]he initial RAB corresponding to the “reusable” legacy civil engineering assets would be set at the regulatory accounting value (at the time of setting the initial RAB) indexed by an appropriate price index, such as for example the retail price index (RPI), leading therefore a valuation of assets that is equivalent to a current cost valuation. Assets that are already fully depreciated would not enter into the initial RAB. The initial RAB would be locked-in and rolled forward from one regulatory period to the next”.*
137. No such adjustment is made by ComReg to the initial RAB and therefore it is unclear how its proposal can claim to meet this aspect of the 2013 EC Recommendation, when no account is given to the preceding sentence which qualifies it.
138. ComReg must adjust the initial NBV consistent with the 2013 EC Recommendation in order to also be consistent with paragraph 36 of the recommendation which states that *“[t]he indexation method would be applied to calculate current costs for the RAB corresponding to the reusable legacy civil engineering assets. This method is preferred due to its practicability, robustness and transparency. It would rely on historical data on expenditure, accumulated depreciation and asset disposal, to the extent that these are available from the regulated SMP operator’s statutory and regulatory accounts and financial reports and on a publically available price index such as the retail price index.”*

⁹ SWD(2013) 330 final

Q. 6 Do you agree with ComReg’s preliminary view that the existing regulatory asset lives for Eircom’s poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

139. eir agrees with ComReg’s preliminary view that the existing regulatory asset lives for eir’s poles and ducts should be maintained at 30 years and 40 years respectively for generic access.

Commercial Area

140. ComReg undertook an extensive review in 2009, which increased the regulatory lives of both poles and ducts. eir considers that the existing pole life of 30 years remains appropriate and that the existing pole reinvestment programme and concentrated pole replacement for NBI within the next 5 years ensures that the pole life will be reflective and stable at 30 years. However, the appropriate asset life of ducts is complicated in that the life of the duct is partially driven by local topology issues (leading to collapsing of the duct) where the reinstatement of such duct typically occurs when further duct access is required. eir agrees, as recognised by ComReg, that there is insufficient evidence to justify amending the current asset lives for either poles or ducts.

141. eir also notes that the regulatory asset lives of 30 and 40 years are consistent with the civil engineering asset lives used by other NRAs (30-40 years) according to the BEREC Report on Regulatory Accounting in Practice 2019.¹⁰

142. In terms of setting prices for Generic Access to poles and ducts in commercial areas, and in terms of preparing the Separated Accounts, eir agrees with ComReg’s preliminary view that the existing regulatory asset lives for eir’s poles and ducts should be maintained at 30 years and 40 years respectively. If poles and ducts carried only fibre optic cables then it is possible that the reduced strains on CEI may allow longer periods between replacement or substantial re-instatement. However, the next period will be characterised by fibre deployment before copper services are retired (i.e., copper switch-off). Later when these services are retired the issue of removing copper cables will arise. It is too soon to understand whether the removal of copper cables from pole routes and from duct sections can be completed without a cost, or damage to the infrastructure, that would not be off-set by any increase in subsequent economic life.

Intervention Area

¹⁰ BoR (19) 240 https://bereg.europa.eu/eng/document_register/subject_matter/bereg/reports/8907-bereg-report-regulatory-accounting-in-practice-2019

143. In the NBP IA where duct and poles carry eir copper now, the position over the regulated asset lives will clearly change. Initially NBI will deploy fibre optic cable alongside eir copper. When sufficient copper services have migrated to NBI fibre a point will be reached where it is no longer economic for eir to support copper services. At that point eir will cease to be the anchor tenant for the duct and pole CEI. NBI will be the sole user of these services based on a contract for 25 years with no certainty as to how the duct and pole investments will be funded after the contract term.
144. When eir (through our own active services) is the anchor tenant for eir CEI then the risk of declining demand or technological obsolescence is properly one for eir itself. However, once NBI is the sole tenant for eir ducts and poles in the IA then asset lives for poles and ducts that are substantially in excess of the NBI contract term for use of that infrastructure represents a risk that eir must be allowed to pass to NBI.
145. An appropriate mechanism for NBI to cover this risk could be addressed by an appropriate risk premium being applied to the WACC used to set duct and pole rental charges for NBI.

Q. 7 Do you agree with ComReg's preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI's MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

146. eir agrees with ComReg's preliminary view on the recovery of process costs from on-going rental prices for Generic access and separately as one-off charges in the case of NBI access to CEI.
147. Process related costs include wholesale product development, product management, project management, and on-going marketing associated with the delivery of pole and duct access. In the Revised CAM these costs were modelled based on the relevant experience of providing unbundled access to copper services including co-location of operator equipment in eir exchange buildings. Process costs were expressed as a percentage mark-up on the direct network costs of providing the unbundled access. This cost was then recovered from the rental charges for duct and pole access. This treatment pre-supposed similar low volumes for unbundled copper loops and pole and duct access.
148. An updated version of the Revised CAM treatment of process costs is appropriate for Generic access to CEI as it is eir's experience that this will only likely be used in limited volumes either to link elements of the operator network or to serve customers of high value services such as leased lines where a second access to the customer site may be costly.
149. NBI use of pole and duct access for its FTTH service to customers in the NBP IA is larger by a number of orders of magnitude. NBI will require access to several thousand kilometres of eir duct and will hang fibre optic cable on hundreds of thousands of eir poles. This deployment is currently planned to run over seven years. eir's network and wholesale division open eir will support this deployment with a rolling team of engineering, design, product, and finance specialists. The cost of this team is dedicated to the NBI programme. As discussed by ComReg in the Consultation paper, one of the key impacts of the NBI state aided investment will be to drive migration of active customer services from eir copper to NBI fibre delivery. This will have the effect of stranding eir investments in copper. Under these circumstances it is clearly inappropriate that the substantial up-front cost to eir of the team dedicated to the NBI programme would be recovered from recurring charges over the life of the pole and duct assets.
150. The correct approach is the one indicated by ComReg in their preliminary view that the element of process costs, represented by the programme management for the extensive NBI network deployment, should be recovered as an up-front fee chargeable over the period of the roll-out of the NBI FTTH network. Once the deployment is complete, then

there will be elements of recurring process costs that should correctly be recovered from pole and duct access rental charges.

151. Relevant process related costs are subject to commercial agreement with NBI as part of the MIP negotiation. ComReg has been informed at various stages that eir intended to remove the associated process related charges within D03/16 prices and charge a lower on-going rental on that basis. The level of process charges will depend on the division of roles, and on the deployment timetable agreed between the two parties. As such it will not be pre-notified to ComReg. When this negotiation is completed, eir will provide ComReg with information as to the level of the charge, and the costs to be recovered from that charge, so that a judgement can be made as to the impact on the prices set for NBI use of eir CEI.

Q. 8 Do you agree with ComReg’s proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

152. eir’s position on the proposed cost modelling approach used by ComReg in the Draft PAM and DAM is laid out using the same headings as ComReg’s consultation as follows;
- (i) General CEI modelling approach;
 - (ii) Inputs from the Access Network Model (hereafter, the ‘ANM’);
 - (iii) Determining the RAB;
 - (iv) Determining the value of Reusable CEI Assets;
 - (v) Determining the value of Non-reusable CEI Assets;
 - (vi) Determining capital annuities and depreciation method;
 - (vii) Determining the operating costs; and
 - (viii) Determining the unit costs.

General CEI modelling approach

153. See also eir’s response to Question 4.
154. The financial information ComReg has collected from eir on underground investments required to introduce fibre optic cable into provincial and rural ducts, is not a good indicator of the underground costs of deploying an urban FTTH network for a number of reasons. The only parts of the provincial and rural underground CEI upgraded for the rural FTTH deployment are those routes leading from the OLT site to the overhead ribbon routes. These routes do not include underground infrastructure within housing developments, which will be typical of ducts that require remediation for the urban FTTH deployment (IFN) now being rolled out by eir.
155. The DAM should be populated with this cost data from the IFN financial reports before it is used to set final prices for Generic access to eir duct in the Commercial Area, or to set final prices for NBI use of eir duct in the Rural Commercial Area – as much of the NBI use of eir duct will benefit from investment made to deliver the IFN.
156. eir can separately make this information available to ComReg under a Section 13 (d).

Inputs from the Access Network Model (ANM)

157. eir has fundamental disagreements with the ComReg’s proposed use of inputs from the ANM. These inputs are from three elements of the ANM – the Geospatial Module, the Service Demand Module, and the OPEX Module.

Geospatial Module

158. The Geospatial Module is also used in ComReg's consultation on the Access Network Model. eir will review the Geospatial Model further in that context and will provide further submissions on the appropriateness or otherwise of the Geospatial Model at that time.

Service Demand Module

159. In the case of the Service Demand Module, the forecast take-up of FTTH services, the initial level of eir copper services, and the timing of any eir retirement of copper services (with replacement by NBI fibre bought in) are critical factors in the comparison of the "per operator" and "per customer" models of charging for NBI use of eir poles in the IA.
160. These key factors are presented as hard coded inputs into the PAM with no possibility for respondents to this Consultation to analyse the starting points or the assumptions that are the basis for the projections that are critical to the relevant price levels. As currently presented, the models are not fit for purpose and do not meet the requirements of the meaning of consultation with parties as provided for under Article 6 and 7 of the Framework Directive.
161. The Draft PAM in particular contains a fundamental modelling error, in that there is inconsistency in the treatment of NBI take-up and the timing of copper switch-off between the alternative options presented by ComReg. The result of this inconsistency is that the trajectories of the "per operator" and "per customer" rates for annual pole rental in the IA on Table 16 at page 163 of the Consultation Document are the outcome of two inconsistent forecasts. This is not readily evident from the presentation provided to interested parties. In effect, ComReg is consulting on the per operator approach and per customer approach and presenting price outcomes that are based on entirely different forecasts. When the potential differences in revenue and cost impacts for copper, pole, and fibre services are considered it is fundamentally misleading, material and unacceptable.
162. The Service Demand Module, provided with ComReg 20/101, projects almost [REDACTED] "Physical Copper Active Lines" in the IA for 2020. As there are circa 537,000 delivery points in the IA, this indicates an average penetration for eir copper services of 53% by delivery point. To illustrate how this diverges from the actual eir experience, we have examined the position for 11 exchanges that serve islands where all premises are within the IA. For these exchanges, the average penetration is [REDACTED]. For the two exchanges that are enabled with ADSL broadband, the penetration by premise rises to [REDACTED]. Quantitative research undertaken by eir in early 2017, when it was a bidder for the NBP contract, indicated that [REDACTED]

[REDACTED]

163. [REDACTED]

OPEX Module

164. The main issue that eir has with the OPEX Module input is the treatment of Common Costs. ComReg states that the decision is to recover no contribution to Common Costs from CEI services provided within the IA. However, it is not readily apparent from the ComReg consultation where those costs are actually proposed to be recovered.

165. This issue will be addressed in more detail in eir’s response to ComReg 20/101.

Determining the RAB

166. eir broadly agrees with the principles to modelling the eir Regulatory Access Base (RAB) but has some serious reservations (see also eir’s response to Question 5) as to how this has been implemented. eir has already expressed concerns regarding the different investments in ducts for the rural FTTH (300k) and the urban FTTH (IFN) deployments by eir. Additional concerns are discussed further below.

Determining the value of Reusable CEI Assets

167. There is a fundamental inconsistency between the treatment of the existing re-usable assets valued at the NBV from the HCA accounts, that is the result of straight line depreciation applied to the asset since deployment (including the changes resulting from the 2009 directed changes to the key CEI asset lives), and the position that ComReg proposes to adopt into the future.

168. ComReg now proposes to depreciate the remaining lifetime of these assets using a straight line depreciation based on eir's HCA and the non-reusable assets using a tilted annuity and to update the price path annually including for revised WACCs. This is incorrect. In changing the depreciation method (and more generally resetting the tilted annuity), ComReg does not allow for efficient cost recovery of eir's costs for the deployment of assets that occurred in the regulatory environment mandated by ComReg. In other words, that new pole investment between 2016 and the date of a new decision by ComReg, would recover costs based on a WACC of 8.18% and a tilted annuity for that recovery of investment costs. The dangers of resetting a tilt has been acknowledged by ComReg in previous decisions but is totally ignored in this Consultation.
169. For poles ComReg should not remove the incremental costs of replacing poles with furniture. This is because eir no longer proposes to charge separately for Operator furniture. The rate card agreed recently with our Contractor for future pole replacements has [X] As [X] As [X] eir does not have a cost basis for a separate charge for pole furniture. However, pole rental charges should be set to recover the total cost of pole replacements – including the past costs of replacing poles carrying furniture. This is an essential adjustment to the cost modelling and price control for pole access both in Commercial Area and in the IA.
170. It is legitimate to remove the material costs associated with pole furniture and drops as these assets cannot be re-used by the operator seeking pole access
171. The preliminary assumption made by ComReg, at paragraph 381, that the residual duct NBV relates to the Commercial Areas (and not to the NBP IA), is a reasonable one. However, having set the prices for duct access using tilted annuities in 2016 it cannot simply refresh those tilts by just updating the WACC, to the one determined in ComReg's recent decision, as if it applied in previous years. See also paragraph 129.

Determining the value of Non-reusable CEI Assets

Pole replacement costs

172. See also eir's response to Question 4.
173. The approach to determining the value of non-reusable pole assets described in paragraphs 383 to 396 is consistent with data supplied by eir to ComReg under 13D requests and with treatments in the FAR. The approach to projecting the replacement of poles for a combination of accelerated deployments of FTTH for the eir IFN in urban areas and the NBI

FTTH in the IA, together with BAU replacement during and after the accelerated deployments is reasonable.

Duct replacement costs

174. See also eir's response to Question 4.
175. ComReg proposes a very different treatment for the valuation of non-reusable duct assets from the valuation of the equivalent pole assets. This is understandable as ComReg correctly identifies that most investments in existing duct infrastructure only occur at the time of deployment of new cables. However, for reasons set out in eir's response to Question 4, eir does not agree with non-reusable duct set at 0% in the rural commercial area.
176. There are, however, a number of issues with ComReg's assumption regarding urban duct deployments;
- (i) the contract with the company deploying the IFN urban FTTH deployment is based on an agreed price per home passed – and not directly related to the new rate card for ducting or cabling activities. Instead the Contractor is paid at (i) the network planned stage, and (ii) at the network ready for customer connect stage, at two globally agreed rate per home (premise) passed;
 - (ii) in urban areas the pattern of surface types, the history of fibre deployment up to street cabinets, and the presence of large amounts of duct under footway and verge within housing developments where tree routes have compromised the plastic tube, all mean that the experience of rural commercial remediation may not be relevant; and
 - (iii) ComReg proposes to treat all urban ducts as having been fitted with sub-duct. This will not be the case. In the IFN, sub-duct will only be deployed up to the last fibre DP. In the IFN DPs serve up to 12 homes. Particularly, where overhead fibre drops are deployed this will mean that large amounts of duct at the edges of the underground D-side network will not be fitted with sub-duct. The ComReg assumption could lead to a substantial overestimate of the length of urban duct fitted with sub-duct as the 2009 CAM treatment that all housing area streets were ducted for their full length over estimated the historic length of duct (and so underestimated the historic cost per metre of duct actually deployed).

Determining capital annuities and depreciation method

177. See eir's response to question 4.

Determining the operating costs

178. ComReg has identified three categories of operating costs;
- (i) direct operating costs;
 - (ii) process costs; and
 - (iii) common costs
179. eir agrees with these categories.
180. The treatment proposed by ComReg of the direct operating costs for pole and duct for recovery from rental charges is consistent with the information provided by eir on the activities relating directly to overhead and underground CEI assets. It is worth noting that the balance of direct operating costs incurred in operating the fixed access network must then be recovered from active services – and this must be recognised in the price control for those services.
181. In respect to Process costs, please see eir’s response to Question 7.
182. In respect to Common costs, please see eir’s response to Questions 9, 10 and 11.

Determining unit costs

183. The issue of the appropriate determination of a unit cost for price setting is addressed in the eir’s response to Question 9 and 10.
184. See also eir’s response to Question 4.

Q. 9 Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to poles and for NBI’s MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

185. eir does not agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means of determining the pole access rental price for NBI’s MIP access to poles in the NBP IA and in the Commercial Areas.
186. ComReg’s approach appears to favour two cost sharing options as follows;
- (i) in the commercial area, NBI pole access for “transit” purposes would be priced on a pure LRIC basis with NBI only paying for the pure incremental costs that it causes with no cost sharing; and
 - (ii) in the NBP IA, network costs would be shared but on a per customer basis relative to the number of customers that each operator is serving using the shared poles.
187. First, ComReg’s overall approach is entirely premised on the view that generic access and NBI access are fundamentally different. eir considers that this view is incorrect and has set out its reasoning in this regard in Question 1. In summary, while the competing active services will be different in the commercial area as opposed to the IA, the underlying passive service remains the same.
188. In addition, ComReg’s proposal to only allocate a proportion of shared costs to NBI is not consistent with the regulatory concerns identified by ComReg in justifying SMP remedies. ComReg’s proposal is essentially giving a commercial operator a free-pass on paying their way until the business has reached some landmark milestones of “success”. This is problematic for two reasons. First, the setting of thresholds is in itself a notional exercise, which will be subject to forecast error. Second, while the merits of state aid intervention should lead to continued progress of Ireland’s digital economy, it is not within ComReg’s remit to diverge from its independent statutory objectives so as to manipulate costs faced by an operator until it has reached scale to bear those costs — that is the role of the Irish Government through the provision of state aid.
189. eir considers that ComReg’s logic with regard to the proposed approach to cost sharing for NBI access in both the commercial area and the IA suffers from a number of flaws. ComReg’s preliminary view is based on the following purported regulatory concerns and objectives;
- (i) the per operator model distorts competition in the commercial area;
 - (ii) the per operator model over incentivises copper switch off in the IA;
 - (iii) the per customer model allows for “optimal” copper to fibre migration in the IA; and
 - (iv) the per customer model is relatively simple to administer in the IA.

190. eir discusses each of these issues, and the associated flaws, in turn below.

Distortion of competition

191. ComReg states at paragraph 465 that it *“tends to the view that Eircom should only recover the long run incremental costs caused by NBI’s access to poles in this area”* and that if such an approach is adopted *“then it is expected that there would be no shared network costs or common corporate costs to be allocated to NBI’s MIP.”*

192. ComReg’s view is based on the following reasoning;

- (i) if NBI were to pay a share of the common network costs in commercial areas, it would reduce pole access prices, which would in turn supposedly disincentivise competition in the CEI market;
- (ii) if NBI were to pay a share of the common network costs in commercial areas, it would result in eir making excess profits, given that NBI will not compete in the commercial areas, which would allow eir to reduce its prices in the wholesale active market (VUA, Bitstream etc.), which would distort competition.

193. Each of these issues is considered in turn.

Competition in the CEI market

194. ComReg considers that if NBI were to pay a share of the common network costs in commercial areas, it would reduce pole access prices, which would in turn supposedly disincentivise competition in the CEI market.
195. However, as noted in the BRG Report, *“it seems both unrealistic and undesirable to ever expect other firms (besides the electric and water companies, which would not anyway be access seekers facing a “build or buy” decision) to build out their own CEI. This simply cannot constitute a justification for treating NBI on an entirely different basis to other access seekers.”*
196. Entry in the CEI access market, specifically in the commercial area, is incredibly unlikely and as such it is unclear how NBI paying its fair share of the common network costs, in line with all other operators, would disincentivise competition in the CEI market. The more likely outcome is that the proposed approach will in fact disincentivise overall market entry and viable competition.
197. ComReg states at paragraph 463 that the per operator approach *“encourages market entry by allowing other operators to share the costs of existing infrastructure, it helps sustain viable competition by allowing competing operators contribute to the cost recovery of shared assets on equivalent terms while maintaining investment incentives by allowing Eircom to continue to recover its efficiently incurred costs over the long-run.”* eir therefore considers it strange that ComReg has dismissed these objectives in the context of NBI access.
198. The per operator model (and per operator plus model) allows for the appropriate cost recovery from all operators, so the cost/price for NBI and eir would be further reduced by an additional operator gaining access. The lowering of the CEI access cost could incentivise further infrastructure investment, which would of course be beneficial from a competition perspective and increased competition is a key tenet of ComReg’s statutory objectives.
199. In addition, even if additional CEI rollout were to occur, it would be as a result of a build-buy decision that is based on artificially high prices for access to eir’s CEI network, given that NBI will occupy space on the relevant poles. This can only lead to inefficient outcomes and unnecessary duplication of network infrastructure. As noted in the BRG Report *“DotEcon’s justification is also completely counter to the typically desired economic regulatory objectives of promoting greater investment and competition in fibre networks through opening up the incumbent’s duct and pole network for potential network competition.”*

200. eir also considers that ComReg's stance is not in line with the policy objectives of either the State Aid Guidelines or the Broadband Cost Reduction Directive (BCRD), which both focus on the re-use of existing infrastructure.
201. In particular, the Guidelines at Recital 78 (f) state that "[s]ince the reusability of existing infrastructure is one of the main determinants for the cost of broadband roll-out, Member States should encourage bidders to have recourse to any available existing infrastructure **so as to avoid unnecessary and wasteful duplication of resources** and to reduce the amount of public funding" [emphasis added].
202. The BCRD grants access to such CEI as well as gas, electricity and water infrastructure and it is likely that the current review of the Directive will only serve to strengthen the options and conditions available for access seekers. The current Directive states at Recital 13 that "[i]t can be significantly **more efficient** for electronic communications network operators, in particular new entrants, to re-use existing physical infrastructures, including those of other utilities, in order to roll out electronic communications networks, in particular in areas where no suitable electronic communications network is available or where it may not be economically feasible to build up a new physical infrastructure. **Moreover, synergies across sectors may significantly reduce the need for civil works due to the deployment of electronic communications networks and therefore also the social and environmental costs linked to them, such as pollution, nuisances and traffic congestion**" [emphasis added].
203. In light of the digital and green agendas of the European Commission and the established regulatory objectives of timely and efficient rollout, eir considers it strange that ComReg appears to now be pursuing a policy of incentivising duplication of physical infrastructure resources.
204. If anything, ComReg's focus on competition in the CEI market should look beyond the traditional telecommunications sphere and recognise the longer term prospects for a CEI specific market, which encapsulates all forms of alternative infrastructure. This outcome is in fact acknowledged by ComReg's own consultants, Europe Economics, who suggest that water and electricity infrastructure can be used, and indeed may well be used, as substitutes for eir's CEI. Europe Economics even suggests that such alternative infrastructures might be in the "same market" as eir's CEI. In this regard, eir notes that SIRO has already entered the market using CEI that is not eir's.
205. As discussed in eir's response to Question 1, taking a forward looking view, ComReg's regulatory objectives would be better served by conducting a full review of the WLA and WCA markets, particularly given the fact that the NBP will have a significant impact on both markets and was not considered at the time of the previous review,.

Excess profits for eir

206. ComReg argues at paragraph 467 that using the per operator approach in the context of NBI access in the commercial areas could lead to eir recovering a significant part of the shared network costs of poles from NBI and given that eir suffers no wholesale or retail revenue losses from providing such transit to NBI, it could *“use this excess contribution as an opportunity to gain a competitive advantage, for example, to reduce the prices of wholesale access services where it is faced with competition from rival network operators. This in turn could have the adverse effect of reducing incentives for competition from alternative infrastructure providers in the Commercial Areas.”*
207. However, and as discussed by ComReg’s own consultants DotEcon, this situation is only likely to occur for a transitional period. Downstream prices would adjust either through competitive pressure or through regulatory decisions to remove any excess profits. Any potential distortion is therefore very limited. Short-term price changes such as those envisaged in this situation are very unlikely to have any material impact on investment and competition. This is acknowledged by DotEcon who do not place significant weight on this risk. Finally, no account is taken of the fact that ComReg is also currently consulting on the regulated wholesale prices for copper products sold within the IA and Rural Commercial Area footprint – therefore, any such adjustments could reasonably already be priced in to the price path in which case the possibility becomes even more remote.
208. In any event, even during short periods, in which eir might be able to generate more revenue from CEI than previously anticipated, it would continue to be constrained by a regulatory framework that would prevent it from undertaking the kind of pricing behaviour that has been highlighted by DotEcon and ComReg. eir notes that the prices for its regulated wholesale access services are set by cost-orientation, so there is no additional revenue that can be used to distort the market. In any event, the underlying wholesale prices can be updated to ensure holistic cost recovery.
209. ComReg further states at paragraph 468 that the per customer approach *“could be seen as more consistent with the fact that NBI cannot use its subsidised network outside the NBP IA to serve and compete for customers in the Commercial Areas”* and *“as NBI cannot compete for customers in this area, thereby avoiding the risk of over-recovery of costs by Eircom.”*
210. However, the restriction on NBI competing in the commercial areas is directly as a result of the fact that the NBP is a state funded rollout and any such competition would be contrary to state aid rules. eir notes that the Guidelines do not imply any further restriction with regard to the commercial or regulated rates that NBI should pay for the use of existing infrastructure and in fact, as addressed in eir’s response to Question 1, granting NBI preferential access to eir’s network has significant potential to distort competition and

potentially impact eir's ability to invest. NBI should be required to pay the regulated rate like any other operator.

211. eir notes that NBI has a number of subcontractors that will assist in rolling out the network. We are not aware that any other subcontractor has been asked or indeed mandated to only recover their incremental costs.

The per operator model does not over incentivise copper switch off

212. ComReg states at paragraph 511 that *“Eircom’s incentive to withdraw its cables is stronger under the per operator approach than the per customer approach as under the per operator approach Eircom would have to remove all cables before NBI’s MIP would be required to absorb more than 50% of pole related costs under the per operator approach”*¹¹ and references Section 7.2 of DotEcon’s report which considers that the per operator approach *“...causes an excessive incentive to shut off its copper network once NBI’s fibre roll-out is high and the number of residual copper customers is small.”*
213. The problem that DotEcon perceives is that at this point, fibre penetration may be *“far from complete”* and this *“risks some customers receiving no service at all.”* The problem of *“patch”* fibre network coverage coinciding with strong incentives for eir to switch off copper is mentioned a number of times in DotEcon’s report.
214. However, DotEcon only favours the per customer approach based on the long-term incentive of copper switch-off. DotEcon’s conclusion is best set out in full for the benefit of readers:
- “On balance, we conclude that, although the usage-based approach is a significant change from the current ‘equal sharing’ access pricing scheme for shared CEI, it has certain advantages in coping with the roll-out of NBI’s fibre network, especially in the long term. A usage-based sharing rule avoids certain risks that arise with the equal-sharing approach due to its tendency to create excessive incentives for shutdown of the copper network once fibre penetration is high enough”* [emphasis added].
215. First DotEcon’s recommendation is trying to address a potential long-term issue with a complex approach involving the blunt instrument of CEI pricing that will knowingly result in the very issue DotEcon highlights at the outset — that the reduction of costs not borne by NBI will need to be funded, which in this specific case will result in the unrecovered shortfall being levied on eir alone. In addition, if copper-based services including, FTTC, CGA, WLR, LLU and SLU remain cost-oriented and have associated access obligations eir’s ability to switch off copper will be limited.
216. In Ireland, the migration of users from the legacy network is currently customer driven and it is anticipated that this will continue to be the case in the short term. A consumer’s assessment of whether to switch to full fibre will therefore depend on the relationship between the on-going charges for such a connection and the charges they pay for their existing connection. If the prices of copper-based services are low (either through

¹¹ As noted, there is an inconsistency throughout the document as to how ComReg describes copper switch-off. Here, ComReg is referring here to copper decommissioning, which is very different to copper switch-off.

commercial or regulatory intervention) then adoption rates for full fibre broadband will also be low.

217. In addition, low wholesale access prices for legacy networks delay infrastructure investment in NGA by alternative operators, as it increases their opportunity cost of investment. This is also true for resellers. The more alternative operators invest in their own infrastructure, the more the incumbent is incentivised to invest in response.
218. A number of regulators have already started to move away from the classic ladder of investment based pricing remedies of cost plus, even for copper prices, in recognition of the dual role that copper plays in funding NGA deployment including incentivising other operators and migration incentives for legacy networks. eir therefore considers that the current proposal of adopting a per customer approach, which will result in decreasing copper prices, is counter to the stated objectives of ensuring timely and efficient migration.
219. Second, DotEcon's advice completely fails to consider the difference between incentive and ability to switch off copper, which will only serve to exacerbate the issue of artificially low copper prices. This failure is also prevalent throughout ComReg's Consultation document. Without an overarching ComReg policy in relation to copper switch-off, the obligations that eir is subject to in various regulated markets will require the continuation of copper-based services. Without a cohesive approach and stated policy on copper switch off, it is therefore misplaced to suggest that CEI prices can impact copper switch off.
220. It is also particularly concerning to eir that while DotEcon discounts its own other theoretical concerns, these balanced considerations are completely ignored by ComReg in its own Consultation paper, which presents them as de facto truisms.
221. As noted in BRG's Report, ComReg's cost model assumes that fibre network rollout will be complete at a point in time when the fibre network has only a 28% share of customers and that this is unsurprising given the fact that telecom networks are rolled out on a lumpy rather than incremental basis. Thus, the concern that DotEcon repeats at several points to the effect that the per-operator rule provides excessive incentives for copper switch-off seems very misplaced in light of the assumptions made in ComReg's own cost model.

The per customer model does not allow for "optimal" copper to fibre migration in the IA

222. ComReg states at paragraph 489 that the primary/secondary user, per operator and per customer approaches *"have different implications for Eircom's incentives to shut down the copper network. The evolving scale of the bill payments under the per customer approach is more phased and allows Eircom's contribution to shared CEI network costs to decline*

progressively as its ability to recover those costs from revenues from copper-based services declines.”

223. First, the Consultation contains a number of inconsistent descriptions of copper switch off, which is described in some cases as the removal of copper from eir’s poles. eir considers that there will likely be a period of time between the switch off of the copper network and the subsequent removal of copper (which may not be efficient or possible in the case of copper deployed in ducts). As such, ComReg should clarify that it is referring to copper switch off rather than copper decommissioning.
224. Second, eir considers that ComReg and DotEcon place too much weight on the incentives for eir with regard to copper switch off and in particular, the *“excessive incentive”* to switch off copper that would apparently exist under the per operator approach. As discussed in eir’s response to Question 1, while eventual copper switch off is likely over the coming years, ComReg has not provided clarity on the conditions for copper switch off. As such, ComReg has not adequately considered the actual ability of eir to shut off its copper network or indeed to expedite the pace of migration. This point is in fact recognised by ComReg at paragraph 482 where it states that *“while Eircom may have some control in respect of the rate of copper retirement across its network, there are other factors that are not within its control and that could prevent Eircom from achieving its intended targets.”*
225. ComReg’s proposal therefore incorrectly assumes that eir actually has the ability to expedite copper to fibre migration, particularly where it is subject to existing regulatory remedies on legacy copper products in the WLA and Regional WCA markets, it is proposed that it will continue to be subject to the entire suite of regulatory remedies in a sub-set of the legacy FACO market and given that USO obligations remain in place.
226. Further, if copper switch off is only allowed at a threshold of x%, then there is no difference in eir’s incentives, under either the per customer or the per operator approach. If, however, the threshold determined by ComReg is too high it creates a perverse disincentive to switch off the copper network under the per customer approach as the residual *“savings”* eir makes are lower. Indeed, DotEcon in Section 5.6 of its report recognises that the per customer model could result in *“abrupt switch-off”*.
227. ComReg and its Consultants also make reference to the 2013 NDCM Recommendation¹², which allows for the progressive transition of costs between copper and fibre and argues that this is supported by the per customer approach. However, eir notes that the Recommendation is referencing the costing of the SMP's network to move from regulated copper services to fibre - it is not trying to price between different networks. The underlying

¹² Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment

principle is therefore that the allocation of costs between eir's own services would allow for orderly progression and signals to eir's fibre services. In the IA, eir has limited availability of fibre services so the allocation is irrelevant - the costs are borne by the copper service, which supports the migration pricing signals to fibre on the alternative (NBI) network.

228. Rather than attempting to address copper switch off through a narrowly focussed and short-sighted approach that merely consists of the further specification of a remedy in a particular regulated market, eir considers that ComReg's focus should be on establishing an overarching agreed and cohesive position (across the various SMP markets) on copper retirement and when eir would be allowed (i.e., have the ability) to undertake its copper switch off programme.
229. This would provide for a defined event or conditions that allows the full recovery of eir's costs from NBI thereafter and avoids the administrative burden of adjusting the full suite of wholesale services and CEI prices based on error prone estimates of migration from copper to a new and independent fibre network. This also provides a concrete solution to DotEcon's concern that the per operator approach provides too much of an incentive for copper switch-off and a superior recovery of allowable costs.
230. eir would welcome the opportunity to discuss ComReg's consideration of the conditions that would allow a timely copper switch off and whether any potential voluntary commitments can be made by eir in that regard.

The per customer model is not simple to administer in the IA

231. ComReg appears to consider that the NBI rollout conditions mean that the per customer approach is relatively easy to apply, stating at paragraph 491 that *"the fact that NBI is contracted to deploy a fibre network to service circa 537,000 premises (delivery points) that are currently only able to avail of a fixed line service from Eircom, means that a per customer approach could be objectively informed by the relative number of the NBP IA premises actively connected either to Eircom's or NBI's networks."*
232. eir notes, as recognised by ComReg at paragraph 490, that it is generally the case that it is not possible to establish the number of customers that each operator is serving with eir's infrastructure or even the number of customers that can be served by that infrastructure. It is unclear why this would be different in the context of the IA.
233. First, it is not the case that premises (delivery points) in the IA are only able to avail of eir's fixed service. These premises also have access to mobile broadband, FWA and satellite services. While, ComReg does not consider that such products are included in the retail

broadband market, this does not negate the fact that a proportion of premises in the IA are already connected to such services.

234. Second, there will be a proportion of premises in the IA that are not connected to any network e.g. in the case of holiday homes or where the household decides not to avail of any broadband service.
235. Third, it is not possible for eir to overlay its Exchange Areas with the NBP IA and as such we cannot determine the number of active eir connections in the IA. ComReg also recognises at paragraph 483 that a similar issue could exist for NBI noting that *“this could be problematic for NBI as the deployment areas for its fibre network are likely to be quite distinct from the exchange areas operated by Eircom”*. It is therefore unclear, how the relative number of customers connected will be established, thus undermining ComReg’s preliminary view that the per customer approach is appropriate. As such, the per customer approach is not capable of being administered.

The way forward

236. In respect to pole cost sharing methodologies, eir considers that:
- In the IA, NBI should be charged using the per operator plus method.
 - In the Commercial Area, NBI should be charged the same as other operators based on a per operator model. As the passive infrastructure is the same in all cases this should be charged irrespective of NBI’s or other operators’ use of those poles.
237. The per Operator model (and per operator plus model) has several clear advantages in the areas of predictability and transparency. To establish the price levels for pole access in the IA, it is only necessary to forecast the investment in poles. The eir Rural Commercial FTTH deployment and the NBI pole test reports on its early OLT plans allow for this to be done with a good deal of confidence. At that point, the total unit cost per pole for those poles being used by NBI fibre (and eir copper) can be forecast accurately and the NBI rental is 100% of the annuity for the incremental investment plus 50% of the annuity for the pole investment required to deliver only copper service as well as 50% of the annual operating cost per pole. The annual rental for shared use, and for exclusive use, in one table can then be published to give full transparency
238. From the point of view of NBI, this approach has the advantage that its contribution to the annual pole cost remains relatively stable up (in combination with a tilted annuity) to the point that eir retires the copper services – the very point at which NBI will see a surge in FTTH VUA rental revenues as eir migrates remaining copper services in the IA to NBI FTTH.
239. See also paragraphs 258-267.

Q. 10 Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI’s MIP access to duct in the in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

240. eir does not agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means of determining the duct access rental price for NBI’s MIP access to duct in the NBP IA and in the Commercial Areas.
241. In line with its proposed approach for pole access, ComReg’s approach appears to favour two cost sharing options as follows;
- (i) in the commercial area, NBI duct access for transit purposes would be priced on a pure LRIC basis with NBI only paying for the pure incremental costs that it causes with no cost sharing; and
 - (ii) in the NBP IA, network costs would be shared but on a per customer basis relative to the number of customers that each operator is serving using the shared poles.
242. Again ComReg’s preliminary view is based on the following purported regulatory concerns and objectives;
- (i) the per operator model distorts competition in the commercial area;
 - (ii) the per operator model over incentivises copper switch off in the IA;
 - (iii) the per customer model allows for “optimal” copper to fibre migration in the IA; and
 - (iv) the per customer model is relatively simple to administer in the IA.
243. First, eir reiterates its view that generic access and NBI access are not fundamentally different or indeed different to the extent that they warrant entirely different regulatory approaches that grant NBI preferential rates for access to eir’s CEI.
244. Second, these issues and the concerns raised by ComReg are the same as those for poles, which eir has addressed in its response to Question 9.
245. In respect to duct cost sharing methodologies, eir considers that in the IA and Commercial Area, all operators (including NBI) should be charged for the full cost of blockage clearance and other remediation up-front. The remaining rental charge (or where that route has already been remediated by eir) recovers a contribution to the historic investments by eir – including recent clearance of blockages and repair of manholes – and those charges should be set to reflect the share of benefit the operator derives from those investments.

246. See also paragraphs 258-267.

Q. 11 Do you agree with ComReg’s preliminary view on the use of number of customer lines and in particular the use of the number of each operator’s active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI’s MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI’s transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator’s active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI’s transit access in the Commercial Areas.

247. For reasons set out in eir’s response to Question 9, eir does not agree that the active number of customer lines methodology is appropriate.

248. In addition, ComReg’s preliminary view suffers from a number of drawbacks and failures including:

- (i) the fundamental justification for the per customer approach in respect to copper switch off incentives is flawed;
- (ii) there is no reliable data available or that can be created to administer the complex task under the per customer method. Even if such data were available, the administrative overhead and time delay associated with its implementation creates uncertainty in both eir’s CEI prices and associated active cost-oriented wholesale services;
- (iii) ComReg has failed to consult on the basis of allocating the large number of non-active lines within the IA or downward adjustment to correct for multiple addressable premises within an eircode;
- (iv) grouping together active customer lines in both the intervention area and commercial area does not create a proportionate ratio to address the regulatory concern associated with CEI access; and
- (v) the alternative customer threshold approach is discriminatory and results in a commercial “free-pass” which is not one of the regulatory concerns identified by ComReg its market analysis assessment.

249. Each of these is discussed in turn.

The justification for the per customer approach is flawed

250. ComReg has broadly put forward three key reasons for favouring the per customer approach as follows:
- (i) the per operator model distorts the market in respect of a) excess revenues generated by eir which are used to cross-subsidise other regulated wholesale products and b) operator's incentives to build their own civil engineering infrastructure;
 - (ii) the per operator model over incentivises copper switch off; and
 - (iii) the per customer approach allows for a smoother transition of costs from copper to fibre.
251. eir has addressed each of these issues in its response to Question 9 but a brief summary is also provided below.
252. First, it seems both unrealistic and undesirable to expect other firms, apart from utility companies to build out their own CEI. ComReg and DotEcon's logic appears to be that, it would be preferable to set higher access charges for eir's CEI in order to attract new full infrastructure players. This contradicts to the overall objective for the CEI access regime as well as the policy objectives of the Commission to avoid unnecessary duplication of physical infrastructure as evident in the aims of the Guidelines and the BCRD. See also paragraphs 195-205.
253. Second, even during short periods in which eir might be able to generate more revenue from CEI than previously anticipated, it would continue to be constrained by a regulatory framework that would prevent it from undertaking the kind of pricing behaviour that has been highlighted by DotEcon and ComReg. eir notes that the prices for its regulated wholesale access services are set by cost-orientation, so there is no additional revenue that can be used to distort the market. In any event, the underlying wholesale prices can be updated to ensure holistic cost recovery — eir notes that ComReg consultation 20/101 may be of relevance here. See also paragraphs 206-211.
254. Third, without a cohesive and stated policy on copper switch off, it is misplaced to suggest that the blunt instrument of CEI pricing can impact copper switch off. Without an ability to switch off copper, the cost-oriented price of the copper services if based on HCA will continually fall as the assets are depreciated and the shared costs are apportioned to NBI. The current proposal of adopting a per customer approach, can therefore only serve to slow down customer migration and thus eventual switch-off.
255. Finally, eir considers that ComReg and DotEcon place too much weight on the incentives for eir with regard to copper switch off. ComReg's proposal incorrectly assumes that eir actually has the ability to expedite copper to fibre migration, particularly where it is continues to be

subject to regulatory remedies on copper-based services and given that USO obligations remain in place. See also paragraphs 212-229

256. Consequently, eir submits that the arguments against the per customer approach are not just merely administrative, as suggested by ComReg and its consultant DotEcon. The approach itself and the associated administrative burden also fails to achieve the very tenets of ComReg's statutory objectives;
- (i) the per customer approach proposed by ComReg is totally inconsistent and contrary to any of the desired regulatory outcomes envisioned by Regulation 6 (1) of the Access Regulations;
 - (ii) Regulation 8 (6) (a) and (b) which require ComReg to impose proportionate and objectively justifiable remedies which are based on the nature of the problem identified. eir notes that ComReg defined a national WLA market on the basis of the national ubiquity of eir's CEI and did not determine in D10/18 that the geographic differentiation of CEI remedies was required to address differences in competitive conditions. ComReg's justification to charge different prices to NBI is not consistent with the nature of the problem identified in ComReg D10/18. In any event, the manner in which ComReg proposes to address any differing conditions that it now believes to exist is incorrect given the lack of assessment of such differing conditions;
 - (iii) Regulation 13 (2) of the Access Regulations *"to allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project"*. ComReg and its consultants have completely failed to consider the implications of the per customer approach on the WACC. Indeed, as evident from the Terms of Reference it appears not to have even been in scope for consideration by ComReg's consultants;
 - (iv) Regulation 13 (3) of the Access Regulations which requires any price remedies imposed by ComReg to promote efficiency, sustainable competition and maximise consumer benefits. See eir's response to Question 1; and
 - (v) Regulation 16 2 (a) of the Framework Regulations which provides that ComReg, in pursuit of its objectives shall apply regulatory principles by, amongst other things, *"promoting regulatory predictability by ensuring **a consistent regulatory approach over appropriate review periods**" [emphasis added]*. See paragraph 274.
257. In respect to the per customer approach, a number of the administrative challenges and associated cost recovery implications are discussed further below.

No reliable data is available for the per customer method

258. The footprint of the NBP covers, in full or in part, multiple eir exchange areas. eir's wholesale customers are billed on a per exchange basis. This means that there is no reliable

method by which to determine the current number of active customers on the open eir network within an exchange area that overlaps with the NBP footprint.

259. In the vast majority of cases, the connection of customers to open eir's network pre-dates structured addresses in Ireland. While the DCCAIE conducted a mapping exercise to determine the NBP area, this map is a patchwork overlay on eir's exchange boundaries. As such, the summation of customers connected on an exchange basis will undoubtedly over-estimate and over-allocate the shared cost disproportionately to eir's active wholesale services.
260. Similarly, while NBI may be able to report on their respective penetration of the 537,000 premises (which eir believes is overstated – see paragraphs 266-267), NBI's penetration report will not capture the number of premises which are inactive on the open eir network. The Consultation does not provide any detail to adequately allow eir to understand under what circumstances the apportionment of those costs has been considered by ComReg.
261. Without recognition of this issue, the per active customer method will lead to an over-allocation of costs to the open eir network and, based on a resulting over-allocation of such demand, will result in a lower average per unit price. This will lead to a stranding of costs as the derived average cost/price is not supported by the actual number of customers to allow the recovery of those costs from eir's active services coupled with the continued migration by customers from copper to fibre). Furthermore, there is no basis for correction to account for this error (if not adjusted for correctly in the beginning) until NBI reaches 100% penetration. In the interim — which may be for an extended period of between 10-15 years (based on ComReg's assumptions) — this will result in the misallocation and under-recovery of eir's efficiently incurred costs over multiple regulatory price control periods.
262. In addition, the administrative time-lag between reconciliation and resulting future adjustment of associated eir wholesale prices, which ComReg acknowledges must be done (a significant known deficit of its favoured approach) coupled with the continued migration of customers to the NBI network will result in unrecoverable and stranded costs for eir — given that those shared costs are attributable to the underlying infrastructure that NBI is using this essentially means eir is gap-funding NBI's business case. This is acknowledged by ComReg's consultants DotEcon, stating that *“an indirect consequence of ComReg meeting its statutory objectives may be that the subsidy requirements may need to be kept to a minimum, subject to the constraint that Eircom recover its efficiently incurred costs in addition to a reasonable return, in order to avoid potential competitive distortions”*¹³.

¹³ *“an indirect consequence of ComReg meeting its statutory objectives may be that the subsidy requirements may need to be kept to a minimum”* [emphasis added]. eir notes that ComReg has no statutory objective either directly or indirectly which should result in the need to keep state-aid subsidy to a minimum. The pursuit of such a “need” would be wholly inappropriate and ultra vires for ComReg to pursue.

263. Put simply, what is not recovered through DotEcon’s coined “see-saw” approach (i.e., urban overpaying to fund the state intervention) — which can be quite large due to the allocation of non-served premises to eir under the per customer approach, the time lag between re-adjustment of eir’s regulated wholesale service prices and the migration of those customers to NBI — is directly funded by eir. Having acknowledged the associated dangers of choosing a recovery of costs methodology, it is surprising that only the administrative aspects (which in itself leads to potential under-recovery) seems to bear consideration for ComReg against the per customer method.
264. While some risk of under-recovery of stranded costs is also a possibility under the per operator and per operator plus method, the quantum of such under-recovery is not as material under the 50:50 apportionment of shared costs between NBI and eir. As the apportionment of shared costs are known with certainty over time it results in a more stable and reliable forecast and allows for a more accurate and timely recovery of those costs across all regulated services (versus the continued administrative reconciliation under the per customer method and the associated consultation and Article 7 notification required to adjust downstream wholesale services).
265. In addition, with an agreed and cohesive position (across the various SMP markets) from ComReg as to when eir is allowed (i.e., the ability) to undertake its copper switch off programme provides for a defined event that allows the full recovery of eir’s costs from NBI thereafter and avoids the administrative burden of adjusting the full suite of wholesale services and CEI prices based on error prone estimates of migration from copper to a new and independent fibre network. This also provides a concrete solution to DotEcon’s concern that the per operator approach provides too much of an incentive for copper switch-off and a superior recovery of allowable costs.

The allocation of inactive lines and adjustment for multiple “addressable” premises

266. Similar to the issues of inactive customer lines in the IA — which must be allocated to NBI — eir is aware that a number of “addressable” premises included in the Departments 537,000 premises is an overestimate relative to multiple address points designated to single addresses.
267. For example, it is known that certain individual premises have been defined as being at least two “addressable” premises. This is the case where a residential home has mixed use purposes (i.e., for residential and commercial use) by the same occupant. Under the per customer method it is conceivable that these multiple addressable premises, which compromise a single tenant, could result in the misallocation of costs towards eir’s network when either the “second” line is not replaced and becomes inactive or represents a premise which is not active on eir’s network.

268. [X] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] X] As such, the use of Department's 537,000 premises as the denominator is a gross over-estimate to use to apportion costs. This must be corrected.

269. As with the inactive lines under the per customer approach, the only way to address this is to apportion such multiple addressable premises (which in reality is a single premise with mixed use development by the same occupant) to NBI to allow appropriate cost recovery for eir. Of course, such administrative adjustments (and additional risk of under-recovery of eir's costs) are unnecessary under the per operator method and per operator plus methods.

Grouping together Commercial and IA customers together distorts the market

270. As discussed in eir's response, the "distortion" of market concerns put forward by ComReg in respect to the per operator approach are misplaced – a fact which is acknowledged by ComReg's own consultants DotEcon stating that "[o]verall, we consider that these considerations should be given little weight as they are hypothetical".

271. ComReg's proposal in paragraph 563 to allocate the shared costs only to eir's wholesale customers or per paragraph 564 to group together the number of active customers in the Commercial area and IA to determine the ratio of shared costs for NBI Transit allocation price is directly counter ComReg's regulatory objectives and will distort the market.¹⁴

272. In effect, ComReg's proposal guarantees that the Irish taxpayer over contributes to the €3 billion state-aid programme. First, consumers have already paid through taxation to fund the Irish State's development programme and to subsidise NBI as a private company. Second, as the number of active customers in the commercial area as a matter of geography and population density will always be higher (than those in the IA) the relative proportion of costs under ComReg's proposed approach will result in a higher share/burden of costs being borne by non-NBI customers and may in fact be borne by eir alone.

273. Third, as NBI's subvention business case should prudently have been based on the known regulated prices at the time when submitting its tender – based on the published regulated pole price per D03/16 and per operator method – the clawback mechanism, which allows

¹⁴ These are also further discussed in eir's response to Question 9.

for the distribution of savings between the Irish Government and the NBI arising from a lower pole price (based solely on ComReg's regulatory per customer method), means that consumer wealth through taxation and regulated prices is being transferred to a private company funded by the Irish Government. The sole reward of this distribution of profits is not as a result of efficiency or value for money but a change in regulatory policy. ComReg's regulatory decision to discriminate in favour of a state-funded commercial business is inconsistent with its regulatory objectives and is fundamentally inconsistent with the nature of the competition concern for imposing regulatory remedies pursuant to ComReg D10/18.

274. eir notes that the potential for such windfall gains is one of the underlying reasons for ensuring regulatory consistency between regulatory review period pursuant to Regulation 16 2 (a) of the Framework Regulations which provides that ComReg, in pursuit of its objectives shall apply regulatory principles by, amongst other things, "promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods" [emphasis added].
275. See also eir's response to Question 9 and Question 10.

Alternative customer threshold approach is discriminatory

276. ComReg's proposal to only allocate a proportion of shared costs to NBI once its penetration rates exceed a threshold is not consistent with the regulatory concerns identified by ComReg in justifying SMP remedies.
277. ComReg's proposal is essentially giving a commercial operator a free-pass on paying their way until the business has reached some landmark milestones of "success". This is problematic for two reasons. First, the setting of thresholds is in itself a notional exercise which will be subject to forecast error. If those thresholds are never met then even those costs which should be "shared" by NBI are never attributed to NBI. Second, while the merits of state aid intervention should lead to continued progress of Ireland's digital economy it is not within ComReg's remit to diverge from its independent statutory objectives to manipulate costs faced by an operator until it has reached scale to bear those costs — that is the role of the Irish Government which is being addressed by the state aid subvention. Finally, eir agrees that there are a number of disadvantages to this proposed approach, including administrative issues as identified by ComReg in paragraph 569.
278. eir considers that ComReg's preliminary view to dismiss the customer threshold method is correct. For the avoidance of doubt, as with DotEcon's overall consideration regarding copper switch off, the deemed attraction of efficient copper switch off that this approach allegedly signals is just theoretical. See eir's response to Question 9.

Q. 12 Do you agree with ComReg’s preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or under-charging by Eircom? Please provide reasons for your response.

279. eir does not agree with the quarterly review method. ComReg is proposing an administrative quarterly task that is over-burdensome, results in increased administration and cost and is complex to administer and reconcile. In particular, ComReg has;
- (i) erroneously proposed a mechanism based on a misapplication of ComReg’s own pricing methodology;
 - (ii) proposed an inefficient process as the per customer method does not result in revised CEI prices until year 3 onwards (in an on-going 3 year cycle); and
 - (iii) raised eir’s operating costs, the shared proportion of which is borne disproportionately by eir and its wholesale customers.

Misapplication of ComReg’s own pricing methodology

280. eir respectfully submits that ComReg has clearly misapplied its own price setting methodology in proposing this quarterly review.
281. ComReg states in paragraph 574 of the Consultation that *“another consideration in terms of implementation of the per customer approach is how to process any differences between the forecasted customers connected on Eircom and NBI’s networks in the NBP IA in the cost modelling exercise and the actual outcomes”*. This then leads it to state in paragraph 575 that *“Consequently, there is a risk that error in forecasts could result in the level of charges that does not tally with the actual share of customers connected by both operators in that period”*. Finally, it then concludes that in order to address this perceived issue another regulatory measure is required to *“establish a review process to monitor the materiality of any inconsistencies between forecasts and outturns so as to provide for rebates or surcharges as and if required to address any over- or under-charging”*.
282. As clearly set out by ComReg elsewhere in the Consultation, the per customer method is proposed to be used to only allocate the proportion of shared costs between eir and NBI. For example, in the case of poles, the forecast of customers on NBI’s network sets an annual per pole price — based on the apportionment of shared cost. The annual review method results in, if required, as set out in paragraph 725 of the Consultation, an update of CEI prices from year 3 onwards (and thereafter on a 3 year cycle in perpetuity until NBI has achieved 100% penetration). As such, while forecasts are used to determine an annual CEI price for the forthcoming regulatory period, any variation in active customers (contrary to that suggested by ComReg in paragraph 575) within the period does not result in potential

rebates or otherwise as the price paid is on a per pole basis, which NBI has and is proposing to deploy its fibre cable on. Consequently, the number of customers actually served within the period is of no consequence and is even more irrelevant within the quarter.

283. As set out in paragraphs 262-263, ComReg has omitted/failed to recognise that a further delay in updating the regulated active wholesale services based on re-aligned and adjusted forecasts will also occur in perpetuity following the 3 year cycle for projected CEI costs/prices.
284. If ComReg's intention is otherwise it is not clear from the current drafting.

A quarterly reconciliation is in itself an inefficient process

285. As set out in eir's response to Question 11, while NBI may be able to report its penetration figures (relative to the State-Aid contract) to ComReg, there is no reliable data available to determine what proportion of that penetration reflects a new connection entirely, a new connection of a previously inactive line on open eir's copper network or a migration from a copper-based service on open eir's network. Therefore, while the active number of national customers will be reported to ComReg as part of its quarterly data by both eir and NBI it will not provide a direct mapping or reconcilable framework to determine actual outturns of customers moving from one network to another in different geographic areas.
286. Even if such data was available, the proposed quarterly review method is extremely labour intensive and has no benefit as the re-adjustment of forecasts and the pricing implications of same cannot be implemented until the beginning of the third year (and thereafter on a three year cycle). See also paragraphs 262-263. Therefore, the data is only meaningful as part of the annual review process and as such a quarterly review process is completely meaningless and serves no regulatory purpose. As identified in paragraphs 280-284, the proposed quarterly review process also completely misapplies ComReg's own price setting methodology.

Increasing eir's operating costs

287. As stated above, eir does not have reliable or available data to determine the number of customers connected in the IA on its network. If ComReg erroneously continues to pursue the per customer approach, all associated capital expenditure and operating expenditure is incremental to NBI activities and as such must be fully recovered from NBI as part of CEI charges. For the avoidance of doubt, it is not clear at this time what could be developed to identify and allocate active customer lines in the IA and what timeframes would be required to develop, test and implement such a proposal.

288. Such expense and uncertainty is of course avoided under the extant per operator method and eir's proposed per operator plus method.

Q. 13 Do you agree with ComReg’s preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

289. eir agrees with ComReg’s preliminary view that Generic Access to ducts should be differentiated by surface type.
290. The primary driver of the price differential between duct access rental prices by surface type is the substantial difference in the historic investment required for eir to build underground infrastructure for each surface type. The investment per metre is substantially higher for carriageway than for footway, and for footway than for grass verge. To charge a single rate for all surface types would effectively discriminate between operators that are using duct access for different purposes. An Operator using eir duct to reach a business customer for a leased line service would not contribute the same share to the investment made in the infrastructure used (a mix of carriageway and footway) as another Operator deploying a local fibre network to serve residential customers (a mixture of verge and footway).
291. The Consultation states that *“ComReg proposes to replace the existing pricing structure for poles and ducts by determining a national price, set by reference to the costs associated with the Commercial Areas”*. However, as noted in the BRG Report, *“this single average price is based on averaging prices across the urban Commercial Area and the rural Commercial Area”*. Therefore, as the cost of Rural Commercial Areas are still well below those in Urban Commercial Areas, ComReg’s new modelling methodology will therefore result in a material under-recovery of cost for generic duct access, with demand being in urban commercial areas but prices being set based on the average of urban and rural areas.

Q. 14 Do you agree with ComReg’s preliminary view on a differentiated WACC rate of 4.03% for Eircom’s CEI in the context of access by NBI’s MIP NBP IA and for NBI’s transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

292. eir does not agree that a differentiated WACC rate is appropriate for eir’s CEI in the context of access by NBI. In particular, ComReg has:

- (i) misrepresented the characteristics of the Irish Government step-in rights and failed to consider the changing risk as a result of ComReg’s pricing proposals;
- (ii) failed to consider that eir’s CEI business is different to classic utility businesses;
- (iii) failed to consider eir’s ability to earn a reasonable return on its capital employed; and
- (iv) failed to consider company specific factors.

Misrepresentation of the characteristics of NBI’s investment and more importantly the change in risk as a result of ComReg’s pricing proposals

293. Both Europe Economics and ComReg overstate the extent to which NBI reduces risk for eir’s CEI business, in two principal ways as follows;

- (i) the presence of NBI as a customer does not and cannot insulate eir’s CEI business from fundamental risks that it currently also faces; and
- (ii) ComReg’s proposals for sharing common network costs associated with poles and ducts create additional risk.

294. On the first point, and as noted in the BRG Report, there are two principal factors that distinguish the telecommunications environment from that of utilities and explain why comparisons of risks, and hence cost of capital, with those utilities are unfounded. These are (a) the risks of substitution to other providers’ CEI (a possibility acknowledged by Europe Economics); and (b) the risks of substitution to non-fixed-line technologies. NBI is free to use alternative infrastructures (e.g., from ESB or Waterways Ireland) for some portion of its rollout. Moreover, customers may eschew fixed-line broadband (both copper and fibre) for LTE+, 5G mobile, 5G Fixed Wireless Access (FWA) and satellite broadband offerings.

295. On the second point, network costs are highly significant components of the overall cost of eir’s CEI. Under ComReg’s proposed cost sharing rules, at the point when NBI begins utilising eir’s CEI, the flow of revenues from NBI to eir is only as stable and predictable as NBI’s ability to acquire end-user customers. Until and unless NBI’s network is successful in gaining significant end-user acceptance, eir will rely on its legacy copper products to cover its CEI costs.

296. Moreover, the Irish state's backing of NBI only reduces the risks for NBI, not for eir's CEI business. In this context, it is critical to understand that the Irish State's "step in" rights merely reduce the risk of default and they do not eliminate other significant risks as identified above e.g., if there is lower demand for FTTH in the IA than anticipated, this would still translate into lower demand for eir's CEI services and indeed lower payments for CEI in the immediate term, given the proposed per customer approach. This is irrespective of how NBI itself is shielded from risk. The BRG Report notes that the risk of default in the telecom and utility sectors *"does not appear substantial, and so eliminating this default risk does not warrant a major reduction in the cost of capital relative to that of regulated fixed-line telecom and (especially) utility companies. Or putting it another way, the Irish State's "step-in right" just assures that money that would anyway have been owed by NBI continues to be paid, but offers no guarantees to the amount of demand (and therefore no guarantee that the CEI provider will recover its costs)."*
297. It appears from the terms of reference provided to Europe Economics that ComReg did not even require its consultants to consider the change in risk arising from ComReg's pricing proposals and the relevant implications for the WACC. eir considers that this is a fundamental process flaw. As evident from the BRG Report, the appropriate WACC to use is in line with the extant telecommunications WACC and if the per customer approach is used then a further increase to that rate is required.

Failure to consider fundamental systematic risk differences

298. Different firms within sectors have different products and services. In financial theory, what the firm does and sells is taken into account in the systematic risk of a firm. This is reflected in the WACC formula through the asset beta. Consequently, as evident in Table 1, there is a divergence in asset betas even among comparative competing companies within an industry.

Table 1: Unlevered fixed asset beta values

	Ticker	MSCI Index	
		2-Year Daily	5-Year Weekly
BT	BT.A-GB	0.45	0.49
Deutsche Telekom	DTE-DE	0.43	0.69
Elisa	ELISA-FI	0.42	0.52
KPN	KPN-NL	0.42	0.62
Orange	ORA-FR	0.37	0.60
Sw isscom	SCMN-CH	0.53	0.52
Telefonica	TEF-ES	0.41	0.56
Telenor	TEL-NO	0.41	0.65
Telecom Italia	TIT-IT	0.38	0.47
Telekom Austria	TKA-AT	0.30	0.36
Telia	TELIA-SE	0.53	0.62
proximus	PROX-BE	0.58	0.64
Telenet	TNET-BE	0.34	0.38
NOS	NOS-PT	0.47	0.65
Tele2	TEL2.B-SE	0.70	0.64
Hellenic Teleco	HTO-GR	0.55	0.83
Average - All		0.46	0.58
Average - ComReg 2019		0.44	0.57
Median - All		0.43	0.61
Median - ComReg 2019		0.43	0.60

Source: FactSet, cut-off date 3 October 2019, KPMG Corporate Tax Table

299. It is wholly and materially inaccurate for a telecommunications regulator to superimpose an asset beta based on an arbitrary selected mid-point range by ComReg of the asset beta for the water sector and asset beta for the electricity sector onto part of eir’s telecommunication business. ComReg states that “*the beta for CEI access should be close to that of network utility*”. It is interesting to note here that even Europe Economics identifies that “*there is an intrinsic uncertainty in the estimates*”. No reference is made by ComReg to that uncertainty. As set out in paragraph 294, and discussed at length in the BRG Report, eir’s “CEI business” bears no resemblance nor is it “close” to that of network utility or how asset betas for comparators should be identified (as set out below).
300. Importantly, using utility comparators is clearly against the advice ComReg’s own consultants Europe Economics gave to the regulator on an appropriate asset beta for Irish Water. Europe Economics states that “*Since Irish Water is not listed, its asset beta must necessarily be inferred from a set of relevant comparators—ideally, listed companies carrying out comparable activities and subject to similar economic regulation*” [emphasis added]. It is therefore surprising, given that eir is also an unlisted private company that Europe Economics has departed from its own recommendations. Europe Economics own reasoning, as set out in the addendum to “Water Revenue Control 3”, doesn’t stand up to any level of scrutiny. It is clear that the provision of water is very different to the systematic risk faced by telecommunication companies including the infrastructure upon which they rely.

301. Alternative means of water delivery and the provision of water (their product) have few, if any, substitutes. This also holds true for the provision of electricity. Put simply, the comparators chosen are not relevant nor do they carry out comparable activities. Whereas, as identified by eir, the requirement to rely solely on duct and pole infrastructure to deliver a broadband product is not required or guaranteed.
302. There are a number of wireless substitutes and different network infrastructure options to deliver a broadband product today with further future substitution opportunities including 5G — a fact recognised by Europe Economics *“[i]t is not fanciful that a future communications network might use no CEI. For example, Google and Elon Musk have both proposed schemes for providing broadband access in various less developed countries on the basis of drones. eir itself states in its submission that “the awarded company could change the technology from a fibre solution to a future wireless solution provided that it achieves the same level of service as fibre”. (op cit. para 191).”* In other words, there is a systematic risk associated with eir’s CEI infrastructure, both from a technology advancement perspective and overall product demand perspective, that is not evident in the asset betas inferred for either Irish Water or the asset beta inferred for Eirgrid or ESB Networks.
303. In fact, the BRG Report notes that *“[t]he potential for leveraging alternative infrastructures is thus very real and might even grow over time as alternative infrastructure providers recognise the value of making their infrastructure available to fibre providers”* and that eir *“therefore faces the risk that NBI might choose not to use portions of its CEI while not having any alternative sources of revenue from which it could recover its costs.”* Furthermore, the BRG Report notes that in addition to the risk of input substitution by NBI, there is the risk of technological substitution by customers. In particular, *“there is a risk that the demand for fixed-line services (copper and fibre alike) will fluctuate depending on the availability and quality of alternatives such as LTE+, 5G (mobile and fixed wireless access) and satellite broadband. These alternative technologies may either not rely on poles and ducts at all (e.g., satellite broadband), or may do so in very different ways (e.g., 5G mobile or even 5G-based Fixed Wireless Access) than do conventional fixed-line services. These technological substitution possibilities create direct and indirect risks for Eircom’s ability to recover its CEI costs.”*
304. By contrast, there is a lack of any significant substitution possibilities in the context of water and electricity distribution networks. eir’s CEI is thus on a different footing to water and electricity networks and faces a different (i.e., higher) demand risk than those types of network. Europe Economics’ referencing a sales website for a wholesale supplier selling various different types of ducts (in various colours) to suggest *“[h]igh supply-side substitutability”* is a very different standard of substitutability “assessment” than used in either competition law or ex post economic regulation. Finally, even without carrying out

any type of rudimentary market analysis assessment it is evident that pre-deployed ducts available from a wholesaler are clearly in a very different market to the infrastructure of deployed ducts.

305. Similarly, Europe Economics' assertion that Irish Water comparators require it to be "subject to similar economic regulation" and that in the context of recommending an asset beta for the Water Revenue control that "[t]he network businesses of these comparators would in many cases be subject to broadly similar regulatory framework". From a regulatory framework perspective in the case of regulated utility businesses it is very different seeking a total revenue price path for a five year period to cover forecast expenditure compared to ComReg's approach of modelling a notional (often hyper efficient) hypothetical telecommunications operator building a new network whose cost recovery is based on tilted annuities projected over 25-30 years (and the recovery of those costs — even for eir's CEI business based - on the continued revision of price paths may never occur). Utility regulators are typically also required to ensure the applied WACC ensures financeability, whereas ComReg has stated that it does not.
306. Furthermore, in setting the price path for Eirgrid and ESB Networks the energy regulator applies a fixed WACC for the duration of the period "*The allowed WACC provides for this uncertainty in its calculation and while the true WACC will change throughout the period, by fixing it for the duration of the period the CER provides investment certainty for the companies*". ComReg has proposed in this consultation to diverge from this practice for pricing ducts and poles — which further undermines certainty and investor confidence in the telecommunications market.
307. In summary, with different lines of business, there are legitimate reasons why the individual component parameters within the WACC calculation should not be the same, since firm-specific components can legitimately vary. Such variation is obviously more apparent in firms operating in completely different sectors.
308. eir therefore submits that in order to accurately reflect the asset beta of a telecommunication business including their underlining assets, in the absence of pure play civil engineering comparators in the telecommunications sector (i.e., companies that only offer CEI for telecommunication services), a beta for eir's CEI wholesale offering could not be estimated with any reliability unless the asset beta for comparative telecommunications peer group operators is used.
309. In ComReg 20/96, ComReg stated in response to eir's submission that a risk premium was required for FTTC that [in ComReg using comparator telecommunication companies to determine the asset beta] "*the updated WACC reflects the market's view of risk of investing in comparator companies across Europe. These companies have, to a large extent, also rolled*

out FTTC. Hence the risk of FTTC is included in the updated WACC". In order for that position to hold true, it also implies that the underlying infrastructure of CEI must also be embedded in the existing asset betas of comparator telecommunication companies. This is also supported by NRA precedent decisions, the UK telecommunication regulator, Ofcom, in pricing CEI states that *"The return on capital employed is calculated using our current estimate of the Openreach Copper WACC...as we consider this most closely reflects the systematic risk associated with physical infrastructure"*¹⁵.

Failure to consider eir's ability to earn a reasonable return on its capital employed

310. Given the capital intensive nature of CEI and the associated pay-back period the materiality of any incorrect determination of the WACC used is significant.
311. Regulation 13 (2) of the Access Regulations requires ComReg *"to allow the operator a reasonable rate of return on adequate capital employed, taking into account any risks involved specific to a particular new investment network project"*. While ComReg has stated in the past that *"Financeability concerns are not among the factors that ComReg has considered when selecting the most appropriate approach to the estimation of the WACC"* ComReg cannot be so draconian as to consider materially different costs of debt within a short time period of determining an appropriate cost of debt for a hypothetical telecommunications operator¹⁶. eir is a privately owned telecommunications company and cannot raise finances for any part of its business *"close to risk-free"* from bondholders.
312. Similarly, in order for the operator to earn a reasonable rate of return on capital employed the relevant costs incurred year-on-year must be anchored to the relevant WACC for that investment and not as proposed by ComReg to adjust over time – which provides no investment certainty or return for operators relative to the investment decisions they made on foot of a ComReg build/buy signal.
313. ComReg takes no account of the cost of eir's embedded debt i.e., the debt which eir has already raised. Such an approach ignores the fact that eir has to fund the cost of its existing debt, which is significantly different from the forward-looking cost of debt ComReg proposes for eir's *"CEI business"*. Furthermore, in ComReg's recent WACC decision it decided that the cost of debt should be 2.6%. In justifying revising the cost of debt down from its original consultation position from 5.04% it stated that *"[a]s a result of recent bond issuances data has become available on Eircom's cost of debt...That cost of debt is materially lower than the cost of debt proposed in the Consultation...Europe Economics in its Final Report notes that when such data is available, adequate weight should be placed on it especially where*

¹⁵ Ofcom, Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26

¹⁶ In fact, ComReg's decision on the appropriate cost of debt took effect on the 14 October 2020, whereas its consultation on CEI was published on the 9 September 2020.

there are marked deviations from the cost of debt calculated under an equilibrium approach”.

314. Therefore, ComReg as part of the WACC determination relied and justified its position on a point estimate for the cost of debt including using observed data, namely the data available on eir’s recent bond issuances, in revising the cost of debt down from its original consultation position of 5.04%. eir’s average cost of debt stands at ~2.92%. It seems unusual therefore, and a very quick change in ComReg’s reasoning (within the 28 day appeal period of the WACC decision), to now propose a completely different approach to justify a cost of debt of 1.44%. ComReg must be proportionate in its decision making and “adequate weight” should apply both ways in revising such parameters.
315. In addition to the risks of input substitution by NBI and technological substitution by customers, BRG identifies three additional issues with respect to their implications for the WACC parameters.
- (i) the allocation of risk is not accounted for in the access price;
 - (ii) there is increased regulatory risk associated with ComReg’s proposal; and
 - (iii) risks arise from the way in which the model calculates prices.
316. First, the BRG Report notes that under the per-customer approach the level of NBI’s payments to eir is linked to NBI’s success in achieving customer acceptance of its products. This arrangement reflects a reallocation of risk from the access seeker to the access provider and *“[o]ne would normally expect that such an option would be priced, e.g., in the cost of capital. For example, in the context of access regulation in Europe, it has been recognised that access seekers benefit from a “wait and see” option—to utilise the infrastructure only when demand for a product is apparent—that the access provider has foregone. As a matter of economic principle, regulators such as Ofcom have recognised the relevance of this “real options” approach to access pricing. “*
317. Second, the BRG Report considers that *“[t]he prolonged time horizon over which CEI costs are recovered also creates regulatory risk. Regulatory risk arises because Eircom’s CEI charges will be subject to periodic reviews on potentially several occasions over the payback period. For instance, the per-customer sharing rule results in a “backloading” of the revenue flow from NBI to Eircom. This “backloading” leaves Eircom more vulnerable to future revisions in the underlying basis for setting access charges.”* Given eir’s experience to date, we consider that there is a significant risk that the basis for CEI access pricing could be revisited in subsequent reviews.
318. Finally, while there are always risks inherent in using a forecast model to set prices, As identified in the BRG Report *“these risks are amplified in the case of the modelling for NBI prices because NBP is a new project with many uncertain elements”* and *“[v]ariations in the*

customer take-up, the pole replacement rate, the number of poles or amount of duct used in a year, or in various other assumptions would all change the price that should be charged, but would not be reflected in the regulated prices for that year.” This imposes significant pricing risk on eir.

Company specific factors

319. If ComReg considers project specific risks (albeit incorrectly in making its proposals) then it must also consider company specific financing — by adjusting the WACC for the cost of equity and cost of debt. In this sense, project specific factors, in particular with CEI investment in NBP areas is lifting the veil of the hypothetically efficient operator and consequently ComReg must specifically consider the funding structure of eir.
320. For the revised WACC to be appropriate it needs to be appropriately adjusted to take into account, inter alia, the additional premium investors’ demand for investing in private companies (referred to as the “illiquidity premium”).
321. The illiquidity premium of investing in private companies is not theoretical as investments in private companies not listed on a stock exchange are usually harder to divest from. This issue has been highlighted by the suspension of the largest fund held by Woodford Investment Management.¹⁷
322. Willis Towers Watson reports that the illiquidity premium could be as high as 150-250 basis points.¹⁸
323. Finally, ComReg’s assertion “[w]ith respect to the range considered for a CEI WACC (and the need to choose a midpoint estimate, similar to the approach adopted by ComReg in the 2014 ComReg WACC Decision), ComReg considers, for the reasons already noted above, the ranges provided by Europe Economics for specific WACC parameters and the proposed “point” estimates are appropriate” [emphasis added], which is in the first instance incorrect based on an inappropriate asset beta (as discussed above) but also more concerning in the second instance is that the arbitrary and completely discretionary choice to use a mid-point value between two completely different asset betas in completely different sectors (hence, for the benefit of the reader, why there is a different asset beta evident for each) and presenting it as some type of methodology with reasoning and justification is completely misrepresenting what ComReg has in fact done.

¹⁷<https://www.reuters.com/article/us-woodfordinv-suspension/explainer-how-the-door-slammed-shut-at-british-money-manager-woodfords-fund-idUSKCN1TB202>

¹⁸ Willis Towers Watson, “Understanding and measuring the illiquidity risk premium”, March 2016.

324. Similarly, while advising on the asset beta for Irish Water, Europe Economics recommendation is based on largely the asset beta of comparable water companies with a reduced weight given to the asset beta's of the UK National Grid, SSE (electricity and gas distribution business) and Centrica plc (largely a gas distribution business) and specifically states that the asset beta chosen for Irish Water *"is the same as the median value for water companies"*. This appears justifiable and reasonable if determining an asset beta for Irish Water but as set out by eir and the BRG Report none of those conditions can be read across to eir.
325. This also holds true in both ComReg and Europe Economics simply picking a mid-point estimate between sectors as if that somehow this reflects an asset beta of a telecommunication's CEI business. A more accurate read across of course is set out in Europe Economics report in Annex 1, which sets out the regulation of Passive Access Infrastructure WACCs for telecommunication operators in other countries. eir submits that these would be *"more relevant comparators... carrying out comparable activities and subject to similar economic regulation"*.

Q. 15 Do you agree with ComReg’s preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

326. As the agreed contractor rates have now been updated for the replacement of poles, eir does not consider that a pole furniture charge is necessary.

327. Given the recent commercial agreement entered into with our contractors, [



]

328. Notwithstanding this, ComReg may wish to consider the merits of an efficient network deployment signal an appropriate pole furniture charge may encourage. In addition, such a charge may ensure that future re-negotiated pole contractor rates are not increased as a result of increased (then) historical pole furniture deployment.

Q. 16 Do you agree with ComReg’s preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg’s proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

329. eir agrees that tree trimming costs associated with route preparation for the deployment of cable should be recovered as a one-off charge from the requesting operator. This approach is consistent with cost causality.
330. eir agrees that tree trimming costs associated with route maintenance should be recovered as part of on-going pole rental. This approach is consistent with sharing of a fixed common cost where both NBI and open eir benefit equally from this activity.
331. However, the proportionality of cost benefit associated with route maintenance is misaligned under the per customer approach, where somehow this fixed common cost is proposed to be shared in ratio of the number of customers on each network. Once multiple independent networks are deployed on a single network (in this case CEI) both networks benefit equally from this maintenance. This should not be confused by the cost recovery of those equally shared costs through price setting of active services on those individual networks which is typically apportioned by those individual networks to its customers — which is consistent with the cost accounting principles per ComReg D08/10.
332. See also eir’s response to Question 9.

Q. 17 Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI's MIP as an upfront fee levied on NBI's MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

333. eir's position on the recovery of NBP-specific investments in duct and poles to support the NBI deployment differs depending on whether the infrastructure is underground or overhead.
334. For ducts, trenches, and manholes, eir proposes to charge NBI up-front for engineering works required to make these ready for deployment of NBI sub-duct and fibre optic cable. There are a number of inter-related reasons why eir has agreed this position with NBI.
335. The demand for copper services in the NBP IA (and in the adjacent Rural Commercial area where most of NBI transit takes place) is in decline and will decline further as FTTH services are taken up. No new copper cables are required to support that demand so the investment in underground assets is driven entirely by NBI requirements.
336. As such, eir agrees that it is appropriate to recover all duct remediation associated costs up-front.
337. In contrast, the current position that eir has agreed with NBI for poles is that eir will fund the investment in pole replacement in the IA (and for any transit poles that NBI testing indicates need to be replaced) and the recovery of that charge will be through the annual rental charge. If a more rapid deployment of rural FTTH is required then a greater number of pole replacements will be required in some years and eir may need to review that funding position. This position is also consistent with the per operator plus model proposed by eir.
338. The replacement of poles is generally an on-going activity to support the operation of copper cables and the associated telephony and ADSL broadband services delivered in the IA. The normal cycle of pole testing would lead to all poles that failed a test being replaced over a period not substantially longer than the planned NBI deployment. Put another way, absent the state aid for rural high speed broadband, eir would still need to invest in poles to deliver rural copper services. Where that level of incremental pole replacement is higher due to NBI requirements that can be recovered using the per operator plus method.
339. As such, eir does not agree that it is appropriate to recover all pole remediation costs up-front resulting in lower recurring pole rental charges.

Q. 18 Do you agree with ComReg’s preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

340. eir would welcome the opportunity to discuss the relevant requirements with ComReg as regards the reporting of its CEI. However, ComReg must give consideration to what information is likely to be available, including its potential accuracy and in what form that information could be shared with ComReg.
341. In respect to pole furniture, please see eir’s response to Question 15.
342. eir’s Regulatory Finance team has undertaken an initial assessment of what information is reasonably available and discussed the matter with a number of subject matter experts to get a better understanding of how NBI will order CEI and be charged for same.
343. NBI’s CEI requirements are first sent in by OLT area to eir. This information will specify the route, length and number of poles. In addition, it will also specify which poles are required to be replaced. As set out by eir, in respect to duct, NBI is required to pay in advance for any remediation required.
344. NBI’s requests are then assessed by eir and relevant instruction is given to the field staff to undertake the necessary remediation. In respect to pole routes, NBI is billed based on the total number of poles used. Similarly, in respect to ducts, this is based on the total length of duct used by surface type. These calculations are captured off-line, verified with NBI and a bill is accordingly sent to them.
345. Based on that available information by OLT, it may be possible to categorise that CEI as Commercial or IA. The cost model to ascertain the national cost of CEI will need to be examined further and significant off-line calculations and manipulation of data will be required — encompassing large amounts of man-hours. If the information allows, it may be possible to perform a further off-line calculation that subtracts the NBI billing information from those national numbers to provide a geographically split Income Statement.
346. However, this would be on a best efforts basis and all information and methodology provided in this response is currently based on an initial desktop assessment and the actual feasibility, accuracy and whether this will meet the relevant audit standard has yet to be determined.

347. eir considers that the information may be better reported to ComReg as part of an AFI and not form part of the HCAs. For reasons set out in Question 19, eir does not consider it appropriate that this level of granular information is made public. As already evident from the various media campaigns from operators, there is clearly no understanding of eir's HCA and how they correlate with regulatory prices. As CEI is based on a combination of future and historic cost inputs a public Income Statement for CEI serves no purpose from a transparency, pricing or non-discrimination perspective and will only add to the existing confusion. Before agreeing to its inclusion in the HCA, eir will also need to engage with its Auditor to ascertain whether the proposed network studies and cost allocations are sufficiently robust and sufficiently accurate to achieve a fairly presents audit opinion as per D08 / 10.
348. One of ComReg's regulatory requirements is to ensure that its regulatory decisions are proportionate and does not result in undue regulatory burden. Absent discussing and understanding this issue further with ComReg it is not possible for eir to comment further at this time.
349. See also eir's response to Question 19.

Q. 19 Do you agree with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg’s proposal that Eircom should publish it on its website? Please provide reasons for your response.

350. eir agrees that an annual statement can be provided to ComReg. However, eir would welcome the opportunity to discuss the relevant requirements with ComReg as forecast information can be more problematic for ducts given the remediation nature associated with this CEI. This level of information is more difficult to project with accuracy in the IA.
351. It is not clear the meaning or the benefit of having a separate category in Annex 5 and Annex 6 in respect to “...remediated for other network operational reasons”. The replacement of the CEI is captured under the first heading “Replacement of poles for Pole access” and “Remediation of ducts for Sub duct access”. eir requests that ComReg identify the nature of the problem it is trying to address by this reporting information, the difference it perceives between the different types of remediation, the relevance and impact of this sub-category of reporting information on the regulated price path and in particular ComReg’s proposal that eir make public such information on its website.
352. In circumstances where CEI remediation (in respect to ducts) is being paid in advance by NBI, it is unclear whether this level of detail is actually required for the IA. Under the MIP, relevant remediation works orders will be completed off-line and agreed with NBI. NBI will then pay eir in respect to those works orders and the agreed work programme. Additional regulatory oversight is not required and it is questionable what benefit undue regulatory reporting of such investment brings to the regulatory price path. Any reporting obligations that NBI has with the Irish Government as part of its contract are matters for it to discharge and cannot be delegated through SMP remedies on eir. eir requests that in respect to the IA, ComReg identify the nature of the problem it is trying to address by reporting this information and in particular the proposal that eir make public such information on its website.
353. eir does not agree with making the additional financial information public for the IA or Commercial area. ComReg must take into account that there are other infrastructure-based operators in the market and eir’s commercial investment programme over a 3 year period is operationally sensitive. In addition, as the relevant rates of this investment are largely based on external negotiated commercial contracts it is wholly inappropriate from a commercial law perspective to make such information public. Such information has historically only been shared bi-laterally with ComReg by eir for good reason. ComReg must respect the sensitive commercial nature of that agreement under ComReg D08/10 and ComReg 05/24.

354. eir submits that the regulatory oversight through additional reporting resulting in undue regulatory burden serves no purpose for the IA where NBI pays for such CEI under the per operator plus model in the case of poles or upfront in the case of ducts.
355. eir has over the last two years provided a significant amount of duct and pole data, both financial and statistical, to ComReg in terms of informing the PAM and DAM costing models. eir agrees to continue to provide information bilaterally to ComReg. However, ComReg must take into account that some compromise may be required as to the level of information eir is able to accurately report and provide to ComReg. It is clear that further engagement is required to ascertain what is reasonably required and obtainable. This must be done in advance of ComReg making (if appropriate) a final determination and cannot be sought to be retrospectively imposed by ComReg on eir once a decision has been published.

Q. 20 Do you agree with ComReg's preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

356. ComReg proposes at paragraph 724 that *"Generic Access prices calculated on the basis of the PAM and DAM at the date of ComReg's final decision are fixed per year for a period of five years, subject to Eircom's obligation of cost orientation continuing for that period."*
357. eir does not agree with ComReg's proposed approach and considers on a principle level that directing prices for Generic access beyond the market review period or indeed current price control period is neither proportionate nor justified. However, eir acknowledges that some certainty is required regarding the long-term pricing of CEI.
358. More generally, eir notes that all recent Market Review Decisions in the last 10 years have been delayed where the pricing remedies have been imposed in perpetuity or where the regulatory price path is beyond the market review period. It would appear that there is a prevailing issue with regard to sequencing and eir is therefore legitimately concerned that the specification of the price path for CEI access beyond the market review and price control period will result in similar delays with regard to the upcoming review of the WLA/WCA markets.
359. As markets continue to evolve, including the number of listed markets susceptible to ex ante regulation, the piece-meal and ill-sequenced review of pricing remedies increases the risk of regulatory failure. The Irish market should not have to remain a laggard in terms of adopting regulatory best practice as a result of delays on the part of ComReg. It is important that the regulatory environment keeps pace with market developments and changes in the focus of EU policy.
360. eir notes, for example, that the Draft Recommendation on relevant markets susceptible to *ex ante* regulation and the associated Staff Working Document, which are due to be adopted by the end of this year, foresee the possibility that NRAs may consider delineating a separate CEI market and that this may be of particular relevance in Member States where one ECS provider owns physical infrastructure which is ubiquitous and suitable for the deployment of alternative fibre networks.
361. ComReg's focus on competition in the CEI market should therefore look beyond the traditional telecommunications sphere and recognise the longer term prospects for a CEI specific market, which encapsulates all forms of alternative infrastructure. This potential outcome is in fact acknowledged by ComReg's own consultants, Europe Economics, who suggest that water and electricity infrastructure can be used, and indeed may well be used, as substitutes for eir's CEI. Europe Economics even suggests that such alternative

infrastructures might be in the "same market" as eir's CEI. In this regard, eir notes that SIRO has already entered the market using CEI that is not eir's and Virgin Media also operates using its own CEI.

362. Moreover, eir is of the view that ComReg's meeting of its regulatory objectives would be better served by conducting a full review of the WLA and WCA markets, particularly given the fact that the NBP will have a significant impact on both markets and was not considered at the time of the previous review, given the lack of clarity around the contract award. As noted by ComReg, the contract between the Minister and NBI has now been concluded. However, ComReg has chosen to assess its impact on specific pricing remedies rather than the underlying market review upon which these pricing remedies rely. eir considers that this approach is incorrect.

Q. 21 Do you agree with ComReg’s preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI’s MIP? Please provide reasons for your response.

363. eir agrees in part with the proposed price control application. In respect to the application of the proposed price control set out in Section 10.2.1 see eir’s response to Question 20. While eir agrees that a statement of compliance regarding eir’s cost orientation obligation has some merit, ComReg has in particular failed to consider that;

- (i) there are associated consultation and Article 7 notification requirements related to updating regulated CEI prices;
- (ii) there is an on-going three year lag for the associated update of CEI prices;
- (iii) the on-going three year lag has associated impact on wholesale service prices and any changes result in renewed consultation and Article 7 notification of those wholesale services; and
- (iv) continually updating the WACC is completely misplaced and fails to consider the continued impact this has on a long term asset and associated cost recovery pricing tilts.

364. Each of these issues is discussed in turn.

ComReg’s regulatory objectives under the EC Framework require on-going consultation and Article 7 notifications

365. Regulation 13 (4) of the Access Regulations cannot subvert ComReg’s requirements under the Framework Directive. ComReg cannot just issue “directions” to eir in respect to a price control without first following the consultation procedures referred to in Articles 6 and 7 of the Framework Directive. As ComReg is aware, other NRAs that have tried to avoid such requirements have been reminded by the Commission of their obligations to consult interested parties and the Commission before adopting any measure and this is also true in respect to updates to the WACC. For example, the European Commission clarified in Portugal, C(2018) 5876, the “[n]eed to notify all WACC updates...the Commission considers that any new calculation of the WACC should be subject to the consultation procedures referred to in Articles 6 and 7 of the Framework Directive, regardless of whether the new WACC value results from a methodological change or simply an update of the data used in the calculation. The Commission therefore calls on ANACOM to consult interested parties and the Commission before adopting any measure related to the WACC in the future either as a stand-alone decision or as part of a market analysis or decision on remedies.”

On-going three year lag

366. ComReg has correctly identified that due to the timing lag associated with the administrative aspects of the proposed price control application that any forward looking updates in CEI prices from forecast adjustments could only take effect (subject to appropriate consultation and Article 7 notification) from the third year of the price control. This is because there may be associated timing delays within one pricing period of capex investment, which are corrected for in subsequent periods. Without such a delay to allow for correction of investment, CEI prices could fluctuate wildly year-on-year. See also paragraph 368.
367. However, ComReg has failed to identify that such a forward looking adjustment commencing from year 3 would be required in perpetuity once NBI's penetration stayed below 100% (which in ComReg's estimate based on NBI's forecast could take 15 years). As such, there is a re-alignment of prices required every three years – which as identified requires on-going Article 7 notifications.
368. eir agrees that it is not appropriate to update prices every second year, as recognised by ComReg *“that a material difference in actual CEI expenditure in one particular year compared to the forecasted expenditure in the model may be offset in the following year and so it is important to ensure that any one-off differences do not lead to price instability”*. Consequently, as a result of the administrative burden associated with the continued forecasting errors, arising from the per customer approach, an on-going three year price adjustment period is required. However, eir queries whether such timelines are feasible given the associated consultation and EC notification requirements.
369. eir considers that under the per operator approach and per operator plus approach the statement of compliance requirement would be minimal and in fact may not justify the regulatory burden of its completion. This is because the number of CEI required by NBI will be known each year with a high degree of accuracy and the replacement of CEI year on year will over the medium/long term self-correct without the need for CEI price adjustments. In addition, as the shared cost element is also fixed the cost forecast error is again minimal. The only event that will materially change the CEI price is copper switch off. As identified by eir, a defined cohesive copper switch off threshold and migration policy set by ComReg means that this event can also be reasonably forecast and identifiable meaning that a statement of compliance cannot reasonable be justified by ComReg.

On-going consultation and Article 7 notifications

370. As identified by eir, ComReg has failed to consider the on-going Article 7 notifications associated with the update of existing wholesale prices as a result of the three year reconciliation cycle. As the per customer approach has cost recovery implications for eir's wholesale services, any associated update requires that the figures now consulted on by

ComReg will require revision, re-consultation and re-notification. Without such appropriate steps, ComReg will not only fail in its regulatory objectives of allowing eir recovery its efficiently incurred costs, but its statutory obligations under the EC Framework to consult and notify pursuant to Article 6 and Article 7.

371. However, as identified by eir, such variations are more stable under the per operator and per operator plus approach, which should reasonably not result in price adjustments. In particular, as price controls can only be set by ComReg for a five year period, it means that in defining when eir will be allowed to undertake copper switch off that event will be reasonably forecast and identifiable within the price control period under review and in all other cases the shared costs are apportioned 50:50 (or pro-rata relative to access from another operator). This means that once again the administrative burden and regulatory process for updating regulated service prices (associated with the per customer approach) is removed and a defined and stable cost recovery for eir and cost predictability for operators and NBI can be set at the outset of the price control periods. This also achieves cost stability overtime.

The continued requirement to update WACC is misplaced and fails to consider the associated impact on modelled pricing tilts

372. In this case, eir is investing in CEI which has long asset lives and thus the expected payback of investing in such infrastructure is backdated over a number of years using pricing tilts allowing for cost recovery.
373. Updating the WACC every year and applying it afresh to existing price controls confuses the time horizons of the (notional) investor and the expected life of the telecommunications assets employed. Effectively such updates imply (updating the WACC retrospectively into existing pricing decisions) that the investor could annually liquidise their assets including unwinding debt obligations and re-capitalise and invest in telecommunications infrastructure afresh each year (as if previous price paths and build/buy decisions were just artificial and without consequence).¹⁹ This is not credible or consistent with ComReg's regulatory objectives. In particular, as there is a difference between the actual cost of capital and the theoretical WACC proposed for regulatory purposes.
374. In other words, the associated weighted average cost of capital is relevant to the year of its expenditure and the associated recovery over a time horizon using that weighted average cost of capital to determine appropriate pricing. Therefore, it is wholly incorrect from a regulatory perspective to retrospectively distort those anticipated returns, such that the expected return from that investment should now be wholly different based on a notional

¹⁹ This is also particularly relevant to associated investment in FTTH by operators including Siro and eir where the recent price path set for FTTC by ComReg act as a signal to undertake riskier full-fibre network investment. See also paragraphs 10 and 176 of eir's Original submission.

hypothetical re-calculation year-on-year of the cost of debt and equity. Put simply, ComReg is not pricing a hypothetical network for build/buy signals it is also required to ensure pursuant to Access Regulation 13 (2) an appropriate return of capital.

375. In the case where ComReg's pricing methodology is focussed materially on eir's historical investment, specifically the HCA re-use value in setting CEI prices, in order for the model to be valid and allow appropriate cost recovery in respect to eir's historic investment, the model must apply the historical WACC that applied in the Irish market from time to time.
376. Similarly, ComReg's regulated prices are based on an annuity which calculates the charge that, after discounting, recovers the asset's purchase price and financing costs in equal annual sums (or in the case of economic depreciation the recovery of those costs that matches the demand profile). As such, the original "tilt" resulting in different year on year prices will cumulatively recover the original investment. From a business and regulatory perspective this appears reasonable.
377. However, in proposing an update to the WACC year on year ComReg is in effect resetting that path afresh each year. ComReg is aware of this and acknowledged such issues in the past – in particular in ComReg D03/16, ComReg states that *"deviating between alternative tilted annuity approaches over the asset life for each asset may lead to an expectation of under-recovery and underinvestment, and we would generally agree with this"*. It is unclear why ComReg has not also considered the similar implications in this case with regard to the proposed amendment to the tilt every year as a result of the proposed annual reviews. In particular, ComReg's model assumes that the current WACC applied at all times historically. This error needs to be corrected by ComReg.
378. Finally, it is not clear how this proposal is consistent with the 2013 EC Recommendation to lock-in the RAB between regulatory periods. See paragraph 129.

Q. 22 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.

379. The Regulatory Impact Assessment (RIA), contained in Section 11 of the Consultation and Draft Decision document 20/81, is not fit for purpose and is deficient in a number of important aspects.
380. The ultimate aim of a RIA is to ensure that all measures being proposed by ComReg are appropriate, proportionate and justified. As such they should include a detailed and accurate examination of costs, benefits and impacts on stakeholders as well as consideration of the use of alternatives to regulation. RIAs should seek to identify any negative impacts of regulation and therefore seek to minimise unintended consequences, such as promotion of the continuing use of legacy technologies at the expense of the uptake of Next Generation Services. Real market impacts should therefore be assessed.
381. ComReg has inappropriately outsourced, to its consultants, its regulatory requirement to determine the regulatory impact of its proposed approach. This is materially concerning for three reasons.
382. First, the Policy Direction of February 2003 requires that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and International best practice and otherwise in accordance with measures that may be adapted under the Government's "Better Regulation" programme. As such, ComReg cannot by-pass this requirement placed on it by outsourcing.
383. Second, the Consultation clearly states that *"[t]he views expressed by Dot Econ and Europe Economics are not necessarily the views of ComReg"*. Therefore, it is unclear how ComReg can (incorrectly) outsource its obligation and then also seek to remove itself from those views. Interested parties must clearly know what ComReg's actual views are in respect to the RIA in order to provide a submission on those views.
384. Third, as evident from the relevant Terms of Reference for both DotEcon (ComReg 20/90) and Europe Economics (20/108) both consultants were just required to focus on their silo outputs and no consideration was required to be given by either consultant to determine whether the totality of ComReg's preliminary proposal remained consistent with their views or indeed if it creates additional considerations — such as ComReg's proposed customer approach on the appropriate WACC. Of course as the decision maker, ComReg remains the most appropriate party to conduct the RIA. eir awaits the correction of the RIA and its publication in order to provide its full response.

385. Without prejudice to eir's views in paragraphs 381-384, eir has provided some preliminary comments on steps 1, 3 and 5 identified by ComReg as being necessary for assessing the various regulatory options it has considered. Each is discussed in turn below.

Step 1: Describe the policy issue and identify the objectives

386. ComReg states at paragraph 758 that “[i]n choosing the appropriate costing / pricing methodology as well as the appropriate WACC in the context of CEI access for the NBP, ComReg has taken account of Section 12 of the Acts, Regulation 6(1) of the Access Regulations, Regulation 8(6) of the Access Regulations, Regulation 13 of the Access Regulations and Regulation 16 of the Framework Regulations.”

387. In particular ComReg considers that the relevant regulatory objectives are as follows;

- (i) Section 12 of the Acts: promote competition and efficient investment in infrastructure, contribute to the development of the internal market and promote interests of users within the community and encourage access to internet at reasonable cost to end-users;
- (ii) Regulation 6(1) of the Access Regulations: promote efficiency, promote sustainable competition, promote efficient investment and innovation and give the maximum benefit to end-users;
- (iii) Regulation 8(6) of the Access Regulations: obligations shall be based on the nature of the problem identified, proportionate and justified and only be imposed following consultation;
- (iv) Regulation 13 of the Access Regulations; promote efficiency, promote sustainable competition and maximise consumer benefits; and
- (v) Regulation 16 of the Framework Regulations; promoting regulatory predictability by ensuring a consistent approach over appropriate review periods and taking due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State.

388. eir addresses the overarching regulatory objectives below but in short eir considers that ComReg's impact assessment already fails at this first stage in that its current proposals do not in fact meet the stated objectives.

Promote competition and encourage efficient investment

389. ComReg considers that its objectives in the context of the NBP mean;

- (i) allowing for a cost efficient deployment of NBI's network;

- (ii) avoiding inefficient duplication of CEI assets in the IA and sending the correct 'build-or-buy' signals to eir and other operators in the commercial areas; and
- (iii) setting the right incentives for the transition from copper to fibre services in the IA.

390. These issues are discussed at length in eir's response but a summary is provided below.
391. In the context of the proposals, eir considers that ensuring a cost-effective deployment of NBI's networks cannot be taken to mean anything other than lowering NBI's costs, specifically those related to CEI access, and thus directly lowering the level of the subsidy. The level of the state subsidy is not relevant to ComReg's role and should not be taken into account in ComReg's review. The NBP scheme and selection process were specifically designed to attract multiple bidders over competing platforms to ensure value for money and to favour a cost effective deployment. See also paragraphs 51-52.
392. In addition, the NBP scheme was specifically designed to incentivise the reuse of existing infrastructure, in line with the Guidelines and indeed as communicated to the Commission in the notification of the scheme.
393. eir therefore considers it strange that ComReg now believes it is necessary for it to take it upon itself to ensure these objectives by stepping in and tweaking the pricing of regulated passive access products, thus creating a more favourable environment for the winning bidder, NBI.
394. In the context of CEI and "build-or-buy" signals in the commercial area, it seems both unrealistic and undesirable to expect other firms, apart from utility companies, which would not anyway be access seekers facing a "build or buy" decision, to build out their own CEI. This simply cannot constitute a justification for treating NBI on an entirely different basis to other access seekers. Entry in the CEI access market, specifically in the commercial area, is incredibly unlikely and as such it is unclear how NBI paying its fair share of the common network costs, in line with all other operators, would disincentivise competition in the CEI market. The more likely outcome is that the proposed approach will in fact disincentivise overall market entry and viable competition. See also paragraphs 53-57.
395. On the issue of transitioning from copper to fibre, without a cohesive and stated policy on copper switch off, it is misplaced to suggest that the blunt instrument of CEI pricing can impact copper switch off. Without an ability to switch off copper, the cost-oriented price of the copper services will continually fall as the assets are depreciated and the shared costs are apportioned to NBI. The proposal of adopting a per customer approach, can therefore only serve to slow down customer migration and thus eventual switch-off.

396. Moreover, eir considers that ComReg and DotEcon place too much weight on the incentives for eir with regard to copper switch off. ComReg's proposal incorrectly assumes that eir actually has the ability to expedite copper to fibre migration, particularly where it is continues to be subject to regulatory remedies on copper-based services and given that USO obligations remain in place.

Contribute to the development of the internal market

397. ComReg states at paragraph 768 that “[o]ne of the key considerations as part of our review of the costing methodology for CEI is the assessment of Reusable CEI Assets and Non-reusable CEI Assets, which is a key focus of the 2013 EC Recommendation.” ComReg further states at paragraph 769 that its “analysis recognises that while some other European jurisdictions use the generic telecoms WACC for passive (CEI) access services, that in the case of CEI access for the NBP ComReg proposes that an alternative WACC may be justified and proportionate.”

398. With regard to the 2013 NCDM Recommendation, eir notes that the Recommendation is referencing the costing of the SMP's network to move from regulated copper services to fibre — it is not trying to price between different networks. The underlying principle is therefore that the allocation of costs between eir's own services would allow for orderly progression and signals to eir's fibre services. In the IA, eir has limited availability of fibre services so the allocation is irrelevant - the costs are borne by the copper service, which supports the migration pricing signals to fibre on the alternative (NBI) network.

399. While ComReg acknowledges that its approach is a departure from established regulatory practice with regards to the WACC, it completely dismisses this fact on the basis that the NBP warrants such a departure. eir notes that many other Member States have their own NBPs and have sought State Aid approval of same. However, eir is not aware of any Member States that have implemented a specific regulated pricing regime for access by the NBP provider although ComReg is of course welcome to provide evidence contrary to this. In any event, departures of such magnitude from established regulatory practice only serve to lead to regulatory fragmentation and as such do not in fact contribute to the development of the internal market.

400. Furthermore, in ComReg D11/18, ComReg reasoned that there was no need to add a risk premium to FTTC because “it is easier to make predictions on penetration rates, and the number of copper lines is relatively stable. Therefore, there is no need to apply a risk premium for FTTC or EVDSL deployment”. In other words, in ComReg's view, as demand could be modelled and the cost was known, there was no reason to adjust the WACC. eir submits that ComReg's view of those conditions appear also to be met by NBI demand for eir's CEI access. See also paragraph 309. The lack of regulatory consistency in ComReg's reasoning in respect to the WACC is very concerning.

Maximise consumer benefits

401. ComReg considers that its proposals promote the interests of end-users in that it would be inefficient to have duplicate networks running in parallel once the new fibre network is rolled out and a timely and efficient migration from copper to fibre would benefit end-users.
402. DotEcon's impact assessment separately raises the following potential impacts of moving from the status quo approach;
- (i) under the status quo the prices of benchmark NGA services in the commercial area could be cheaper thus leading to potentially cheaper retail services in the IA and commercial areas; and
 - (ii) under the status quo prices of copper services in the IA may also be somewhat lower (although the status quo would eventually purportedly create inefficiently strong incentives for copper switch off).
403. As such, DotEcon's impact assessment recognises that customers in both the IA and commercial areas could potentially be better off under the status quo. This fact is, however, completely ignored by both ComReg and DotEcon.
404. On the issue of a timely and efficient transition from copper to fibre, the proposal fails to account for the difference between incentive and ability and the fact that ComReg does not have a cohesive and stated policy on copper switch off. The current proposal, will therefore only serve to slow down customer migration and thus eventual switch-off. See paragraphs 58-62.
405. Consequently, on balance, it is not clear how the proposal will in fact maximise consumer benefit.

Obligations that are based on the nature of the problem, proportionate and justified

406. The "problem" identified by ComReg appears to be that NBP access to CEI is different to the extent that it warrants a fundamentally differentiated approach through the further specification of the existing CEI price control obligation imposed under D10/18.
407. First, eir notes that ComReg has defined a national WLA market on the basis of the national ubiquity of eir's CEI and did not determine in D10/18 that the geographic differentiation of CEI remedies was required.

408. Second, eir has discussed at length why this different approach is flawed, but in particular, the fact that NBI will seek long-term, widespread and large scale access to eir's CEI does not change the level of risk for eir to the extent that it warrants the approach proposed by ComReg. See also paragraphs 34-39.
409. It would appear that rather than a further specification of the existing price control, ComReg is entirely altering the underlying assumptions that feed into the standard regulated tariffs in order to produce the lowest possible price for the benefit of NBI specifically. ComReg's actions will ultimately result in a material altering of the level of the NBP subsidy and distort the market.
410. In light of the above and the other issues raised throughout eir's response, eir does not consider that the proposals are in any way proportionate or justified.

Promote regulatory predictability

411. ComReg states at paragraph 807 that while it "*proposes to continue with the existing costing / pricing methodology for Generic Access requests to CEI, for NBI's MIP access to CEI, ComReg is proposing differentiated costing / pricing methodologies for CEI access in the NBP IA and separately in the Commercial Areas for the reasons set out in Sections 5 and 6, as referenced above at paragraph 806.*"
412. For the reasons set out in eir's response, we believe that the justification put forward by ComReg for a differentiated approach is severely flawed. It therefore does not serve as a sufficient basis to deviate from ComReg's objective to promote regulatory predictability by ensuring a consistent approach over appropriate review periods.
413. Given that in 2016 pursuant to ComReg D03/16, ComReg mandated a per operator approach (which eir assumes was also the basis of NBI's business case, subvention requirement and contract award), it is not clear how ComReg proposing to change the regulatory environment again, on which commercial decisions are made, promotes regulatory predictability. In addition, the continued re-opening of regulated price paths and refreshing depreciation methods fundamentally changes cost recovery.

Taking due account of the variety of geographic conditions

414. ComReg appears to consider that the possible differentiation of the CEI price control remedy in relation to NBI's MIP in both the NBP IA and in the Commercial Areas takes due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State.

415. However, eir notes that the NBP, in and of itself, is designed to address such geographic differences, in particular, by addressing a market failure where the deployment conditions in various areas within the State do not lend themselves to commercial deployment. From a retail competition perspective, this will remove any form of digital divide or differing and/or better competitive conditions for end-users.
416. Further, eir notes that ComReg has defined a national WLA market on the basis of the national ubiquity of eir's CEI and did not determine in D10/18 that the geographic differentiation of CEI remedies was required. It is therefore unclear why the further specification of a remedy in this market is necessary or justified to addresses differing geographic conditions or indeed that the proposed approach is the correct manner in which to address any differing conditions that ComReg now believes to exist.

Step 3: Likely impact on stakeholders

417. ComReg states at paragraph 817 that it considers the impacts of the various regulatory options and ComReg's preferred approach throughout the Consultation. This appears to be a departure from ComReg's standard or indeed the accepted procedure of conducting an overall assessment of the various regulatory options, including the maintenance of the status quo, within the context of the RIA itself.
418. Instead this assessment is left to ComReg's consultants, DotEcon and Europe Economics, assessments which eir notes are not required to meet the same standards²⁰ as those conducted by a regulatory body such as ComReg. While neither explicitly discusses the option of maintaining the status quo the following options and some corresponding impacts are discussed;
- (i) Commercial Area cost sharing option 1: a move from status quo to sharer incremental cost based CEI access charges for NBI
 - (ii) IA cost sharing option 1: a move from status quo to line based sharing of common CEI costs
 - (iii) IA cost sharing option 2: a move from status quo to NBI paying only sharer incremental cost
 - (iv) Specific WACC for NBP CEI: a move from the fixed-line WACC to a reduced WACC for NBP CEI, which should also be adopted as the "WACC for transit".
419. See also paragraphs 381-384.

²⁰ In 2003, the Minister for Communications, Marine and Natural Resources issued a policy direction to ComReg which requires that ComReg, before deciding to impose any regulatory obligation on an undertaking must first conduct a RIA in accordance with European and international best practice and any measures that may be adopted under the Irish Government's Better Regulation programme, such as the RIA Guidelines.

420. While eir considers that the RIA fails at Step 3, given the outsourcing of its assessment to ComReg's economic consultants, each of the options identified is nonetheless discussed in turn below.

Move from status quo to sharer incremental cost based CEI access charges for NBI in the commercial area

421. DotEcon considers that the proposal would have the following impacts:

- NBI: reduced CEI payments with little effect on NBI's profitability as the subsidy payments should be reduced correspondingly.
- Customers: potentially more expensive NGA services than would be the case under the status quo, as NBI will make a significantly smaller contributions to shared costs.
- State: reduced level of subsidy to NBI.
- eir: lower profitability as there would be no gross margins on CEI services sold to NBI. DotEcon considers that this effect would be transient.
- Wholesale customers of eir: potentially more expensive access services due to the lower contribution made by NBI to CEI common costs.
- Competitors: improved incentives for competitive infrastructure provision.

422. Each element of DotEcon's brief impact assessment is discussed below.

423. While Section 3.2.2 of DotEcon's Report notes that *"the NBP contract contains various provisions intended to claw back capital underspends and cost savings splitting these between NBI and the Government in order to provide incentives for cost reduction and that "[t]hese provisions would presumably apply if CEI access charges were to reduce for some reason"*, there is no mention of this in its impact assessment. The assertion that the proposed approach would therefore have little effect on NBI's profitability is inherently misleading. Given the nature of the reductions proposed for NBI's benefit and the design of the clawback mechanism, the proposal will likely have a significant impact on NBI's profitability.

424. DotEcon's impact assessment explicitly recognises that customers in the commercial areas could potentially be better off under the status quo. This fact is, however, completely ignored by both ComReg and DotEcon.

425. eir notes that ComReg has stated in Footnote 48 that *"the level of State subsidy is not relevant to ComReg's role (it is the responsibility of the DCCA) and it is not taken into account in ComReg's review of the costing methodologies for determining CEI prices"*. It is therefore unclear why this particular impact is included in DotEcon's assessment or indeed

whether it has in fact been considered by ComReg given the reference to DotEcon's assessment included in the RIA.

426. DotEcon claims that the effect of lowering eir's profitability would be transient but fails to consider the serious implications that the proposal has on eir's ability to recover its costs. This impact is not transient and eir does not consider that the effect can be discounted in this manner. ComReg's proposal has serious implications for eir's ability to recover its costs. In fact, BRG estimates that *"NBI will pay roughly (in net present value or "NPV" terms) €100m less for pole access and roughly €13 million less for duct access than a generic access seeker would pay for the same level of pole and duct use"*.
427. DotEcon appears to have misunderstood how NBI's prices will be set. NBI is required to provide its wholesale services based on a benchmark of those services outside the IA. The profitability of NBI has no bearing on the prices it is required to charge. In addition, the profitability of NBI should bear no relevance to ComReg's regulatory obligations.
428. eir considers that the impact for competitors and wholesale customers is interlinked in the context of the proposals. In particular, eir considers that the assertion of DotEcon that the cost sharing option will result in improved incentives for competitive infrastructure provision is problematic given that the opposite is in fact true, due to the cost of building out own physical infrastructure, particularly for potential new market entrants. As noted by Ofcom's paper the "Economics of Shared Infrastructure Access", *"[t]he cost of competition analysis shows that considerable cost can be avoided through duct access versus competitive new build network deployment. However, whilst competition under duct access avoids the cost of multiple duct networks, CPs [Communication Providers] continue to duplicate investment in the fibre and active elements of their networks. This duplicative investment drives up the cost of competition. The analysis shows that in a market with four competing CPs, the cost of competition would actually exceed the cost of a connection in a market with a single infrastructure. That is, having four competing FTTP networks instead of one will result in the cost per end user more than doubling"*.
429. On balance, it is unclear how this option can be declared an improvement on the status quo.

Move from status quo to per customer approach in the IA

430. DotEcon considers that the proposal would have the following impacts:
- NBI: initially lower CEI costs that progressively increase with fibre take-up with little effect on NBI's profitability as the subsidy payments should be adjusted in line with changing costs.
 - Customers: potentially higher prices for copper services but avoidance of early switch off.

- State: subsidy requirements increase over time as fibre connections increase,
- eir: delayed payments for CEI but eir should be able to recover reasonable costs, avoidance of excess profitability than would be the case under status quo, copper network remains economical for a longer period of time thus eliminating the risk under the status quo where the copper network is uneconomical but turning it off is difficult if fibre network is not fully deployed.
- Wholesale customers of eir: no impact.
- Competitors: no impact.

431. Each impact is discussed in turn below.

432. On the issue of reduced payments for NBI and their impact on NBI's profitability see paragraph 423.

433. eir agrees that higher prices for copper-based customers are a possible outcome. However, DotEcon seems to discount this effect on the basis of the trade-off with regard to ensuring that the copper network is not switched off too early. eir has discussed the issue of copper switch off incentives at length throughout its response but reiterates that DotEcon has completely failed to consider eir's ability in this regard. Any eventual date for copper retirement will have to be approved by ComReg.

434. With regard to the level of the State subsidy, see paragraph 425.

435. In relation to eir's ability to recover its costs, see for example paragraph 426. On the issue of supposed excess profitability that would be the case under the status quo, even during short periods in which eir might be able to generate more revenue from CEI than previously anticipated, it would continue to be constrained by a regulatory framework that would prevent it from undertaking the kind of pricing behaviour that has been highlighted by DotEcon and ComReg. In fact, DotEcon states in Section 5.7 that such returns would be "*transitory*". However, this fact is excluded from its impact assessment. eir notes that the prices for its regulated wholesale access services are set by cost-orientation, so there is no additional revenue that can be used to distort the market. In any event, the underlying wholesale prices can be updated to ensure holistic cost recovery.

436. DotEcon also suggests that the proposed approach provides a boon for eir in the sense that it allows the copper network to remain economically viable for longer than would be the case under the status quo and as such reduces the risk for eir that it will not be able to recover its costs if fibre deployment does not happen in a timely manner. First, it is strange that this is the only place that DotEcon considers eir's inability to switch off the copper network. Second, absent NBI deployment, eir would continue to have copper customers in

the IA and its CEI infrastructure would continue to be used (and invested in) to serve those customers.

Move from status quo to NBI paying only sharer incremental cost

437. DotEcon considers that the proposal would have the following impacts:

- NBI: lower CEI costs while CEI is shared but sudden large increase once the copper network is switched off, which could impact profitability.
- Customers: no impact on pricing of NGA or copper services but incentives for early copper switch off are higher than under the status quo, which could lead to service availability issues.
- State: reduced level of subsidy to NBI, while CEI is being shared but possible sharp increase once copper is switched off as well as the possibility of USO type costs of copper network needs to be kept running.
- eir: lower profitability as there would be no gross margins on CEI services sold to NBI and increased risk of copper switch off being difficult once uneconomical if fibre has not been fully deployed.
- Wholesale customers of eir: no obvious impact.
- Competitors: no obvious impact.

438. Each of these potential impacts is discussed below.

439. On the issue of reduced payments for NBI and their impact on NBI's profitability see paragraph 423.

440. With regard to excessive incentives for early copper switch off, DotEcon once again disregards the fact that ability and incentive are two very different things. In the absence of an overall copper retirement strategy from ComReg, too much weight is placed on the supposed incentives associated with the proposal.

441. The level of the state subsidy is not a matter for ComReg and therefore should not be considered in the RIA, see paragraph 425. However, eir notes that no USO funding mechanism has been established in Ireland to date. The possibility that such funding would fall to the State is therefore highly unlikely.

442. Again, it is strange that the impact assessment is the only place that DotEcon considers eir's inability to switch off the copper network but completely disregards this fact throughout the rest of its report.

Move from the fixed-line WACC to an overall reduced WACC for NBP CEI

443. Europe Economics considers that the proposal would have the following impacts:

- eir: a lower rate of return on new CEI than outside the IA but this is accompanied by lower risk in the IA and an elevated return on CEI that would become obsolete at an earlier date were it not for NBP. Possibility that the proportion of eir's total CEI under economic use within the IA would rise over time favouring investment within the IA even earlier in the NBP period.
- Other CEI providers: ESBN would be neutral between providing CEI access to NBI and not doing so. If the WACC had been higher, ESBN would have had strong incentives to provide CEI infrastructure instead of using its infrastructure to support its electricity network. There is thus neutrality in this respect.
- Other communications sector wholesale access providers: no other access providers would have operated within the IA but it is possible that at the margins between the IA and the commercial areas, there could be a limited number of households that could be served either by wholesale access-seekers using NBI or other wholesale access providers. To the extent such rivalry existed, the reduced WACC would tend to favour NBI, but it is far from clear that this would be sufficient to offset the disadvantages NBI would face in other dimensions of its costs.
- Wholesale access-seekers: lower CEI access costs than would be the case if a fixed line WACC were applied means that wholesale access-seekers are more likely to find it commercially viable to operate within the IA and as such more likely to provide broadband services to final consumers.
- Final consumers: whether final consumers are likely to be served with broadband services within the IA will depend upon other elements of the price control and other elements of state intervention that fall outside the scope of this analysis. But they are more likely to be offered broadband services and more likely to be offered a full range of broadband services than would be the case if the WACC were set at the fixed line level.

444. With regard to the level of risk faced by eir in the IA, Europe Economics overstates the extent to which NBI reduces risk for eir's CEI business, in two principal ways. First, the presence of NBI as a customer does not and cannot insulate eir from the fundamental risks of (a) substitution to other providers' CEI; and (b) substitution to non-fixed-line technologies. NBI is free to use alternative infrastructures (e.g., from ESB or Waterways Ireland) for some portion of its rollout and retail customers may eschew fixed-line broadband (both copper and fibre) for LTE+, 5G mobile, 5G Fixed Wireless Access and satellite broadband offerings. Second, ComReg's proposals for sharing common network costs associated with poles and ducts create additional risk. Until and unless NBI's network is successful in gaining significant end-user acceptance, eir will rely on its legacy copper products to cover its CEI costs.

445. On the issue of other CEI providers, Europe Economics appears to be suggesting that ESNB, which is regulated by CRU, could be influenced by the fixed telecoms WACC to provide access to its civil engineering products. Given that ComReg's remit does not extend to regulating ESNB and the fixed telecoms WACC is determined by ComReg for operators designated with SMP in the fixed telecommunication sector i.e., eir, this should not bear any consideration for ComReg's determination – it would be a matter for the CRU and the Broadband Cost Reduction Directive.
446. With regard to Europe Economics' suggestion that lower CEI access costs mean that wholesale access-seekers are more likely to find it commercially viable to operate within the IA, this appears to completely misunderstand the manner in which NBI's access services will be priced. This will not be in relation to the underlying inputs but rather benchmarked against regulated prices in the commercial area, where the regular fixed telecoms WACC will be applied. As such, the proposal has no effect on the commercial viability of operating in the IA over and beyond the effect that the presence of NBI will already have.
447. In fact ComReg notes at footnote 44 that *"[a]s NBI's wholesale prices in the NBP IA are set by reference to comparable wholesale regulated broadband services any changes to the CEI access prices as a result of this review should only impact on the state subsidy (and hence amount to be recovered from tax payers) but not from end-users of the broadband service."*
448. This also invalidates Europe Economics supposition that final customers will benefit specifically from the reduced WACC. Any benefit to final customers arises from the existence of state funded rollout alone rather than changes to the level of payments for NBI access to eir's CEI.
449. Finally, as identified by eir, given that the Terms of Reference provided to Europe Economics did not extend to consider the impacts of ComReg's proposed per customer approach on the WACC, Europe Economics' assessment is not complete.

Step 5: Assess the impacts and choose the best option

450. ComReg states at paragraph 821 that *it has taken account of Section 12 of the Acts, Regulation 6(1) of the Access Regulations, Regulation 8(6) of the Access Regulations, Regulation 13 of the Access Regulations and Regulation 16 of the Framework Regulations, in arriving at its preliminary views on the appropriate costing / pricing methodologies and the WACC for access to Eircom's CEI, in particular in the context of the NBP, in the earlier sections of this Consultation document."*
451. eir has addressed the regulatory objectives covered by each of these provisions in relation to Step 1 of the RIA. See paragraphs 389-416.

452. ComReg further states at paragraph 822 that it *“has considered the potential impact of our proposals in the context of the key stakeholders, as summarised at Section 11.5”* and that the proposed measures should meet ComReg’s regulatory objectives while addressing the competition concerns associated with the WLA Market.
453. First, Section 11.5 contains one paragraph in relation to ComReg’s consideration of the impacts of the various regulatory options, which simply directs the reader to refer to the assessment of same “throughout” the Consultation. The remainder of Section 11.5 directs the reader to refer to the assessment that has been outsourced to ComReg’s consultants. This is particularly strange, given ComReg’s position at Footnote 5 of the Consultation that *“[t]he views expressed by Dot Econ and Europe Economics are not necessarily the views of ComReg.”* It is unclear how ComReg has managed to establish its own view when it has not even conducted this important part of the RIA.
454. Second, the competition concerns associated with the WLA market have already been addressed by D10/18. To the extent that ComReg now considers there is sufficient clarity with regard to the NBP and/or the existence of geographic differences in competitive conditions that need to be addressed, it should conduct a new review of that market rather than attempting to impose geographically differentiated remedies in isolation of the market review process.

Q. 23 Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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

455. eir has the following comments in respect of the text of the draft Decision Instrument (DI). These comments are in addition to the drafting changes that will be required in light of our substantive comments in this response.
456. eir notes that the draft DI refers to ComReg acting pursuant to its powers under current Regulations. It seems highly unlikely that the DI could be issued by ComReg prior to the transposition of the European Electronic Communications Code (the Code), which is due to occur by December 2020. Simply referring to the Code in paragraph (ix) is not sufficient. Section 1 of the draft DI will therefore need to be replaced and should be subject to further consultation.
457. Reviewing the references to existing Regulations in section 1, it is clear that the references are deficient as ComReg has omitted reference to the fact that it is also acting pursuant to its powers to undertake a market analysis and define economic markets. This should be corrected with appropriate references to the relevant sections of the transposed Code.
458. In Section 3.3. ComReg proposes that any price amendments arising from the DI should take effect *“from the first day of the third month following the Effective Date of this Decision Instrument”*. eir agrees that this is appropriate as it provides sufficient time for the changes to be implemented on billing systems in an orderly manner.
459. With regard to the proposed definitions in Section 4:
- The definition of “Authorised Undertaking” is used solely in the context of defining NBI. This is a departure from the usual practice of referring to Undertakings. We request ComReg to explain why this new definition is necessary.
 - The definition of “High Speed Broadband Map” is incorrect as DECC no longer differentiates between Blue and Light Blue areas. At a minimum this will need to be corrected. However this also highlights a deficiency in the proposed regulatory approach, which hinges on market definitions that are outside of ComReg’s control. The Commercial Area could change as a result of future actions by DECC and we fundamentally question whether it is appropriate that the geographic application of SMP remedies imposed by ComReg should be determined and controlled by an entity other than the national regulator unless ComReg and DECC are acting in a coordinated manner. We request that ComReg explains how this dynamic will

operate in practice where changes in DECC practice directly impact on the operation of the proposed DI.

- Given the recent change in practice by DECC and without prejudice to our comments in the preceding bullet point, the definitions of Urban Commercial Area and Rural Area should be revisited.
- The definition of 'Intervention Area' refers to the '*total geographic area ... identified by Amber areas*'. Given that individual premises can be colour coded as Amber on the DECC map we request Comreg to explain how the term total geographic area is appropriate in this context.
- The definition of 'NBI' refers to "*NBI Infrastructure Designated Activity Company, a company registered in Ireland with number 629167 whose registered office at [date of Decision Instrument] is at Ten Earlsfort Terrace, Dublin 2, D02T380, Ireland*". A search of the Company Registration Office for the registered number 629167 returns a company with the name National Broadband Ireland with a registered office of 70 Sir John Rogersons Quay, Dublin. ComReg should clarify which company it is referring to.

460. Section 11.1 states "*This Decision Instrument shall be published on ComReg's website (www.comreg.ie) and on the same day, notified to Eircom.*" It is not clear what the intention or effect of this proposed Section is. For example, if ComReg publishes the DI but fails to notify eir, or vice versa, does that render the DI ineffective? eir requests ComReg to explain the rationale for Section 11.1.

Pricing of Eircom's CEI

An analysis of ComReg's Consultation Paper

Mark Williams

Kalyan Dasgupta

Alberto Carpani

Daniel Pate



FINAL REPORT, NOVEMBER 18, 2020

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I. Introduction and objectives

1. BRG has been asked by eir¹ to provide independent economic analysis of ComReg’s proposals for pricing of access to Eircom’s civil engineering (i.e., pole and duct) infrastructure (“CEI”). We have placed particular focus on ComReg’s proposals for CEI access prices in the Intervention Area (“IA”)², where National Broadband Ireland (“NBI”) is likely the sole customer for Eircom’s CEI. However, we also comment on pricing of access in Commercial Areas.³ We also review the economic advice that ComReg received from DotEcon⁴ and Europe Economics⁵.
2. We have focused our analysis on two aspects of ComReg’s consultation, which materially impact the calculated rental prices that NBI will pay:
 - a. the Weighted Average Cost of Capital (“WACC”); and
 - b. the proposed rules for sharing of certain network costs and corporate common costs.
3. These two aspects are inter-related. Changes in the approach to sharing of common costs affect the analysis of how risky the investment is, and thus affect the WACC.
4. We have also been asked to provide alternative recommendations as to the appropriate approach to, and level of, WACC, and alternative approaches to sharing of certain network expenditures and common costs.
5. In addition, we have reviewed ComReg’s Pole Access and Duct Access models and provide observation and commentary on particular technical features of these models.

¹ Note: We subsequently use “Eircom” in this document to be consistent with ComReg and ComReg’s advisors’ usage.

² ComReg (2020), “Pricing of Eircom’s Civil Engineering Infrastructure: CEI access in the context of the National Broadband Plan”, September 9^h, 2020, para. 12 (hereafter “ComReg”).

³ ComReg, para. 13.

⁴ DotEcon; “Pricing and costing principles for access to civil engineering infrastructure and the NBP: A report for ComReg” 8 September 2020 (hereafter “DotEcon”).

⁵ Europe Economics; “Cost of Capital for Poles and Ducts Access” September 2020 (hereafter “Europe Economics”).

II. Summary of Conclusions and Structure of Report

II.1. SUMMARY OF CONCLUSIONS

6. We focus our attention on a few critical dimensions of ComReg’s consultation paper that have a highly significant impact on CEI access prices. These are:
 - a. ComReg’s approach to setting the WACC that it believes should apply specifically to Eircom’s CEI business as it is utilised by NBI; and
 - b. ComReg’s approach to the treatment of common costs (including both corporate common costs and what ComReg terms “shared network costs”).
7. As we explain in our report, we believe that ComReg’s approach to sharing of common costs and its approach to WACC are significantly interlinked.
8. ComReg proposes to apply a WACC in the calculation of prices for generic access of 5.61% but only 4.03% for calculating prices to be paid by NBI for accessing an equivalent service.
9. Under ComReg’s proposals, generic access seekers pay a share of corporate common costs and pay for shared network costs associated with poles (the most important component of CEI) based on the number of operators that they share the pole with. By contrast, NBI pays no share of common costs, pays no share of shared network costs in the Commercial Area, and pays shared network costs for poles based on its relative success in attracting end-users to its FTTH product in the IA.
10. ComReg’s approach to WACC and to network sharing costs produces the result that NBI will pay much less than any other access seeker, both for access to CEI in the IA and access to CEI for transiting through the Commercial Areas. We estimate that NBI will pay roughly (in net present value or “NPV” terms) €100m less for pole access and roughly €13 million less for duct access than a generic access seeker would pay for the same level of pole and duct use.⁶ Unless this reduction in payments by NBI relative to generic access seekers is objectively linked to different costs or a different risk profile associated with serving NBI, it might well be viewed as a subsidy from Eircom to NBI. The use of the term “subsidy” is justified in this context because the prices available to generic access seekers are designed to provide Eircom a fair opportunity to recover its investment in CEI. Prices significantly below the level offered to generic access seekers do not provide this fair

⁶ This is based on applying the same pricing formulae as applied to generic access seekers to NBI’s use of poles and ducts, and calculating the change in the NPV of payments by NBI relative to ComReg’s proposed pricing scheme.

opportunity and so represent a subsidy to the access seeker that is offered such lower prices. Consequently, it is critical to examine the claims that ComReg and its economic advisers make in respect of the different costs and risks associated with serving NBI

11. Our analysis focuses on two major components of ComReg’s proposals: the determination of the WACC and the approach to sharing of common costs.

II.1.1. WACC

12. ComReg and its economic advisers, Europe Economics, approach the issue of risk—and thus the issue of WACC—from the perspective of a stand-alone CEI business selling duct and pole access to NBI. They adopt the view that this business faces substantially less risk than Eircom’s fixed-line business, its current CEI business (as reflected in the terms of access provided to generic access seekers) or indeed fixed-line telecom businesses in other countries. Europe Economics considers utilities, or even state-owned utilities, as appropriate risk comparators to a hypothetical NBI-facing CEI business.⁷
13. ComReg—drawing on Europe Economics—further suggests that this business is essentially riskless. ComReg and Europe Economics express the view that the riskless nature of the business arises by virtue of NBI’s “guarantee” to Eircom that it will effectively pay for Eircom’s CEI over a period of 25 years. Europe Economics suggests that the role of the Irish State is a critical determinant of this guarantee, as the “step in” right of the Irish State is “close to in effect guaranteeing” that should NBI fail, another provider or the government itself will cover the payments of CEI access charges.⁸ The role of the Irish State thus eliminates the risk that the CEI user will default on its payments. Secondly, Europe Economics also cites NBI’s statement in 2019 (made in the context of a separate ComReg consultation on the appropriate WACC) that NBI’s use of Eircom’s CEI will not face risks linked to lack of end-user uptake of NBI’s products or “the emergence of competitive broadband offerings from mobile, satellite, or other technologies.”⁹
14. In our view, the correct approach would recognise that NBI is a customer of Eircom’s CEI business. This customer may benefit from lower prices (e.g., as reflected in a lower assessed cost of capital) if it provides a more stable and predictable flow of revenues than other customers do.¹⁰ This more stable and predictable flow of revenues might reduce the

⁷ Europe Economics, Section 2.5.

⁸ Europe Economics, Section 2.2.

⁹ Europe Economics, Section 2.4.

¹⁰ Of course, the customer would also have to pay, in full, for specific costs that it causes, i.e. incremental costs.

overall risk of the CEI business. However, Europe Economics and ComReg overstate the extent to which NBI reduces risk for Eircom's CEI business, in two principal ways.

15. First, the presence of NBI as a customer does not or cannot insulate Eircom's CEI business from fundamental risks that it currently also faces. These are (a) the risks of substitution to other providers' CEI; and (b) the risks of substitution to non-fixed-line technologies. NBI is free to use alternative infrastructures (e.g., from ESB or Waterways Ireland) for some portion of its rollout. Second, customers may eschew fixed-line broadband (both copper and fibre) for LTE+, 5G mobile, 5G Fixed Wireless Access and satellite broadband offerings.¹¹
16. Second, ComReg's proposals for sharing common network costs associated with poles and ducts create additional risk. These network costs are highly significant components of the overall cost of Eircom's CEI. ComReg proposes that NBI's contribution to these costs increases in line with the relative size of the end-user base for fibre products (that utilise NBI's network) relative to copper products (that utilise Eircom's legacy copper network). Until and unless NBI's network is successful in gaining significant end-user acceptance, Eircom will rely on its legacy copper products to cover its CEI costs.
17. In summary, the advent of NBI as a customer does not reduce the inherent risk that CEI infrastructure built to serve fixed-line providers faces. Unlike Eircom's existing copper products, NBI also has the option to use other CEI. Further, under ComReg's proposed cost sharing rules, at the point when NBI begins utilising Eircom's CEI, the flow of revenues from NBI to Eircom is only as stable and predictable as NBI's ability to acquire end-user customers. Thus, to the extent that lower prices for NBI relative to other access seekers are premised on the reduction in risk to Eircom's CEI, these prices should be revised upwards if the reduction in risk is found to be overstated.
18. In this context, it is also critical to understand that the Irish State's "step in" rights merely reduce the risk of default, but they do not eliminate other significant risks as identified above. In the telecom and utility sectors, the risk of default does not appear substantial, and so eliminating this default risk does not warrant a major reduction in the cost of capital relative to that of regulated fixed-line telecom and (especially) utility companies. Or putting it another way, the Irish State's "step-in right" just assures that money that would anyway have been owed by NBI continues to be paid, but offers no guarantees to the amount of demand (and therefore no guarantee that the CEI provider will recover its costs).

¹¹ These alternative non-fixed line technologies need not provide perfect technical substitutes for fixed-line broadband offerings in order for a significant amount of substitution to occur. Realistically, if they are able to provide speeds that are adequate for many customers' needs (e.g., 30 Mbps down) at affordable price points, many customers may take these services instead of paying a premium for faster fixed-line broadband offerings.

19. ComReg also adopts several specific assumptions about parameters of the WACC calculation that appear to be driven by the assumptions of the near-riskless nature of the project that we discuss above:
 - a. The approach to the WACC of CEI differs from that used by Ofcom, for example, which calculates a WACC for the access business of BT that is based on a blended average of utility and fixed telecom risk levels (e.g., as reflected in asset betas). ComReg’s WACC calculation is driven by the more extreme assumption that the supposed guarantee provided by NBI (which is backed by the Irish government) simply eliminates the telecom-like component of risk that CEI faces. This is incorrect;
 - b. ComReg’s proposed WACC of 4.03% (pre-tax, nominal) stands out as being exceptionally low. The closest WACC that we found any other regulator (utility and telecom) using was 4.90% (CRU, for water). Ofwat in the UK recently assessed a WACC of 5.65% and Ofgem of 5.62% (for electricity transmission). The average of fixed-line telecom WACCs assessed recently by European regulators was 7.26%;
 - c. As we discuss more fully in Section IV, ComReg’s approach is unusually aggressive and the values that it assumes for the cost of debt and cost of equity are outliers relative to typical assumptions in both telecoms and utility regulation. Similarly, we find that ComReg assumes an inappropriately high gearing level, which also drives down the WACC.

II.1.2. Sharing of common costs

20. Access prices determined by ComReg’s cost models are highly sensitive to the rules used to “allocate” shared network costs between access seekers. For example:
 - a. ComReg’s proposal for “pure LRIC” pricing in the Commercial Areas implies that NBI only pays an “MIP wholesaling charge” of 7 cents per pole for the next 25 years. The rate based on the standard practice of allocating network shared costs to NBI using the same “per operator” basis applied to other access seekers, is €7.87 per pole (an average over the next 25 years);
 - b. Likewise, in the IA, using the standard “per operator” sharing approach instead of ComReg’s proposed “per customer” cost sharing basis would result in a price in 2021 of €9.18 instead of €4.90.
21. We find that ComReg and its advisors’ justification for these cost sharing rules is often questionable. As a starting point, “cost sharing” is inherently not a concept moored in economics. At best, the theory of Ramsey pricing provides guidance about how a

multiproduct firm can efficiently (with minimal deadweight loss) recover common costs, i.e., by implementing a type of inverse elasticity rule for prices, but this rule is difficult to implement in practice.¹² It is also certainly not the approach—despite the claims that DotEcon make in their paper for ComReg—that is even remotely reflected in ComReg’s proposals. As such, ComReg’s proposals are essentially a matter of choice. The bigger problem, however, is that ComReg fails to reflect that the choices it makes with respect to sharing rules also affect risk, and by doing so, they also affect the cost of capital. ComReg also fails to recognise that the policy objective of rapid fibre rollout might be better met if NBI faced incentives and constraints more similar to that of an infrastructure owner rather than an access seeker, i.e., by making NBI responsible for a greater proportion of the network costs – or in regulatory terms not acting in a discriminatory manner towards a single operator and to be technology neutral.

22. With specific regard to the “pure LRIC” approach advocated for the Commercial Areas, DotEcon’s primary justification for this approach is that shifting some of the cost burden of the network onto NBI would lower prices for Eircom’s other wholesale services (as they would then make a lower contribution to paying off network costs). This would then induce potential infrastructure competitors to seek access to Eircom’s CEI rather than building their own. However, it seems both unrealistic and undesirable to ever expect other firms (besides the electric and water companies, which would not anyway be access seekers facing a “build or buy” decision) to build out their own CEI. This simply cannot constitute a justification for treating NBI on an entirely different basis to other access seekers. DotEcon’s justification is also completely counter to the typically desired economic regulatory objectives of promoting greater investment and competition in fibre networks through opening up the incumbent’s duct and pole network for potential network competition.¹³
23. DotEcon also strain to justify the “per customer” sharing rule as (a) reflective of a Ramsey approach; (b) designed to encourage “optimal” copper-to-fibre migration. As Section IV.3

¹² In the present case, Eircom is providing the same CEI product to different customers. However, the Ramsey pricing proposition is then one of recovery across different customer groups as opposed to different product groups. The long-run elasticity of demand by copper customers is likely to be lower than the long-run elasticity of demand by NBI, however, and so this would suggest recovering a higher share of the common cost burden from NBI.

¹³ For example, the European Commission’s 2013 Broadband State Aid Guidelines state at Recital 78(f): “[T]he reusability of existing infrastructure is one of the main determinants for the cost of broadband roll-out” and “Member States should encourage bidders to have recourse to any available existing infrastructure so as to avoid unnecessary and wasteful duplication of resources.” Similarly the Commission’s 2014 Broadband Cost Reduction Directive (2014/61/EU) states at Recital 13; “It can be significantly more efficient for electronic communications network operators, in particular new entrants, to re-use existing physical infrastructures” and further notes that “synergies across sectors may significantly reduce the need for civil works due to the deployment of electronic communications networks”, referring to the environmental nuisances that civil works can often create.

discusses, only if elasticities of demand for copper and fibre services were equal and the average incremental costs of providing fibre and copper were equal, would their rule amount to Ramsey pricing. DotEcon themselves do not believe that this is the case. Further, DotEcon's analysis of "optimal" migration is flawed and incomplete—it ignores the role of profit margins (as opposed to just costs) in informing incentives for copper switch-off and for fibre migration. It also inappropriately assumes that Eircom will be able to retail fibre lines to all the copper lines it turns off. This also seems unrealistic.

II.1.3. Overall Conclusions on ComReg's Proposals

24. In summary, ComReg's approach to both the WACC and the sharing of network costs produces dramatically lower parameters for NBI's access to Eircom's CEI than is the case for other access seekers. ComReg recommends a WACC that is an outlier by the standards of both fixed telecom networks and also utilities. This low WACC is not justified when the actual risk of the cash flows from NBI to Eircom is properly considered.
25. The cost sharing rules ComReg uses are not justified either by any economic theory or any rigorous policy rationale, although as with the WACC, they have a significant negative effect on the prices that NBI pays relative to the prices that other access seekers pay. ComReg also fails to understand the interplay between the cost-sharing rules and the cost of capital, in particular the reallocation of risk to Eircom inherent in the move from a "per operator" to a "per customer" sharing basis for poles.
26. From a fairness perspective as opposed to an economic one, NBI may be Eircom's most significant wholesale customer by far, and the suggestion that this particular large customer should be exempted from a range of costs that other customers are paying does not seem either appropriate or justified.

II.1.4. A More Appropriate Approach

27. We believe that a still-conservative approach would be to use the WACC of 5.61% applied to generic access seekers to apply to NBI. This WACC is very close to the WACC that we calculate based on using parameters for gearing, beta, and the debt premium that are averaged across telecoms and utilities, and a risk-free rate of 0.82%. This approach accounts for any risk reduction created by unique characteristics of NBI as an anchor tenant on Eircom's CEI network but does not assume away risk. This WACC is comparable to the WACC determined for other utilities and well below the WACC determined, for example for any part of BT's fixed line business by Ofcom, or for other European fixed operators for which recent WACC adjudications have been made.

28. Further, we believe that this WACC should either be used in conjunction with a variant of the per-operator approach to sharing the cost of poles¹⁴—which is the approach that has historically been applied in Ireland and flavours of which are used in the US, Canada and the UK for pricing pole access—or a mark-up should be applied to this WACC to account for the extra risk associated with the per-customer approach. Simply using a per-operator plus approach seems more realistic, however, and doing so may also provide NBI with better incentives to achieve rapid rollout and customer uptake of its fibre network.

II.2. STRUCTURE OF THIS REPORT

29. The rest of this report is structured as follows:
- a. Section III reviews the main aspects of ComReg’s consultation document, and also the reports of its economic advisers, Europe Economics and DotEcon;
 - b. Section IV provides an in-depth review and critique of the economic principles espoused by ComReg and its advisors in respect of cost of capital, costing/valuation bases and approach to sharing of network and corporate common costs. We also provide our own recommendations as to the economically appropriate approach to these issues;
 - c. Section V provides a quantitative overview of the significance of the assumptions that ComReg adopts with respect to cost of capital, costing/valuation basis and cost-sharing basis;
 - d. Section VI contains our observations on additional specifics of ComReg’s models that we have reviewed;
 - e. Section VII provides brief concluding remarks.

¹⁴ The current per-operator rule in Ireland, as applied to poles, splits total pole costs between the operators on the pole. The more refined version would have each operator pay for its incremental costs (which in the case of NBI can be identified) and split only the shared network costs between operators. We refer to this as the “per operator plus” rule.

III. ComReg's Approach

30. This section summarises the key components of ComReg's approach to WACC and to the sharing of network costs, and ComReg's justification for choosing the parameters it ultimately chose. An in-depth critical review of ComReg's choices is reserved for Section IV.

III.1. WACC

III.1.1. ComReg's approach to estimating WACC parameters

31. In calculating the level of WACC used for the pricing of the CEI services provided by Eircom, ComReg differentiates between

- the WACC which applies to the provision of CEI to NBI, both in the IA and in the Commercial Area; and
- the WACC which applies to the provision of CEI services to other network operators which may be competing with Eircom in the downstream markets.

32. In the following sections, we briefly describe the underpinning of ComReg's recommendations regarding WACC, which draw from Europe Economics' approach for the calculation of each of the WACC parameters. The key parameters of the calculation are (a) the assumed level of gearing; (b) the assumed asset beta and the cost of equity; and (c) the cost of debt.

Gearing

33. ComReg considers that the optimal gearing for Eircom in relation to the provision of CEI to NBI may be higher than that of a fixed telecom provider. It argues that the predictable streams of future revenues, linked to the 25-year contract that NBI has with government, mean that it could consider this stream of revenues as a "*quasi securitised asset*",¹⁵ against which Eircom would be able to raise a higher proportion of debt than it does in relation to its other telecom operations. It then considers the notional gearing considered by Irish and UK utility regulators as part of their price control determinations, and selects a value at the mid-point of the observed range, 55%, which also corresponds to the gearing ratio considered by the CRU for the electricity sector¹⁶

¹⁵ ComReg, para. 633.

¹⁶ ComReg, para. 636.

Cost of equity

34. ComReg proposes that the risk-free rate and the equity risk premium (ERP) to be used for the calculation of WACC in relation to the provision of CEI to NBI should be the same as those used for the calculation of WACC for Eircom's fixed telecom services,¹⁷ as defined in its 2020 WACC final decision.¹⁸ The relevant nominal values are 0.824% for the risk free rate and 7.21% for ERP.
35. ComReg proposes that the asset beta to be used in relation to the provision of CEI service to NBI should be lower than that used for Eircom's fixed telecom services and close to that of a network utility, and that a sample of determinations by Irish and UK utility regulators considered for the determination of gearing provides a reasonable comparator group for setting asset beta.¹⁹
36. Europe Economics have considered the asset beta used by CRU in the context of the PR4 CER for the electricity sector, 0.40, and the proposed range of betas in relation to the RC3 consultation for the water sector, 0.28-0.36. For NBI CEI, Europe Economics suggests using the midpoint of the combined range, 0.28-0.40, i.e. 0.34.²⁰ This is the assumption that ComReg proposes adopting.

Cost of debt

37. ComReg considers that the cost of debt for NBI CEI could be "very close" to a risk-free rate as a result of the (supposedly) very low demand side risk faced by Eircom in relation to the provision of these services. This is supported by Europe Economics' conclusion that the cost of debt for NBI CEI should be "*very close to that of a state-owned utility asset such as ESB Networks, or perhaps a risk-free asset with some allowance for issuance costs*".
38. ComReg's choice of the cost of debt is determined by Europe Economics as follows. First it considers the risk-free rate it determined as part of ComReg's wider WACC consultation²¹, 0.824%, and then adds an issuance premium of 0.10% based on the CRU's RC3 consultation, resulting in a rate of 0.924%²². It then considers the cost of debt that had been recommended as part of the CRU RC3 consultation, with a mid-point of 2.0% (in real terms), but rejects the use of these values as they do not reflect recent falls in the cost of

¹⁷ ComReg, para.608.

¹⁸ ComReg, Review of Weighted Average Cost of Capital (WACC) – Response to Consultation and Final Decision, 14 October 2020.

¹⁹ ComReg, para. 642.

²⁰ Europe Economics, Section 3.3.

²¹ Europe Economics, Section 3.4.

²² It appears that in determining the overall cost of debt, this issuance premium was not incorporated.

debt.²³ It settles on the value of 1.44%, which was in fact the value for the cost of debt in one (which it did not adopt) of the four approaches or scenarios that ComReg considered in its determination of the overall WACC for Eircom’s fixed line operations.²⁴ Under this approach—which they justify with reference to the European Commission’s recommendations in its recent notice on determining the cost of capital,²⁵ the cost of debt is calculated by summing up risk-free rate and an average debt premium, both calculated by averaging values over the most recent five-year period. Europe Economics considered the relevant period to be the five years ending in December 2019.

III.1.2. Calculation of WACC

39. Based on the updated values of the specific WACC Parameters, ComReg calculates a nominal pre-tax WACC of 4.03%. The key parameters used for the calculation are shown in Table 1.

Table 1: ComReg’s NBI CEI WACC and underlying parameters

	NBP CEI	Fixed line
Nominal Risk-free rate	0.82%	
ERP	7.21%	
Asset beta	0.34	
Gearing	55.00%	40.00%
Equity beta at notional gearing	0.76	
Nominal cost of debt	1.44%	2.60%
Nominal cost of equity after tax	6.30%	6.67%
Tax	12.50%	12.50%
Nominal pre-tax cost of equity	7.20%	7.62%
Nominal pre-tax WACC	4.03%	5.61%

Source: Europe Economics.

III.1.3. ComReg’s WACC proposal compared with benchmarks

40. There are two key elements of ComReg’s approach to calculating WACC, which drive down its value relative to benchmarks.

²³ Europe Economics, Section 3.4.

²⁴ This value is the value calculated under the European Commission approach, one of the four approaches that Europe Economics present in its final report, see Europe Economics, The Cost of Capital for the Irish Communications Sector Final Report, May 2020, 5.7.

²⁵ European Commission, *Commission Notice on the calculation of the cost of capital for legacy infrastructure in the context of the Commission’s review of national notifications in the EU electronic communications sector* (2019/C 375/01), November 2019.

- a. First, the WACC determined for NBI CEI services is based on the risk faced by a conventional utility business and not the risk of either a typical fixed-line telecommunications company, or a provider of passive telecom infrastructure. This is atypical when compared to the approach defined by other regulators in setting the prices for CEI services. ComReg argues that a differentiated WACC is required for CEI because “the provision of CEI access in the context of NBI’s MIP presents a set of new and specific conditions”.²⁶ Europe Economics suggests that these specific conditions are linked to the existence of a very different revenue model, to the Irish government guarantees in the contract with NBI, and to the fact that, in the absence of NBI, the assets in the IA are likely to become obsolete at an earlier date under strictly commercial use. We further review ComReg’s justification for this approach, later in this section, and explain why we think it is not appropriate, in Section IV.
 - b. Second, ComReg has adopted a very aggressive approach in defining the parameters used to determine WACC. Virtually all parameters are set at the lower end compared to both telecoms and utility benchmarks.
41. The result is that the WACC calculated by ComReg in relation to CEI sold to NBI is low in comparison to relevant benchmarks.
- At 4.03% on a pre-tax basis, it is significantly lower than the 5.61% WACC determined for generic CEI access;
 - It is below the WACC recently determined by other regulators in the context of setting prices for CEI services;
 - It is also lower than the rate set by utility regulators in the context of price controls.

This is shown in Table 2 below, which compares the WACC proposed by ComReg as part of the current consultation on CEI on both a pre-tax and a post-tax basis, with a benchmark of WACCs recently set by other telecom and utility regulators in Europe.²⁷

²⁶ ComReg, para. 603.

²⁷ In this sample we have considered the benchmarks that Europe Economics has considered in its report, as well as recent WACC determinations from Ofcom, Ofwat and Ofgem.

Table 2: Comparison of ComReg CEI WACC with a range of telecom and utilities comparators

	Nominal pre-tax WACC	Nominal post-tax WACC
Eircom NBI CEI 2020	4.03%	3.53%
Eircom Generic CEI 2020	5.61%	4.91%
BT WFTMR 2020	7.10%	5.93%
BT BCMR 2019	7.10%	5.85%
BT WLA 2018	7.90%	6.50%
Telefonica 2018	6.82%	5.11%
MEO 2019	7.40%	5.74%
Average Telecoms	7.26%	5.83%
CRU 2019 (Irish Water)	4.90%	4.27%
RIO2 2019 (UK electricity)	4.94%(*)	N/A
Ofwat PR19 (UK Water)	5.02%**	N/A
Average Utilities	4.95%***	N/A

Source: Relevant Regulator’s publications.²⁸

Notes:

(*) The nominal pre-tax WACC for RIO2 2009 calculated as Vanilla WACCs, i.e. averaging the cost of debt (pre-tax) and the post-tax cost of equity. The value of WACC defined by Ofgem is lowered by a reduction in the cost of equity of 0.5%, as Ofgem assumes that companies will earn 0.5% through incentives.

(**) The nominal pre-tax WACC for Ofwat PR19 is also calculated as Vanilla WACC.

(***) This is an average of the CRU 2019 (Water) pre-tax WACC and the RIO2 2019 and the Ofwat PR19 vanilla WACCs.

III.1.4. ComReg’s justification for its calculation of WACC

- When setting the WACC for setting the prices for the provision of Eircom’s CEI service to NBI, ComReg considers whether a differentiated WACC *should be used to “reflect the*

²⁸ Eircom: ComReg, Table 12; BT WTFMR 2020: Ofcom, WFTMR 2020 Consultation, Appendix 21, Table A21.1; BT BCMR 2019: Ofcom, 2019 BCMR Statement, Appendix 21, Table A21.1; BT WLA 2018: Ofcom, 2018 WLA Statement, Appendix 21, Table A20.1; Telefonica 2018: Europe Economics, Figure 4.2; MEO 2019: Europe Economics, Figure 3.3 (Section 4.3.1); CRU 2019 (Irish Water): Europe Economics, Consultancy Support for Water Revenue Control 3, 24 July 2019, Table 8.1, the nominal pre-tax WACC was calculated by applying Europe Economics’ inflation assumption of 1% to the real pre-tax WACC of 3.86%; RIO2 2019: Average five year WACC for period FY 2022 to 2026, Ofgem, RIO-2 Sector Specific Methodology Decision – Finance, 24 May 2019, Table 20, the vanilla WACC was calculated by applying Ofgem inflation assumption of 2% to the vanilla WACC of 2.88%; Ofwat PR19: Ofwat, PR19 Final Determinations, Allowed return on capital, technical appendix, Table 1.1.

specific circumstances and effect of the NBP contract,²⁹ rather than using the rate previously determined for fixed line telecommunications.

43. ComReg argues that “*the provision of CEI access in the context of NBI’s MIP presents a set of new and specific conditions which result from the combination of, on one hand, the large scale and the long-term duration of the access by NBI’s MIP and, on the other, the fact that the demand for Eircom’s CEI is ultimately underpinned by the Irish State’s commitment to the NBP through the step-in rights*”.³⁰
44. ComReg also considers which elements of the WACC approach may need to be adjusted to reflect the specific circumstances of the provision of CEI to NBI, and it concludes that the CAPM methodology remains the appropriate methodology to be applied, but proposes a differentiation between “*generic WACC parameters*”, i.e. those parameters that should be consistent across the provision of services to NBI and to the other communication operators, and “*specific WACC parameters*”, which may require amendment to reflect the distinct characteristics of the NBI’s access to CEI. It identifies the cost of debt, the gearing and the asset beta as such specific parameters.
45. ComReg considers that it is appropriate to adjust the *specific WACC parameters* to reflect the supposedly lower risks faced by Eircom when providing CEI access to NBI for the purpose of the NBP.³¹ Consequently it reviews the value of each of these parameters in relation to the specific circumstances that it has identified for the provision of these services to NBI. In setting these parameters, ComReg relies on the conclusions from Europe Economics’ analysis, which in turn are linked to the parameters Europe Economics defined in its final report on WACC issues, prepared for ComReg’s consultation on the review of WACC for mobile, fixed line and broadcasting operators³².
46. Europe Economics explains that there are important differences in relation to cost risk and the demand risk between the CEI services provided to NBI and the services offered by international passive infrastructure service providers, and that these differences are related to the nature of NBI as the provider selected by the Irish government for the implementation of NBP to non-commercial rural areas, and the nature of the contractual relationship it has with the Irish Government. They suggest that, due to these differences, the WACC they calculated for fixed telecoms needs to be adjusted.

²⁹ ComReg, para. 601.

³⁰ ComReg, para. 603.

³¹ ComReg, para. 623.

³² Europe Economics, The Cost of Capital for the Irish Communications Sector, Final Report, May 2020.

47. Europe Economics considers that the nature of the provision of NBI CEI service is different from that faced by other CEI providers in other countries and identifies two key differences which it considers have an impact on the calculation of WACC.
- a. First, demand and cost risks are substantially reduced. Europe Economics suggests that demand risk is “*almost wholly eliminated*”, because the state provides investors with high confidence that Eircom will receive a stream of payments associated with the NBP over the 25-year duration of the NBI contract with the Irish government and because another provider or the state itself would be guaranteeing the income stream in case of default of NBI.³³ It also considers that the volume and nature of usage by NBI of Eircom’s CEI will not rely on end-user demand, for example in relation to take-up and the emergence of alternative broadband offerings from other technologies such as mobile. In relation to cost risks, Europe Economics considers that, without demand from NBI, some of the CEI deployed for NBI would become obsolete at an earlier date, because of the reduced demand for copper services, and that therefore Eircom would have a higher risk of not being able to recover the costs of its investment.³⁴ Europe Economics therefore concludes that the reduced demand and cost risk will be close to those of a network utility. This conclusion is reflected in the approach it uses to choose notional gearing and asset betas (and therefore the cost of equity) which are based on a benchmark of parameters used by other utility regulators; and
 - b. Second, the risk of default would be similar to that of a state-owned utility such as ESB networks, due to the conditions in the NBI contract with the Irish government, granting the state step-in rights. This assumption is used to determine the value of cost of debt used in the WACC calculation.

III.2. COST SHARING APPROACH TO NBI ACCESS IN THE IA

III.2.1. Overview

48. ComReg proposes that the price for NBI access in the Intervention Area should be set to recover all incremental costs and a proportion of shared network costs calculated based on a per-customer approach, i.e. based on the relative number of copper and fibre customers served off the relevant pole or duct.³⁵

³³ Europe Economics, Section 2.4.1.

³⁴ See Europe Economics, Section 2.4.1.

³⁵ ComReg, para. 513.

III.2.2. Justification

49. ComReg argues that the per-customer approach provides an appropriate cost sharing mechanism between Eircom and NBI's MIP.³⁶ It considers it positive that under this approach Eircom's contributions to shared CEI costs decline progressively as the ability to recover such costs from its customers also decline. This would allow for a smoother evolution of copper access rental prices compared to the per-operator approach. ComReg is concerned that the other sharing approaches it considered, the primary/secondary and the per-operator approach, may cause an excessive incentive for Eircom to shut off its copper network.³⁷
50. ComReg recognizes that normally the per-customer approach would be difficult to implement, because, for example, "*when another operator acquires access to Eircom's pole network it is not possible to establish the number of customers that each operator is serving with the infrastructure they share or even the number of customers that can be served by that infrastructure*".³⁸ However it considers that in the case of NBI access to the IA this problem could be solved as the total number of premises involved in the deployment is fixed and the per customer approach could be informed by considering the relative number of active premises actively connected either to Eircom's or NBI's network, which should be available.³⁹

III.3. APPROACH TO COST SHARING FOR GENERIC ACCESS SEEKERS

III.3.1. Overview

51. ComReg proposes that the price for "Generic Access" to CEI by Eircom's competitors in the Commercial Areas is set to recover incremental, shared network costs and common corporate costs.⁴⁰ The shared costs would be allocated between Eircom and competing operators on a per-operator basis (based on BU-LRAIC+costs).⁴¹

III.3.2. Justification

52. ComReg justifies this approach by stating that CEI access by operators that compete with Eircom in downstream markets will lead to reductions in Eircom's market share in those

³⁶ ComReg, para. 487.

³⁷ ComReg, paras. 481 and 511.

³⁸ ComReg, para. 490.

³⁹ ComReg, para. 491.

⁴⁰ ComReg para. 458.

⁴¹ ComReg, para. 459.

markets. Eircom's downstream sales will therefore make smaller contributions to the costs of the CEI. Eircom needs to be able to recover those shared costs from these access seekers and they should therefore be charged an access price that makes an appropriate contribution.⁴²

53. A primary/secondary user approach to allocating shared costs would create distortions in the retail market⁴³ and a per customer approach would not be practical.⁴⁴ It notes that the per-operator approach:

encourages market entry by allowing other operators to share the costs of existing infrastructure, it helps sustain viable competition by allowing competing operators contribute to the cost recovery of shared assets on equivalent terms while maintaining investment incentives by allowing Eircom to continue to recover its efficiently incurred costs over the long-run⁴⁵

54. It also notes that this would be a continuation of the existing approach that has been in place since 2016.

III.4. COST SHARING APPROACH TO NBI ACCESS TO CEI IN COMMERCIAL AREAS

III.4.1. Overview

55. ComReg proposes that NBI should only pay the pure LRIC associated with its accessing Eircom's CEI in the Commercial Areas.

III.4.2. Justification

56. ComReg's justifies its approach on the basis that including some shared costs of the CEI in the access charges for NBI in Commercial Areas could result in Eircom recovering a significant part of the shared network costs of poles from NBI (see Section II above for a summary of ComReg's position).

⁴² As a methodological point, we note that ComReg appears to be considering the issue of NBI access from the perspective of a stand-alone CEI business, whereas the rationale it is offering in the case of generic access seekers is based on the fact of Eircom's vertical integration. Clearly, if we were to consider the fact of vertical integration in the analysis of access by NBI, then the same justification for including common cost contributions would apply in the case of NBI too (in the IA, where NBI will be a downstream competitor to Eircom) and one might argue on that basis that there is no justification for using a different approach.

⁴³ ComReg, para. 460-461.

⁴⁴ ComReg, para. 462.

⁴⁵ ComReg, para. 463.

57. ComReg claims that this could lead to “competitive distortions” if, for example, Eircom used this excess contribution to reduce the price of its wholesale access services where it faces competition.⁴⁶
58. The justification for the pure LRIC-based approach to charging NBI for access to Eircom’s CEI in Commercial Areas is expanded upon in more detail in the report by DotEcon. DotEcon suggest⁴⁷ that as NBI does not compete with Eircom for customers in Commercial Areas (unlike Generic Access seekers), it is possible to create a dual pricing structure in which some access seekers (i.e. competing operators) are charged a different price from others (i.e. NBI).⁴⁸
59. DotEcon further suggests that if NBI were to pay a contribution to the shared network costs of poles that it accessed in the Commercial Areas and this charge was set on a per-operator basis, it could result in excess returns for Eircom (in the short-run until these are eroded through competition or regulation) and lower CEI access prices for all users. DotEcon claim that this could result in two types of competitive distortion, one transitory and one persistent:
- Eircom could use these excess returns to subsidise a reduction in the price of its wholesale services, which could adversely affect competing operators. DotEcon note that this effect is likely to be transitory and would be “much less concerning, as similar issues arise in other circumstances”,⁴⁹
 - Eircom’s CEI charges for all users would fall (because a significant portion of the total costs of CEI in Commercial Areas is being shared by NBI), which would reduce incentives for other infrastructure-based operators to enter the market to compete with Eircom (i.e., for operators to utilise their own CEI instead of using Eircom’s).

⁴⁶ ComReg, para. 467.

⁴⁷ DotEcon, section 5.3.2.

⁴⁸ DotEcon refer to this as a “differentiated access service”. In fact, it is not a differentiated service but rather the same service but with two different prices, depending on who the purchaser is (e.g. NBI or commercial operators).

⁴⁹ DotEcon section 5.4.

IV. Economic Analysis of ComReg’s Proposals

60. In this section, we review ComReg’s proposals and discuss some of the analysis undertaken by DotEcon and Europe Economics that is used to support ComReg’s proposals. The key claims and propositions are summarised in Section III above, and here we focus on providing a critical analysis of these claims and propositions.

IV.1. RISKS FACING EIRCOM’S CEI BUSINESS

IV.1.1. *The “state guarantee” to Eircom’s CEI business*

61. ComReg’s position is that Eircom’s CEI business faces lower risk in the IA because of the nature of NBI’s demand, citing particularly to the step-in rights for the Irish state contained in NBP’s contract and to the fact that NBI is required to pass all premises in the IA.⁵⁰ They claim that, for this reason, the WACC of the business is closer to a utility than a fixed-line telecoms operator. Europe Economics claim (in response to Eircom’s submission that the risk profile associated with providing access to NBI would be lower if there actually was a guarantee that Eircom would be paid for use of its CEI for 25 years) that there is a guarantee of use of, or at least payment for, the CEI of Eircom for a 25-year period.⁵¹ Europe Economics also cite NBI’s intervention in ComReg’s proceeding to set an appropriate WACC for Eircom (Consultation 19/54) stating that the volume and nature of NBI’s usage of Eircom’s CEI will not vary depending on factors such as end-user take-up, and emergence of competitive offerings from technologies such as mobile and satellite broadband.⁵²
62. Europe Economics goes so far as to say that the “Irish State’s commitment to the NBP through a long-term contract with “step in rights” is close to in effect guaranteeing to CEI providers that...the government will itself cover the CEI access charge payments.” It appears to be Europe Economics’ understanding that Eircom is guaranteed that its CEI will be paid for over the full 25-year contract, which Europe Economics seems to characterize as effectively a contract with the Irish state.⁵³

⁵⁰ See, for example, ComReg at para. 611 (referring to “stable and predictable revenues” while further stating that “Eircom’s position as a significant and long-term provider of CEI in the NBP IA...is close to that of a network utility.”). See also paras. 634-37 and para. 642, which reflect choices of key parameters such as gearing ratios and asset betas which are based on using utilities rather than fixed telecom firms as comparators.

⁵¹ Europe Economics, footnote 15.

⁵² Europe Economics, p.5.

⁵³ Europe Economics, footnote 15.

63. As Section II.1.1 explains, the “step-in” rights of the Irish State might at most guarantee that if NBI were unable to meet its financial obligations, another broadband provider would take over its network, or *in extremis*, the Irish State would do so itself. Thus, the Irish State provides a “guarantee” that Eircom’s CEI assets to the extent they are used will be paid for (in accordance to the price set by ComReg). What it does not guarantee is the extent to which Eircom’s CEI assets will be used or the level of future payments (and whether they will be sufficient to cover Eircom’s investment in the CEI) that Eircom receives. At most, the “step-in” rights cover default risk. However, this apparent state guarantee against default may not warrant a particularly large reduction in any element of the WACC relative to benchmark WACCs determined for fixed telecom access networks and especially for utility infrastructure. In both these cases, we would expect that some significant usage of the infrastructure will be maintained for decades to come, even if the firms utilising that infrastructure change over time. In any event, we note that the cost of debt that ComReg recommends in this case is well below the cost of debt that has been estimated for utilities and for investment-grade telecom firms, i.e., firms with low default risk.
64. These statements also overlook three important primary risk factors , two of which would apply regardless of which rule for sharing of network costs was used, and another of which is a direct and significant consequence of using the “per-customer” approach to cost sharing that ComReg and DotEcon advocate. In fact, as we discuss below:
- There is not even a guarantee—especially not under present cost-sharing proposals— of any particular level of revenue flow from NBI to Eircom;
 - There is particularly no guarantee that Eircom will cover its costs, given that for many years, a substantial burden of cost recovery will fall upon Eircom’s copper network assets, which do face risks.

We expand on these issues below.

IV.1.2. Input Substitution by NBI

65. Europe Economics suggest that there is supply-side substitutability between utility infrastructures and Eircom’s CEI.⁵⁴ Supply-side substitutability means that even if utilities such as ESB and the water companies do not currently supply infrastructure that can be used to support telecom providers, they could do so readily if and when economic conditions became more favourable—e.g., if the price-quality proposition of Eircom’s CEI infrastructure deteriorated appreciably. They also point to the fact that some providers

⁵⁴ Europe Economics, p.5.

appear to be selling water and communications duct access⁵⁵, and that some some NBP CEI may literally be electricity network assets.⁵⁶ They go on to suggest that this evidence of supply-side substitutability suggests that alternative infrastructures—e.g., those supplied by ESB and the water companies—may be in the same market⁵⁷ as Eircom’s CEI.⁵⁸

66. Regardless of whether the degree of supply-side substitutability warrants including utility infrastructures in the same relevant market (as that term is used in competition economics) as Eircom’s CEI, broader evidence supports Europe Economics’ point that such infrastructure could and is being used to support fibre and other telecom networks. Vodafone and ESB already have a joint venture that leverages ESB’s poles to offer fibre broadband. Paris’ municipal sewage infrastructure has also been used to offer fibre broadband. Electric utility poles have been leveraged extensively to build cable systems on a large scale in the United States and Canada for several decades—the North American examples are particularly relevant to low-density and mid-density areas.⁵⁹ Another prominent example of electric utility infrastructure being leveraged to provide open access fibre comes from Italy, where the OpenFiber network—50% owned by the electric utility, Enel, and utilising electric utility infrastructure—recently attracted a bid for around 2.65 billion Euros for Enel’s 50% stake.⁶⁰ The potential for leveraging alternative infrastructures is thus very real and might even grow over time as alternative infrastructure providers recognise the value of making their infrastructure available to fibre providers.⁶¹

⁵⁵ Europe Economics, p.8.

⁵⁶ Europe Economics, p.8.

⁵⁷ Europe Economics, p.9.

⁵⁸ Europe Economics (perhaps unintentionally) seem to be implying a strong level of supply-side substitutability across infrastructures. On the other hand, we understand that ComReg in decision D10/18 has concluded that the level of substitutability was insufficient to (in the context of WLA) rectify the potential problem associated with Eircom leveraging its position in CEI into downstream markets.

⁵⁹ In the United States, the FCC was given the authority to regulate pole attachment rates for telecom poles and electric utility poles alike, as long ago as 1978. Electric utility poles have been widely used to roll out cable TV networks in Canada too, with some provincial-level regulation of rates, e.g., in Ontario. See CSMG, “Economics of Shared Infrastructure Access”, Final Report for Ofcom, available at https://www.ofcom.org.uk/__data/assets/pdf_file/0020/25283/csmg.pdf.

⁶⁰ Capacity Media (2020), “Macquarie Makes Firm €2.65bn Offer for Enel’s Open Fiber Stake”, available at <https://www.capacitymedia.com/articles/3826376/macquarie-makes-firm-265bn-offer-for-enels-open-fiber-stake>.

⁶¹ See Arthur D. Little (2020), “Open Access Fiber: New Investment Opportunities Opening Up for Gigabit Broadband in Europe,” available at <https://www.adlittle.com/en/open-access-fiber>. The authors note the involvement of energy and utility companies in helping to develop new fibre deployments. The European Commission’s Broadband Cost Reduction Directive (2014/61/EU) explicitly references (at Recital 13) the efficiencies available with the potential to reuse electricity, gas, water, and sewage systems for purposes of hosting electronic communication network equipment. We understand that this is currently being reviewed, and that provisions relating to facilitating infrastructure re-use may well be strengthened, which may increase the attractiveness of using other utilities’ infrastructure relative to Eircom’s CEI.

67. The clear implication is that NBI may have the ability and incentive—and that ability and incentive may change and grow over time—to substitute Eircom’s CEI with alternative infrastructures to an appreciable and potentially significant degree. As such, the degree to which it utilises Eircom’s CEI is variable, and this creates riskiness in the flow of payments from NBI to Eircom. There is no reasonable prospect of Eircom’s CEI in the IA being used for any other (i.e., non-telecommunications) purpose. Eircom therefore faces the risk that NBI might choose not to use portions of its CEI while not having any alternative sources of revenue from which it could recover its costs.
68. By contrast, we are not aware of any significant substitution possibilities in the context of water and electricity distribution networks. Eircom’s CEI is thus on a different footing to water and electricity networks and faces a different (i.e., higher) demand risk than those types of network.

IV.1.3. Technological substitution by Customers and Cost-Sharing Rules

69. The telecommunications industry is technologically dynamic and there is significant inter-technology competition. In particular, there is a risk that the demand for fixed-line services (copper and fibre alike) will fluctuate depending on the availability and quality of alternatives such as LTE+, 5G (mobile and fixed wireless access) and satellite broadband. These alternative technologies may either not rely on poles and ducts at all (e.g., satellite broadband), or may do so in very different ways (e.g., 5G mobile or even 5G-based Fixed Wireless Access) than do conventional fixed-line services.⁶² These technological

⁶² For example, a 5G mobile service might rely on attachments on poles (e.g., distributed antenna systems, or small cells hooked up on poles) to some degree, as might a fixed-wireless access service which uses 5G mobile in the last mile. Mobile operators will, however, typically not follow the configuration of the existing pole network in their build-out and will instead rely on a heterogeneous mixture of macro-cells and existing towers and masts, poles, street furniture and building rooftops to meet their capacity and coverage objectives. In any case, we understand from eir that under open eir’s current rules no active equipment is permitted in ducts or on poles.

substitution possibilities create direct and indirect risks for Eircom's ability to recover its CEI costs.⁶³

70. Under a per-operator model (and per-operator plus model) for sharing network costs, the risk created by substitution to alternative technologies is that Eircom will not necessarily be able to meet its share of these costs (which is fixed at 50% until such time as it switches off the copper network) by raising prices to copper customers, who may substitute away to other non-fixed technologies. Even if the flow of payments from NBI is predictable, Eircom's copper business faces demand-side risk, and this residual demand-side risk has to be factored into the determination of the cost of capital for *Eircom's* CEI. If NBI can leverage alternative infrastructures, then this risk is even greater. This is because to the extent that copper demand is diverted away to fibre, this diverted demand will not be fully recaptured by Eircom's CEI. Therefore, the risk under this approach may not be very different than under the existing regulatory pricing of CEI per ComReg D03/16.
71. Under the per-customer approach that ComReg recommends, the demand-side (generated by inter-technology competition) risk to NBI's fibre as well as the demand-side risk to Eircom's copper are both relevant. In this case, the flow of payments from NBI to Eircom depends on the number of customer connections that NBI makes, which is subject to demand-side risk. Further, Eircom's ability to meet all of its costs if NBI's contributions

⁶³ It is important to recognise that mobile services or satellite services do not have to be perfect technical substitutes for copper or FTTH services, in order to result in some level of demand risk to fixed-line networks and hence to Eir's CEI. All that is needed is that some consumers will prefer the price-quality-convenience proposition of mobile service to that of fixed line service. A significant proportion of consumers in some countries are already using mobile broadband exclusively—e.g., roughly 20% of North American households and 15% of Spanish households, according to Deloitte's Mobile Consumer Survey.

<https://www2.deloitte.com/content/dam/Deloitte/global/Images/infographics/technologymediatelecommunications/gx-deloitte-tmt-2018-mobile-home-internet-report.pdf>. Further, if 5G service in rural areas improves mobile latency and speeds up to the point where such service matches FTTC service quality, it may provide a significant alternative to a large group of consumers. Satellite broadband services are also rapidly improving their quality. (See, for example, <https://www2.deloitte.com/us/en/insights/industry/technology/future-of-satellite-internet.html>). Especially over the very long time-frame being contemplated for NBI's use of the CEI, one can reasonably expect significant improvements in mobile technology and satellite technology.

do not cover these costs, depends on the ability to fund these costs through raising copper prices—this too is subject to demand-side risk as discussed above.^{64, 65}

72. There is little discussion of the potential for substitution to other technologies by either ComReg or its economic advisers. Europe Economics highlights NBI’s statement—in the context of Consultation 19/54—that payments from NBI to Eircom would not vary depending upon the level of end-user take-up of NBI’s product or the degree of substitution to mobile and satellite technologies.⁶⁶ These statements ignore the fact that as long as a significant portion of the shared network costs are recovered from copper customers, the demand risks faced by the copper network (from substitution to non-fixed-line technologies) are relevant to the overall risk assessment. They also ignore the fact that the per-customer rule directly links the payments from NBI to Eircom to the level of NBI’s end-user acceptance. The payment flow from NBI to Eircom is thus not guaranteed, and Eircom’s ability to recover its costs is also not guaranteed.
73. In summary, the “guarantee” that NBI can provide to Eircom exists only from the point where NBI is able to assume sole occupancy of any and all Eircom CEI. Up until that point, Eircom’s CEI will be subject to demand risk, stemming from input substitution and from technology substitution, just as it is today under the existing per operator model but without the additional complexities and risk of the per customer model (as discussed below).

IV.1.4. The allocation of risk is not accounted for in the access price

74. Under the per-customer rule advocated by ComReg, the level of NBI’s payments to Eircom is linked to NBI’s success in achieving customer acceptance of its products. This arrangement reflects a reallocation of risk from the access seeker to the access provider. Unlike normal infrastructure providers—such as Eircom itself—NBI does not incur the costs of building out CEI first and then waiting for customer revenues to generate payback for that upfront investment. Instead, NBI assumes the costs of the infrastructure progressively.

⁶⁴ The underlying point is that the overall demand for CEI will depend on the strength of the demand for fibre services that use the CEI, the strength of the demand for copper services that use the CEI, and the substitution possibilities towards other services that do not use the CEI or use less of the CEI. If there is substantial diversion away from copper to fibre, or NBI makes substantial use of other infrastructure (besides Eir’s CEI), then cost recovery for Eircom’s CEI business is not straightforward, as an undershoot in fibre demand cannot be fully offset by increasing copper prices and an increase in copper prices may not be fully offset by diversion to fibre services that use the same CEI.

⁶⁵ Eircom can, in theory, choose to switch off the copper network in response to the difficulties of recovering costs via the path of increasing copper prices. Such a decision is unlikely to come without significant logistical and administrative challenges, and also attract public policy scrutiny. As such, it is unlikely to be a decision that can rapidly respond to evolving and unexpected market conditions.

⁶⁶ Europe Economics, p.5. Again, the revenue stream from NBI to Eircom under the pre-customer rule would only be guaranteed if the ratio of copper to fibre lines was guaranteed to evolve as per forecasts.

The position of NBI is thus more similar to that of an investor in a project that is given the option by its co-investors to increase its stake in the project progressively as demand for the end-product becomes more certain. One would normally expect that such an option would be priced, e.g., in the cost of capital. For example, in the context of access regulation in Europe, it has been recognised that access seekers benefit from a “wait and see” option—to utilise the infrastructure only when demand for a product is apparent—that the access provider has foregone. As a matter of economic principle, regulators such as Ofcom have recognised the relevance of this “real options” approach to access pricing.⁶⁷

75. In the present context, although it may be challenging or impossible to put a value on the option, the reallocation of risk as between the per-operator rule and the per-customer rule means that the appropriate cost of capital to use in setting the access charge should be linked to the allocation of risk inherent in these rules. Thus, if current cost of capital benchmarks are based on the “per operator” rule (the incumbent cost sharing rule in Ireland and in some other countries), the cost of capital used in conjunction with a “per customer” approach should be elevated above this benchmark.
76. There is also a public policy consideration associated with risk allocation. There may be benefits from having NBI face the same incentives (with respect to CEI) as an infrastructure owner that bears up-front risks as a result of having to make a large lump of sunk investments before it can start growing its customer base. This provides strong incentives to rapidly grow the customer base—and if there are external social benefits (e.g., network externalities) associated with fibre adoption, this may accelerate the realisation of those benefits.⁶⁸ From another perspective, allowing NBI’s private investors to benefit from risk-mitigating options that might well have been priced in a commercial negotiation over access represents a form of subsidy from Eircom’s investors to NBI’s investors. There may thus be good public policy justifications for either pricing this option or moving to a per-operator (or what we call a per-operator plus model, as described in Section V) that will significantly move NBI’s incentives towards those of an infrastructure owner.⁶⁹

IV.1.5. Regulatory risk

77. The prolonged time horizon over which CEI costs are recovered also creates regulatory risk. Regulatory risk arises because Eircom’s CEI charges will be subject to periodic reviews on potentially several occasions over the payback period. For instance, the per-

⁶⁷ See Ofcom (2005), “Ofcom’s Approach to Risk in the Assessment of the Cost of Capital—First Consultation”, available at https://www.ofcom.org.uk/consultations-and-statements/category-2/cost_capital.

⁶⁸ See the discussion in Section IV.3, *infra*.

⁶⁹ The per-operator rule does not quite result in NBI facing the same incentives as an infrastructure owner, but it certainly represents a step in that direction.

customer sharing rule results in a “backloading” of the revenue flow from NBI to Eircom. This “backloading” leaves Eircom more vulnerable to future revisions in the underlying basis for setting access charges. For example, if fibre take-up is initially low, this may create significant pressure for reducing NBI’s costs and thus its prices.⁷⁰ The rollout of FTTH under the NBP is a high-profile endeavour and expectations of the wider social and economic benefits from the rollout are also high—for example, the Department for Environment, Climate Action and Communications (DECC) has already announced its desire to see the rollout of FTTH achieved within 5 years rather than the original 7 years.⁷¹ To the extent that access pricing is a lever that policy makers believe they can pull in order to more effectively meet broader policy and social objectives, e.g., faster fibre rollout, it is not unreasonable to believe that the basis for CEI access pricing could be revisited in subsequent reviews.

78. Pricing of CEI for the NBI already departs from the pricing of CEI for generic access seekers in terms of re-distributing the burden for shared network cost recovery and for corporate overhead recovery away from NBI. As we explain in Section IV.3, the sharing of such “common” costs is—in the absence of the ability to implement Ramsey pricing—often a matter of choice, with no real grounding in economic theory. As Sections IV.3 and IV.4 explain, ComReg’s advisors—DotEcon—attempt to provide economic explanations for choices such as the use of pure LRIC in the Commercial Areas or the use of the per-customer cost sharing rule in the IA that are far from emphatic. For example, the explanation that allocating shared network costs in the Commercial Areas to NBI will provide the wrong signal for “build or buy” decisions by other infrastructure providers is based on the idea that there might be firms that skew their choice to renting Eircom’s CEI rather than building their own CEI. Many reasonable observers of telecommunications networks would query whether this is a material concern. Likewise, the logic and rationale supporting the per-customer cost sharing rule is not based on widely accepted economic principles. The broader point is that the choices ComReg has already made are discretionary ones—even setting aside the question of whether there are obvious adverse effects (from the vantage point of society) from these choices—and ComReg may continue to make other discretionary choices that affect the revenue streams available to Eircom over the entire lengthy payback period. Indeed, it is our understanding that at the time NBI made its submission to Consultation 19/54, the expectation of the parties would have been that network costs would have been shared on the incumbent “per operator” basis—this

⁷⁰ We understand that NBI’s prices in the intervention area will be benchmarked to prices in the Commercial Areas, but it is allowed to offer promotions and discounts to price below those benchmarks.

⁷¹ Colm Gorey (2020), “Government Wants to Roll Out National Broadband Plan in Five Years, Not Seven”, Silicon Republic, available online at <https://www.siliconrepublic.com/comms/national-broadband-plan-bruton-five-years>.

change alone has significantly changed the nature of the “guarantee” that NBI claimed it would provide to Eircom in its response to ComReg’s consultation.

79. More broadly, economic literature does indicate that regulators are susceptible to changing asset valuation bases for regulated companies based on their perceptions about whether this would produce lower regulated prices.⁷² In the case of telecom pricing, Hausman, Sidak and Tardiff (2008) point to regulators’ failure to take forward-looking costs into account when doing so would produce higher regulated prices.⁷³ In addition, such regulatory risks may be greater in the case of telecommunications regulation than in utility regulation as the former offers less assurance that regulated firms will recover their efficiently incurred costs, which might otherwise constrain the potential to revise valuation and pricing bases.

IV.1.6. Risks arising from the way in which the model calculates prices

80. There are always risks inherent in using a forecast model to set prices. However, these risks are amplified in the case of the modelling for NBI prices because NBP is a new project with many uncertain elements. The price per pole or meter of duct is set by the model for an initial period of two years based on forecasts and thereafter is to be set on a yearly basis. Variations in the customer take-up, the pole replacement rate, the number of poles or amount of duct used in a year, or in various other assumptions would all change the price that should be charged, but would not be reflected in the regulated prices for that year. Given the high level of uncertainty in some of these assumptions (particularly with regard to customer take-up) and the size of their impact on the price, this imposes significant pricing risk on Eircom.
81. ComReg has stated its intent to reconcile the key assumptions to actual outcomes on an annual basis, with a delay of two years before the first reconciliation and adjustments.⁷⁴ However, ComReg has proposed that adjustments to the prices from this reconciliation apply from the following 1 July.⁷⁵ Eircom will therefore have to accept the potentially incorrect prices it receives each year, with lagged updates to assumptions only affecting the price for the next year, but with continued uncertainty in the forecasts for each year.

⁷² See Grout, Paul and Andrew Jenkins (2001), “Regulatory Opportunism and Asset Valuation: Evidence from the US Supreme Court and UK Regulation”, University of Bristol, CMPO Working Paper Series No. 01/38.

⁷³ Hausman, Jerry A., J. Gregory Sidak and Timothy J. Tardiff (2008), “Are Regulators Forward-Looking? The Market Price of Copper Versus the Regulatory Price of Mandatory Access to Unbundled Local Loops in Telecommunications Networks”, *Federal Communications Law Journal*, Volume 61, Issue 1, pp. 199-228. The authors point particularly to the New Zealand Commerce Commission’s failure to take rising copper prices into account when setting the price of unbundled local loops.

⁷⁴ ComReg, para. 46.

⁷⁵ ComReg, para. 725.

This issue will be most severe under the per-customer approach, because customer take-up rates are particularly uncertain and may vary significantly from year to year.

IV.2. IMPLICATIONS OF THESE RISKS FOR THE WACC PARAMETERS

82. In Section III above we explain that ComReg’s approach to the calculation of WACC for NBI CEI relies on the assumption that the risk faced by Eircom on its provision of CEI services to NBI is lower than both the risk faced by Eircom in connection to the provision of other fixed telecom services and the risk faced by other providers of CEI service across European countries, because of the nature of the NBI deal with the Irish government.
83. We have also explained above that we believe ComReg’s assessment of risk of Eircom’s NBI CEI business to be incorrect and that it significantly understates the risk faced by Eircom. In this subsection we review ComReg’s estimate of the *specific WACC parameters*, and consider the implication of an appropriate assessment of risks on these parameters.

IV.2.1. Cost of debt

84. ComReg’s underestimation of risk is a key element driving its choice of specific WACC parameters to apply in the case of NBI. The cost of debt is intentionally set close to the risk-free rate, for example, in order to match the default risk profile of a state-owned utility.⁷⁶ Table 3 makes clear that the value selected by ComReg is (by a very striking margin) an outlier relative to costs of debt set by other regulators. It is a full 116 basis points below the cost of debt set for Eircom’s broader fixed business and 228 basis points below the average cost of debt determined in recent UK and Irish WACC determinations for water and electric utilities.

⁷⁶ Europe Economics, Section 2.5.

Table 3: Cost of debt used for a range of recent WACC determinations

	Cost of debt	Risk free rate	Premium on risk free rate
Eircom NBI CEI 2020	1.44%	0.82%	0.62%
Eircom Generic CEI 2020	2.60%	0.82%	1.78%
BT WFTMR 2020	3.40%	1.50%	1.90%
Telefonica 2018	2.09%	N/A	N/A
MEO 2019	4.06%	N/A	N/A
Average Telecoms	3.18%	1.50%	1.90%
CRU 2019 (Water)	3.02%	0.91%	2.11%
RIIO2 2019	3.97%	1.24%	2.73%
Ofwat PR19	4.18%	0.58%	3.60%
Average Utilities	3.72%	0.91%	2.82%

Source: Relevant Regulator’s publications.⁷⁷

85. The cost of debt that ComReg has set in this case is, however, not based on benchmarking against state-owned utility companies, or indeed any utility at all. Instead, the cost of debt is obtained by adding a debt risk premium of 0.62% to a risk-free rate of 0.82%. This risk premium itself is justified by Europe Economics on the basis that it reflects the five-year average of recent telecom company bond yields. In fact, this very combination of risk-free rate and debt premium was used as one of the scenarios in ComReg’s broader WACC consultation, but in that case ComReg also considered three other scenarios and based the overall cost of debt on the average of all scenarios, arriving at a cost of debt of 2.6%.
86. Although ComReg makes much of the comparison between the utility-like risk profile of CEI as supplied to NBI and uses this to inform its choice of gearing ratio and the asset beta to apply to CEI access by NBI, it determines the cost of debt by relying only on telecom data and using only one particular approach to determining the cost of debt. No specific aspect of the risk profile of CEI as supplied to NBI is used in making this determination.

⁷⁷ Eircom: ComReg, Table 12; BT WTFMR 2020: Ofcom, WFTMR 2020 Consultation, Appendix 21, Table A21.1; Telefonica 2018: Europe Economics, Figure 4.2; MEO 2019: Europe Economics, Figure 3.3 (Section 4.3.1); CRU 2019 (Irish Water): Europe Economics, Consultancy Support for Water Revenue Control 3, 24 July 2019, the nominal cost of debt was calculated by applying Europe Economics’ inflation assumption of 1% to the real point estimate of the cost of debt (Table 8.1) and the nominal risk-free rate was calculated based on the real risk-free rate under the UKRN approach of -0.09% (Table 5.4); RIIO2 2019: Ofgem, RIIO-2 Sector Specific Methodology Decision – Finance, 24 May 2019, Cost of debt from Table 5 and risk-free rate from Table 6, applying 2% inflation to calculate nominal value; Ofwat PR19: Ofwat, PR19 Final Determinations, Allowed return on capital, technical appendix, Table 1.1.

87. As mentioned above, the cost of debt of 1.44% for CEI supplied to NBI is actually the same cost of debt produced by applying the European Commission notice to the wider ComReg fixed line business. Europe Economics claims that by adopting this value for NBI, it is reflecting the near-risk-free nature of CEI supplied to NBI by picking out a value that is at the “very bottom of the range” it found for overall fixed line debt.⁷⁸ Yet the reason that this value is at the very bottom of the range found for overall fixed line debt is simply because it gives more weight to data for a recent time period in which debt costs were low, not because it reflects the costs of debt of a less risky fixed-line business, or a less risky part of a fixed-line business.⁷⁹
88. This exclusive reliance on one approach—the “European Commission Notice Approach”—does not match ComReg’s practice in its broader WACC consultation and ultimate decision. It also does not match other regulators’ practice. For example, Ofcom made a recent determination of the cost of debt in its recent (2020) WFTMR—by which time the European Commission Notice was already published and known to Ofcom. Ofcom noted that:
- “[W]e continue to have regard to the cost associated with existing debt obligations when estimating the overall cost of debt. This is because an efficiently financed firm may not have anticipated the scale of the Bank of England’s quantitative easing programme...and the extent of the current low interest rate environment.”⁸⁰ (Ofcom, WFTMR, Annex 21.16).
 - “A cost of debt based primarily on current market rates may not be consistent with providing the regulated firm with a ‘fair bet’ on its financing costs. We propose to base our estimate of the cost of existing debt by reference to the 10-year average yield on 10-year BBB-rated debt.”⁸¹ (*ibid.*)
89. Thus, the approach taken by Ofcom takes account of the “debt drag” of existing debt and incorporates a much longer time series of bond yields than the Commission Notice

⁷⁸ Europe Economics, Section 3.4.

⁷⁹ The “range” that Europe Economics refers to for fixed line debt is a range generated by applying four very different approaches to determining the cost of debt for the same fixed-line operator. The variability evident in that range is purely driven by different methodological choices applied to estimating the cost of debt for a single telecom business. This approach is no more insightful with regard to the cost of debt for the “state-owned utility” that Europe Economics deems NBI to be analogous to, than if a financial analyst set out to estimate the beta for *the electric utility asset class* by using the range of published estimate of beta for a *given telecommunications stock*. A more valid approach would have been for Europe Economics to consider a range of fixed-line operators that vary in their risk profiles, or consider inferring the costs of debt for risky versus less risky parts of the fixed-line business (e.g., passive infrastructure or access relative to retail), or utilise actual information on utilities.

⁸⁰ Ofcom (2020), Wholesale Fixed Telecom Market Review, Annex 21, para. 16.

⁸¹ *ibid.*

approach. Europe Economics' exclusive reliance on the Commission Notice approach increases the weight given to recent data, and risks violating the "fair bet" principle embedded in UK and Irish regulation.

90. In summary:

- Even if one believed that the risks associated with the NBI-facing aspect of the CEI business were utility-like, the calculations on cost of debt presented by Europe Economics and then used by ComReg are disconnected from utility data, and instead reflect an approach designed to yield "low" numbers;
- If ComReg believed that the cost of debt for the NBI-facing CEI could be estimated using telecom operators' data then it should have considered the same wider range of approaches to doing so that it considered in determining the same parameter for Eircom's broader fixed access business;
- If ComReg believed that the NBI-facing CEI reflected its utility-like characteristics, then its cost of debt calculation should have been informed by cost of debt determinations for utilities;
- A more reasonable approach would involve considering the cost of debt for both telecom and utility operators. This approach would incorporate some risk reduction associated with specific aspects of NBI, but not adopt the extreme assumptions of risklessness that ComReg and Europe Economics adopt.

IV.2.2. Gearing

91. ComReg's choice of gearing for the determination of the NBI CEI WACC reflects the assumption that the contract NBI signed with the Irish government removes the risks associated with the revenue stream from NBI CEI revenues (for example, demand risk and the risk of loss due to NBI defaulting) to an extent that such revenues can be considered as a "*quasi-securitised asset*", and allow Eircom to raise a higher level of debt, as compared to other fixed telecom operators at low interest rates against such revenues, to a level which is closer to that of utilities than that of a fixed telecom operators.

92. We have explained above that the ComReg analysis is likely to significantly underestimate demand risk for Eircom's NBI CEI business, and that we would not expect it to be as drastically different (as ComReg implies) to that faced by CEI providers in other jurisdictions. Other telecom regulators such as Ofcom have considered the lower risks faced by "passive" or CEI-like businesses, and have incorporated this lower risk into elements of the WACC calculation (e.g., by using asset betas that are averages of utility

and telecom betas), but they have not chosen a gearing ratio as extreme as that chosen by ComReg.

Table 4: Gearing for a range of recent WACC determinations

	Gearing
Eircom NBI CEI 2020	55.00%
Eircom Generic CEI 2020	40.00%
BT WFTMR 2020	40.00%
Telefonica 2018	36.04%
MEO 2019	39.53%
Average Telecoms	38.52%
CRU 2015 (Electricity)	55.00%
CRU 2019 (Water)	52.50%
RIIO2 2019	60.00%
Ofwat PR19	60.00%
Average Utilities	56.88%

Source: Relevant Regulator’s publications.⁸²

93. Table 4 above shows the value of gearing used in recent WACC determinations. It confirms that the notional gearing of telecoms is significantly lower than that used by utilities. Based on this, and on our findings on the demand risk for NBI CEI services, the extent of ComReg’s proposed deviation from standard telecom gearings levels seems unwarranted.⁸³

IV.2.3. Beta and the cost of equity

94. The value of the asset beta directly captures the value of the systematic non-diversifiable risk of a business, having isolated the additional impact of the company’s debt on the risk, i.e. assuming a gearing of 0%.

⁸² Eircom: ComReg, Table 12; BT WTFMR 2020: Ofcom, WFTMR 2020 Consultation, Appendix 21, Table A21.1; Telefonica 2018: Europe Economics, Figure 4.2; MEO 2019: Europe Economics, Figure 3.3 (Section 4.3.1); CRU 2019 (Irish Water): Europe Economics, Consultancy Support for Water Revenue Control 3, 24 July 2019, Table 8.1, RIIO2 2019: Ofgem, RIIO-2 Sector Specific Methodology Decision – Finance, 24 May 2019, para. 7.33; Ofwat PR19: Ofwat, PR19 Final Determinations, Allowed return on capital, technical appendix, Table 1.1.

⁸³ Additionally, it may be inappropriate to assume large changes in capital structure, without then examining the consequences of that capital structure for financing costs (e.g., on the cost of debt). Further, we note that in proposing a cost-sharing rule for generic access seekers, ComReg adopted the perspective of cost recovery by Eircom as a firm. If one were to use this perspective in the analysis of the cost of capital, then the simulation of the cost of debt for a highly geared firm would be even more removed from the reality of the actual cost of funds to Eircom.

95. As we have noted for the other *specific WACC parameters*, ComReg has underestimated the level of risk faced by Eircom’ NBI CEI business and therefore set the value of asset beta too low. This is illustrated in Table below, showing the betas used by in recent regulatory decisions.

Table 5: Asset betas for a range of recent WACC determinations

	Asset Beta
Eircom NBI CEI 2020	0.34
Eircom Generic CEI 2020(*)	N/A
BT WFTMR 2020	0.57
Telefonica 2018	0.61
MEO 2019	N/A
Average Telecoms	0.59
CRU 2015 (Electricity)	0.40
CRU 2019 (Water)	0.32
RIIO2 2019 (Electricity)	0.38
Ofwat PR19 (Water)	0.29
Average Utilities	0.35

Source: Relevant Regulator’s publications.⁸⁴

Notes: (*) when ComReg calculates the cost of equity for Eircom Fixed Telecom services, a component of the WACC used to determine the price for Eircom Generic CEI services, it averages across two approaches which use different values for asset betas.

96. Other telecom operators have set asset betas between 0.57 and 0.61. We note that Ofcom in the previous decisions (2019 BT BCMR and 2018 BT WLA) had set values in a similar range, at respectively 0.55 and 0.59. We also note that the asset betas defined by Ofcom in this context are specific to the Openreach business and already reflect the asset betas of utilities.⁸⁵
97. ComReg has instead considered that the asset beta for NBI CEI services should be set at the level typical for utilities and set the value to 0.34. This is not supported by either the

⁸⁴ Eircom: ComReg, Table 12; BT WTFMR 2020: Ofcom, WFTMR 2020 Consultation, Appendix 21, Table A21.1; Telefonica 2018: Europe Economics, Figure 4.2; MEO 2019: Europe Economics, Figure 3.3 (Section 4.3.1); CRU 2019 (Irish Water): Europe Economics, Consultancy Support for Water Revenue Control 3, 24 July 2019, Table 5.4, RIIO2 2019: Ofgem, RIIO-2 Sector Specific Methodology Decision – Finance, 24 May 2019, Table 8, mid rang value; Ofwat PR19: Ofwat, PR19 Final Determinations, Allowed return on capital, technical appendix, Table 1.1.

⁸⁵ When Ofcom defines the value of the asset beta for Openreach, it sets a beta which is slightly above the mid point of the range between that of network utilities (0.39) and BT group (0.68) (See Ofcom, WFTMR 2020 Consultation, Appendix 21, para. A21.74).

level of risk faced by Eircom in relation to its NBI CEI investment, which as we have explained above is not as drastically dissimilar as ComReg's approach implies to that of other fixed telecom operators providing CEI-like services. We list in table 6 below some of the risk mitigating factors which characterise utility businesses and the regulatory regime under which they operate, and consider to what extent they apply to fixed telecoms and CEI operators. This analysis shows that the risks faced by CEI operators are broadly similar to those typical of fixed telecoms, as they do not have many of the protections which utility networks benefit from. It also shows that a significant portion of the risk mitigation for utilities is offered by a regulatory regime, which includes efficiency incentives but it is focused on incentivising investments and ensures companies' financeability to maintain continuity of supply.

Table 6: Comparative Risk of utilities and telecom CEI

Risk mitigating factor	Utility networks	Fixed Telecoms	Eircom CEI	Comments
Strength of natural monopoly/existence of competitors	✓✓	✓	✓	While utilities generally operate under a natural monopoly, Eircom faces competition from ESB and potentially water utilities on CEI services. The reverse is not true.
Lack of substitute products	✓	✗	✗	Mobile and satellite communications provide a substitute to fixed telecom, and increase demand risk for Eircom CEI services
Limited technological dynamism (more predictable demand)	✓✓	✗	✓	The impact of technology on telecoms outpaces that of utility networks and also affects the demand for Eircom’s CEI services
Regulatory regime which ensures full recovery of efficiently incurred costs	✓	✗	✗	The regulatory regimes of utility networks gives investors confidence of a full cost recovery. The same protection is not available to fixed telecoms and CEI operators
Regulators’ duty to ensure financeability	✓✓	✗	✗	Regulators’ duty with respect to ensuring financeability generally does not apply to fixed telecoms and CEI operators
Ability to re-open price controls	✓	✗	✗	Mechanisms to re-open the price control are generally included in the regulatory regimes of utility networks, but not so in telecoms.
Protection for changes in input costs (e.g. inflation)	✓✓	✗	✗	Links to price indices provide additional protection to utility networks

Source: BRG analysis.

98. We therefore consider that an asset beta either in the range of that used by other telecom regulators or at least reflecting an average value across utility and telecom infrastructure businesses would better reflect the risk faced by Eircom in relation to the NBI CEI business. As discussed, we consider that the per customer model places further risk on Eircom than might be faced by utility and telecom infrastructure businesses which could justify an additional WACC premium adjustment.

IV.2.4. Recommendations on WACC

99. In the ultimate analysis, the most useful way to consider the issue of (pre-tax, nominal) WACC is to consider the broader context around ComReg's proposed WACC of 4.03%, which effectively applies to a hypothetical CEI business selling access to a single customer, NBI ("the NBI business.").

100. This WACC contrasts with an average benchmarked telecom WACC (Table 2) of 7.26%, an average benchmarked utility WACC of 4.95%⁸⁶ (Table 2) and 5.61% for Eircom's broader fixed (and hence CEI) business. This substantial difference in WACCs is driven by the premise that there is a "guarantee" that the NBI business will have its costs paid for a 25-year period. We have explained that, in fact, the NBI business faces input substitution and technological substitution risks, as do the other telecom businesses for which WACCs have been determined recently.

101. In addition to these points, which have been extensively discussed above, we note that the NBI-facing CEI business (in the IA) is reliant on a single customer, whereas the other fixed line businesses (or their passive infrastructure divisions) have more options to diversify away from this customer risk. Europe Economics make the point that NBI further reduces risk for Eircom's CEI business, because absent NBI, the assets would become obsolete faster.⁸⁷ This statement seems to be based on contrasting the situation facing the CEI business in the presence of NBI with a situation in which the existing copper services that use copper network assets are withdrawn and nothing replaces these services. In reality, in the absence of a replacement technology, Eircom would utilise the copper network assets for longer, and *relative to this scenario*, there may be more risk to its ability to

⁸⁶ This is an underestimate of the average WACC for utilities, as the WACC in Ofgem's and Ofwat's decisions is a Vanilla WACC, which is lower than the pre-tax WACC calculated by ComReg, as it averages the cost of debt with the pre-tax cost of equity.

⁸⁷ Europe Economics, p.5.

recover costs related to the copper network if it also faces competition from NBI's fibre network.⁸⁸

102. Rules for cost allocation and cost sharing can also create additional risk for the NBI business. Although factors such as changes in interest rates over time might justify a lower WACC for NBI relative to recent utility and telecom WACC adjudications, the magnitude of the difference between typical fixed-telecom WACCs and the WACC chosen for NBI—more than 300 basis points— can only really be explained more by choices ComReg appears to have made, based on too strong an assumption of *de minimis* risk to the NBI business (e.g., choices with respect to the cost of debt, asset betas and gearing).
103. We believe that the WACC for the NBP business can reasonably be regarded as close to the WACC that has been estimated for the wider access business, i.e., 5.61%. Even if the risks facing the two businesses are not identical, they are probably significantly less disparate than ComReg suggests; further, ComReg's estimates of the WACC for the fixed access business anyway are well below WACCs determined by other telecom regulators in quite recent times (e.g., Ofcom 2020); and the 5.61% WACC is also in line with utility WACC determinations. In fact, when we use parameters for the debt premium and the gearing ratio that are at the mid-point between typical telecom parameters (gearing of 40%⁸⁹, asset beta of 0.59⁹⁰ and a nominal cost of debt of 3.18⁹¹%) and utility parameters (gearing of 55%, asset beta of 0.35 and a nominal cost of debt of 3.72%), we obtain a pre-tax nominal WACC of 5.78%, i.e., very close to the wider access business WACC of 5.61%. Table 7 provides the full calculation.⁹²

⁸⁸ In this case, Eircom will lose some customers downstream to NBI. As it loses these customers, it gets an increased contribution to shared network costs from NBI, but loses the margin on downstream sales. As the increased contribution from NBI is at best a compensation for costs that it would otherwise have recovered anyway, it will be left worse off (unless it can then fully recapture the lost customers by serving as a retailer of NBI's fibre services).

⁸⁹ See Table 4 for average gearing levels in utilities and telecoms.

⁹⁰ See Table 5 for average asset betas in utilities and telecoms.

⁹¹ See Table 3 for average cost of debt in utilities and telecoms.

⁹² This calculation is based on averages of the benchmarks presented in Tables 10, 11 and 12 above. We have also run sensitivity analysis to include in our calculation of telecoms averages the additional Portuguese and Slovenian benchmarks considered by ComReg in its 14 October WACC decisions (WACC Final Decision, Table 8 and Table 9). The result of this analysis (i.e. a pre-tax WACC of 5.88%) is in line with the figures in Table 14. While the type of averaging or "midpoint" approach we take in Table 14 is still a highly simplified way of capturing the risk profile of an NBI-facing CEI business, the calculations are nonetheless reflective of the significant effects of adopting more reasonable and less extreme assumptions regarding risk than those adopted by ComReg.

Table 7: BRG alternative calculation of WACC

Ref.	Parameter	Values	Utility specific parameters	Telecom specific parameters	Comment
a	Nominal Risk-free rate	0.82%			Per ComReg's calculation
b	ERP	7.21%			Per ComReg's calculation
c	Asset beta	0.47	0.35	0.59	Average of telecoms and utilities parameters
d	Gearing	47.50%	55.00%	40.00%	Average of telecoms and utilities parameters
e	Equity beta at notional gearing	0.84			$=c*(1+(d/(1-d))*(1-h))$
f	Nominal cost of debt	3.45%	3.72%	3.18%	Average of telecoms and utilities parameters
g	Nominal cost of equity after tax	6.90%			$=a+b*e$
h	Tax	12.50%			As for ComReg's calculation
i	Nominal pre-tax cost of equity	7.88%			$=g/(1-h)$
j	Nominal pre-tax WACC	5.78%			$=d*f+(1-d)*i$

Source: BRG analysis.

IV.3. COST SHARING FOR NBI ACCESS IN THE IA

IV.3.1. Objective economic rationales for “sharing” of common costs

104. The exercise of setting prices for Eircom’s CEI must recognise that the CEI infrastructure supports multiple outputs. Thus, for a long period of time, the CEI will support both the copper-based products of Eircom and the FTTH products of NBI. There are economies of scope associated with providing both “services”, and the CEI infrastructure provider may

be analysed in a fashion analogous to that used for a “multi-product firm.”⁹³ In the context of a multiproduct firm, in a long-run equilibrium, pricing each service at its incremental cost⁹⁴ would fail to cover the fixed and common costs of the firm. For example, the incremental cost of the fibre service would equal the total costs of providing the CEI less the costs that would be avoided (again, in the long run) if the fibre service were not provided. The incremental cost of the copper service would likewise equal the total cost of providing the CEI less the costs avoided by not providing the copper service. However, the sum of these two incremental costs may not allow the firm to break-even, i.e., cover all of its total costs. For this reason, regulated prices will typically include a mark-up above incremental cost (or the “pure LRIC” referred to by ComReg) to allow for common costs.

105. As prices of individual services are raised above their incremental costs as a result of attempting to meet the regulated firm’s break-even constraint, there is necessarily some deadweight loss or inefficiency associated with regulated pricing. From an economic efficiency perspective, the issue is one of minimising the deadweight loss of regulated pricing. Setting aside this consideration, as long as each service is priced such that the price is above incremental cost and below stand-alone cost^{95,96} there is no basis for any

⁹³ See, for example, Baumol, William J. and David F. Bradford (1970), “Optimal Departures from Marginal Cost Pricing”, *American Economic Review*, Volume 60, Number 3, pp. 265-83, for a discussion of the economic characteristics of multiproduct firms, in particular economies of scope. Note that the principle behind Ramsey pricing might also be applied to different customer groups purchasing the same product—i.e., deadweight loss is minimised by charging higher prices to the group with lower demand elasticity.

⁹⁴ Incremental cost in this discussion necessarily refers to long-run incremental costs.

⁹⁵ The stand-alone cost is the per-unit cost of providing the service assuming that the service bore all common costs, where common costs are those costs which cannot be avoided by ceasing production of any one service provided by the multiproduct firm. ComReg’s definition of common costs is narrower than this still, as it includes only corporate overhead costs. The economic definition of common costs will include what ComReg refers to as “shared network costs”, e.g., many of the capital costs of a pole which, once incurred, can support multiple products and services. See, for example, Waverman Leonard and Melvyn Fuss (1981), “Regulation and the Multiproduct Firm: The Case of Telecommunications in Canada”, in Gary Fromm, ed., *Studies in Public Regulation* (Cambridge, Massachusetts: National Bureau of Economic Research), pp. 278-279 for discussion of the prevalence of joint production in utilities, especially telecommunications.

⁹⁶ When services are priced below their incremental cost, they are receiving a subsidy from other services; when they are priced at or above stand-alone cost they are cross-subsidising other services. See Faulhaber, Gerald (1975), “Cross-Subsidization: Pricing in Public Enterprises”, *American Economic Review*, Vol. 65, No.5, pp.966-977. One might consider such cross-subsidised pricing to be inefficient because it does not provide market-like incentives for the provision of services and because it may potentially be used by multiproduct firms to distort competition in particular service markets. Cross-subsidised pricing also fails to satisfy allocative efficiency: the price of the subsidised service is below the incremental cost of adding that service. However, this violation of allocative efficiency is inevitable when service prices are raised above incremental cost, as they would be in any regulated pricing scheme where the regulated firm is allowed to earn a normal return on capital in the presence of common costs—even when no cross-subsidization issues arise.

particular “allocation” of costs to be considered more efficient on any sort of objective economic basis than any other “allocation.”

106. Economic theory provides the well-known approach of Ramsey Pricing to address the issue of how much the prices of individual services should be marked up above incremental costs in order to minimise the deadweight loss associated with recovering the burden of common costs. Ramsey pricing suggests that services with relatively inelastic demand should be marked up more than services with relatively elastic demand.⁹⁷ In the case of services whose demands are not independent of each other but are instead substitutes, Ramsey pricing would also recognise that increasing the prices of one of the firm’s services might induce substitution to another service, i.e., copper broadband customers might substitute to fibre if the price of copper services rises. Thus, the cross-price elasticity of demand between services will also factor into the setting of the optimal price.
107. As summarised in Section II of this report, ComReg’s approach to CEI pricing for the NBI, in both the IA and in the Commercial Areas, departs significantly from the approach it applies to generic CEI access seekers. As Section V illustrates, the most quantitatively significant departures (in terms of their impact on per-pole and per-metre unit prices of CEI) are those associated with the treatment of shared network costs.⁹⁸ In particular, the “pure LRIC” approach to pricing of CEI in the Commercial Areas and the use of the per-customer approach to shared network costs in the IA are major drivers of the much lower prices that NBI pays for access to CEI relative to generic access seekers. There are no provable economic efficiency justifications for the choices that ComReg has made—Ramsey pricing certainly provides no justification for these choices.
108. ComReg’s economic advisers, DotEcon, expend considerable effort (see, e.g., DotEcon, Chapters 5 to 8) attempting to link the approach that they propose to Ramsey pricing, even referring to the analysis that they present in Section 5.6.1 as the “Ramsey framework.” DotEcon then go onto discuss the “EPMU approach” and appear to be casting this approach as a simplified version of Ramsey pricing.⁹⁹ The EPMU approach involves applying a common proportionate mark-up to all services.¹⁰⁰ This is not Ramsey pricing except in the special circumstance that all relevant price elasticities are equal.¹⁰¹ One can

⁹⁷ See Ramsey, Frank P. (1927), “A Contribution to the Theory of Taxation”, *Economic Journal*, Vol. 37, No.1, pp.47-61.

⁹⁸ As mentioned above, ComReg discusses “network shared costs” as distinct from common costs, but we (as with DotEcon) adopt the economic definition of common costs in this discussion.

⁹⁹ DotEcon, p. 52, makes the claim that “the simple revenue-based common cost sharing rule derived from EPMU is likely to be a reasonable approximation to optimal (Ramsey) prices for copper and fibre services”.

¹⁰⁰ Equivalently, it implies that the share of common costs paid for by a given service is—if we impose the constraint that the firm just breaks-even (earns a normal return)—is equal to its share of revenues.

¹⁰¹ DotEcon, p.49.

reasonably expect the own- and cross-price elasticities of fibre and copper¹⁰² to be potentially very different and for the relative elasticities to change significantly over time. DotEcon themselves suggest that switching from copper to fibre services will be driven by “an underlying trend of growing bandwidth needs”, that over time consumers will be willing to pay a greater price premium for fibre, and that fibre will be a “superior” technology to copper.¹⁰³ Given this, there is no reason to believe that elasticities are equal.

109. The informational requirements of Ramsey pricing—especially when demand is dynamic and cross-price effects between services must be accounted for—undoubtedly make it very challenging to implement. However, this does not mean that a simplified regulatory shorthand approach such as EPMU should be considered as a form of simplified Ramsey pricing that has the same efficiency properties as Ramsey pricing, especially when there is no reason to believe that demand elasticities are equal between different services.
110. DotEcon also suggest that there is equivalence between the Ramsey pricing rule and a sharing rule based on relative numbers of subscriber lines as between fibre and copper.¹⁰⁴ In fact, what DotEcon demonstrate is that *EPMU* (which is not Ramsey pricing, except in the special circumstance of equal elasticities across services) is equivalent to sharing common costs between fibre and copper on the basis of the relative number of fibre and copper lines, *in the special circumstance where the average incremental cost of fibre and copper services is equal*. DotEcon then state, however, that the variable costs of fibre service are likely to significantly exceed the variable costs of copper service.¹⁰⁵ Thus it is very unlikely that the average incremental costs (of which variable costs are a component) of copper and fibre are equal, just as it is very unlikely that the elasticities of demand for these services are equal. In summary, there is no Ramsey pricing justification for sharing common costs in proportion to relative subscriber lines.

IV.3.2. Efficient Migration from Copper to Fibre

111. The principal justification for the per-customer approach (sharing of common costs, or more particularly shared network costs, in line with relative customer numbers) that DotEcon advances is that it provides “optimal” or “efficient” incentives for migration from copper to fibre and the timing of the switch-off of copper services. The benchmark used for efficiency

¹⁰² The own-price elasticity for a service will anyway reflect all the cross-price elasticities between a given service and other (substitute) services. See Church, Jeffrey and Roger Ware (2000), *Industrial Organization: A Strategic Approach*, (Toronto: McGraw-Hill), at p.606. With respect to cross-price elasticities, these are generally not symmetric, i.e., one would not expect the percentage change in fibre demand given a 1% change in copper prices to be the same as the percentage change in copper demand given a 1% change in fibre prices.

¹⁰³ DotEcon, pp.51-52.

¹⁰⁴ DotEcon, p.50.

¹⁰⁵ DotEcon, p.53.

or optimality is the switch-off decision that would be taken by an integrated provider of fibre and copper services.¹⁰⁶

112. Even before we discuss the broader issue of whether an optimal switch-off of copper can be engineered by manipulating regulated prices of CEI, it is worth noting that the equivalence that DotEcon derives between the per-customer sharing rule and the decision of an integrated service provider of copper and fibre is based on a very incomplete analysis.

113. Thus:

- DotEcon model the decision of the copper service provider, Eircom, as one of choosing between running the copper network—and incurring fixed costs specific to the copper network in the process—and becoming a retailer of NBI’s fibre product. In the mathematics that DotEcon sets forth (equation (1) on p.54) they assume that at the critical value of copper lines, Eircom will face a choice between switching off N number of copper lines and being able to retail the same number of fibre lines. It is far from clear—given potential competition at the retail level—that this will be the case.
- If Eircom is only able to end up retailing (as fibre connections), a fraction of the copper customers that it switches off, then the “bias” towards delaying copper switch-off that DotEcon describes at p.55 might be much less significant than it suggests.

114. More fundamentally, Eircom’s switch-off decision will also depend on margins available to it as a copper wholesaler/retailer relative to margins available to it as a fibre retailer, whereas DotEcon’s mathematical analysis only models Eircom’s incentives from the perspective of costs.

115. Finally, DotEcon express the concern that the per-operator sharing rule creates excessive incentives for Eircom to switch off copper when fibre penetration is high enough.¹⁰⁷ The problem they perceive is that at this point, fibre penetration may be “far from complete” and this “risks some customers receiving no service at all.”¹⁰⁸ The problem of “patchy” fibre network coverage coinciding with strong incentives for Eircom to switch off copper is

¹⁰⁶ In the arrangement that will prevail in the IA in Ireland, Eir will run the copper network and NBI the fibre network, and thus Eir’s private incentives for switching off copper will be different from the incentives of an integrated fibre-copper network operator.

¹⁰⁷ See, for example, DotEcon, p.82. The logic behind this claim is that under the per-operator rule, Eir may continue to bear a 50% share of the network costs but might find itself unable to raise copper prices to recover these costs.

¹⁰⁸ DotEcon, *ibid.*

mentioned at a few junctures in DotEcon’s report.¹⁰⁹ ComReg’s cost model—of which we have been provided a copy—assumes that fibre network rollout will be complete at a point in time when the fibre network has only a 28% share of customers. This is not surprising: telecom networks are rolled out on a lumpy basis, not on an incremental basis. Thus, the concern that DotEcon repeats at several points to the effect that the per-operator rule provides excessive incentives for copper switch-off seems very misplaced in light of the assumptions made in ComReg’s own cost model.

116. Further, one might reasonably think that the copper network should be switched off when the social value from switching off copper and migrating copper customers to fibre exceeds the social value of keeping a rump of remaining customers on copper. The social value from copper switch-off includes within it the net social cost savings from switching off copper and migrating customers to fibre, but also the value to society at large from broader adoption of a superior technology, i.e., fibre. That is, there may be network externalities in fibre adoption¹¹⁰, and these network externalities may mean that even if a rump of customers are resistant to migrating from copper to fibre, when the social benefits (in the form of externalities experienced by the rest of society) and the social cost savings (in the form of avoided copper network costs) are large it may be optimal to migrate even customers with relatively low valuations of additional speed to the fibre network. Thus, even the benchmark for efficiency—the “switch-off” decision based only on the incentives of an integrated copper-fibre provider—may not reflect social efficiency (with all its complexities).
117. DotEcon also fail to consider the effect of cost-shifting rules on NBI’s incentives to rollout fibre. As we pointed out above (Section IV.I.4), broader policy goals of accelerated fibre rollout might be better supported by providing NBI with incentives to ensure rapid uptake of its product. Providing NBI with incentives more similar to those of an infrastructure provider would, as we explained, be more consistent with providing such incentives than would a cost-shifting rule that is based on NBI’s success in attracting end-user customers.
118. Thus, not only is there no real economic efficiency basis for preferring a per-customer sharing rule to a per-operator sharing rule, but there is no convincing reason from the perspective of “efficient copper-fibre” migration to prefer one rule to another. Even setting asides the flaws in DotEcon’s analysis that we describe above, there may not be a realistic

¹⁰⁹ See, for example, DotEcon, p.2, p.5 and p.83.

¹¹⁰ Economists studying telecommunications and broadband networks have long understood the role of network externalities. Jeffrey Rohlfs (1974), “A Theory of Interdependent Demand for a Communications Service”, *Bell Journal of Economics*, Vol. 5, No.1, pp. 16-37. Network externalities and broadband growth externalities are also discussed in Mayo, John W. and Scott Wallsten (2011), “From Network Externalities to Broadband Growth Externalities”, *Review of Industrial Organization*, Vol. 38, No.2, pp.173-190.

or sensible way in which a topic as complex as “optimal migration” from one generation of technology to another can be engineered via regulatory cost-sharing rules. The social savings in the form of avoided copper-specific fixed costs, while appreciable, might nonetheless be too modest to justify the primacy that DotEcon gives them: in non-Large Exchange Areas (non-LEA), Eircom has calculated that the cost savings from removing copper are roughly \times [REDACTED] \times per line, compared with an overall cost per copper path of \times [REDACTED] \times .¹¹¹

119. However, the salient point for purposes of our analysis is that the choice of cost-sharing approach makes a very substantial difference to per-unit prices of CEI and also creates a significantly different risk profile for future revenue streams. This has attendant consequences for the appropriate cost of capital to consider.

IV.4. PRICING FOR NBI ACCESS IN THE COMMERCIAL AREAS

IV.4.1. DotEcon’s analysis and ComReg’s proposal for pricing for CEI access in Commercial areas by NBI is misguided.

120. On the first concern that DotEcon raises—Eircom’s ability to utilise any excess profits generated from higher-than-expected revenues from CEI access—this situation – as discussed by DotEcon - is only likely to occur for a transitional period. Downstream prices would adjust either through competitive pressure or through regulatory decisions to remove any excess profits. Any potential distortion is therefore very limited. In the fixed telecommunications industry, investment decisions are taken with a long-term commercial view. Short-term price changes such as those envisaged in this situation are very unlikely to have any material impact on investment and competition. This is acknowledged by DotEcon who do not place significant weight on this risk.

121. However, even during short periods in which Eircom might be able to generate more revenue from CEI than previously anticipated, it would continue to be constrained by a regulatory framework that would prevent it from undertaking the kind of pricing behaviour that has been highlighted by DotEcon and ComReg. In the event that Eircom was able to earn profits on its CEI business above its WACC for a transitory period, this would have no bearing on its incentive or ability to set prices on other products in an anticompetitive way (e.g. through a margin-squeeze). If this would be a profitable strategy, Eircom would have an incentive to undertake it, irrespective of profits that it is generating on different products. However, it is constrained from such pricing behaviour through the general prohibition on

¹¹¹ Our understanding is that these relatively small cost savings reflect the sunk and hence unavoidable nature of many of Eircom’s copper network costs.

abusive conduct. Eircom is very aware of these legal constraints on its commercial strategy and it would therefore be very unlikely to undertake it, even if it had the incentive to do so.

122. DotEcon and ComReg's second concern relates to potential distortionary effects on incentives for other infrastructure competitors to enter the market. ComReg and DotEcon's logic appears to be that, it would be preferable to set higher access charges for Eircom's CEI in order to attract new full infrastructure players. Thus:

The primary effect is on full infrastructure-based providers deploying their own CEI, as this becomes relatively less attractive. For partially infrastructure-based providers, using Eircom's CEI to deploy their own infrastructure, there are countervailing effects leaving them largely unaffected, as CEI access used as an input gets cheaper, but so do Eircom's competing wholesale network services.¹¹²

123. This is contradictory to the overall objective for the CEI access regime. If it was a more efficient outcome for an alternative operator (either an alternative CEI player or a vertically integrated network operator) to enter the market and compete with Eircom, then there would be no need for regulated access to the incumbent's CEI. It is precisely because it would be inefficient to duplicate this passive infrastructure and that there is only a very limited threat of entry that necessitates regulated access to Eircom's ducts and poles.¹¹³
124. The high fixed costs associated with CEI infrastructure, the limited scope for innovation and its ability to serve multiple operators simultaneously is the reason that ComReg, in common with many regulators in Europe, has decided that it would be inefficient to try to duplicate it. Rather, the most efficient outcome is for competing operators to share Eircom's infrastructure with Eircom itself and with other users.
125. In fact, ComReg's proposal to prevent NBI from paying a share of the common network costs of Eircom's CEI in the Commercial Areas necessarily results in higher CEI access prices for other operators who might want to obtain access. This results in higher barriers to entry and expansion for potential competitors. ComReg's proposal for CEI access charges for ComReg may therefore result in less downstream competition, rather than more.

¹¹² DotEcon, p.68.

¹¹³ DotEcon (p.37) themselves make the point in respect of the IA that "There is no reason to expect there to be significant future changes in the fundamental cost conditions allowing competitive provision of CEI within the intervention area. It is likely to remain cost advantageous to share CEI rather than build alternative CEI, and that this will be unaffected by technological progress elsewhere in the telecoms value chain." Precisely the same considerations apply to the Commercial Area.

126. It is also important to note that this proposal also imposes an unnecessary cost on consumers in the Commercial Areas. If NBI contributed to Eircom’s common network costs in these areas, it would potentially lead to lower costs for wholesale network services and ultimately lower prices. ComReg’s proposal to not require NBI to contribute to these shared costs is therefore sustaining higher retail prices than is necessary.

127. In fact, a better way to promote competition overall would be to require NBI to share Eircom’s common network costs in the Commercial Areas on a per-operator basis. This would lower the costs to deliver downstream services for both Eircom and any subsequent competing operator that also decided to access Eircom’s passive infrastructure.

IV.5. SUMMARY AND RECOMMENDATIONS

128. We conclude that:

- ComReg and Europe Economics have chosen all the specific WACC parameters to calculate an NBI-related WACC in a way that minimises NBI’s payments for Eircom’s CEI. The strong assumption that there is a “guarantee” from NBI to Eircom informs the choices that ComReg and Europe Economics have made, and it results in a WACC that is far below that of other telecom operators, far below that of Eircom’s generic CEI business (which might itself be too low), and far below that set by many utility regulators.
- In fact, based on our review of the choices made by ComReg and Europe Economics, by other utility and telecom regulators, and of the actual risks associated with provision of CEI to NBI, the 5.61% WACC for the generic CEI business might be a much more reasonable approximation of the WACC to apply in setting NBI’s access charges too, than the 4.03% WACC proposed currently.
- In fact, the choice of WACC also fails to reflect the additional risks to Eircom’s revenue streams created by the application of the “per-customer” rule (applied to poles) for allocating shared network costs. This rule has no grounding in economic theory, and the analysis of DotEcon to justify this via a mathematical analysis of “optimal migration” from copper to fibre ignores many realities that ought to be incorporated into such an analysis (which is anyway rather intractable).
- In our view, a per-operator sharing rule might provide superior incentives to a per-customer rule to NBI in terms of its imperative to accelerate fibre rollout. This is relevant in the context of the Irish government’s recently professed desire to see the NBI rollout completed in five years rather than seven years. Further, a per-operator rule is more consistent with practice in Ireland to date, and also with practice in the

United States¹¹⁴, Canada (Ontario)¹¹⁵ and United Kingdom.¹¹⁶ To the extent that this per-operator approach—which has implications for risk allocation too—is common elsewhere, it suggests that existing WACCs for passive infrastructure access might underestimate the additional risk associated with using the per-customer approach.

- ComReg’s decision to exempt NBI’s access prices in the Commercial Areas from having to bear any burden of recovering shared network costs largely rests on the improbable justification that doing so would avoid distorting incentives for other players who might be thinking of building out their own CEI. This justification should carry no weight at all.

¹¹⁴ See CSMG (2010), Section 2.5.6, p.29.

¹¹⁵ See Ontario Energy Board (2018), “Report of the Ontario Energy Board: Wireline Pole Attachment Charges”, p. 14, available at <https://www.oeb.ca/sites/default/files/report-pole-attachment-20180322.pdf>. This suggests that common costs are allocated based on the number of attachers.

¹¹⁶ See Ofcom (2020), Promoting investment and competition in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, 8 January 2020, Annex 20, para. A20.24 and A20.25, and also A20.60.

V. Quantitative Impact of ComReg’s Approach

V.1. IMPACT OF COMREG’S APPROACH TO ACCESS PRICING

129. ComReg’s approach to setting the CEI access prices that NBI will pay is a departure from conventional CEI access pricing adopted in other countries. It is also a departure from the approach historically applied in Ireland and introduces a significant difference between the prices paid by NBI and those paid by commercial operators for an equivalent service.

130. As noted in Section II, the net result of such an approach would be to transfer value from Eircom to NBI and this transfer of value might be seen as a subsidy if it is not justified by objectively lower costs or risks of providing CEI access to NBI.

131. In this section, we quantify the potential transfer. We do this by progressively changing the values of key parameters such as WACC and the cost sharing rule used from their “base case” values—ComReg’s recommended approach—towards the parameters used for generic access seekers. For this purpose, we utilised the versions of the Pole Access Model (“PAM”) and Duct Access Model (“DAM”) which we were supplied as part of our assignment.

V.2. TRANSFER OF VALUE FROM EIRCOM TO NBI AS A RESULT OF COMREG’S PROPOSED APPROACH

132. We have illustrated the transfer of value from Eircom to NBI by incrementally adjusting the parameters in the PAM and the DAM from those applied by ComReg. For simplicity, we have only showed adjusted pricing tables from the Draft PAM in this section. The equivalent tables for the Draft DAM can be found in Appendix A

133. ComReg’s base case proposal for NBI’s prices uses:

- A WACC of 4.03% applied in all pricing cases (in the IA and Commercial Areas alike);
- A per-customer approach to allocation of network shared costs in the IA, with NBI bearing no share of such costs in the Commercial Areas;
- HCA depreciation to value the asset base in the IA and tilted annuity depreciation to value the asset base in the Commercial Areas;
- No mark-up at all for corporate common costs;

- Incremental costs are allocated to NBI in both the IA and the Commercial Areas, albeit the incremental costs calculated for NBI are minimal in the latter areas.¹¹⁷
- This approach produces the following path of prices for the IA and the Commercial Areas alike.

Table 8: Draft PAM prices per pole under ComReg’s proposals

Area	2021	2022	2023	2024	2025	25-year average
NBP IA	€4.90	€5.11	€6.08	€6.33	€6.75	€12.46
Commercial Areas	€0.07	€0.07	€0.07	€0.07	€0.07	€0.07

Source: Draft PAM model provided to Eircom.

V.2.1. Scenario 1: Moving to a Per-Operator Plus Sharing Rule

134. In this scenario, we apply a variant of the incumbent per-operator approach currently applied to generic CEI access seekers to shared network costs for NBI’s access prices in both the IA and the Commercial Areas. We note that in the latter areas, ComReg’s current proposals result in effectively no sharing of network costs by NBI. The “per operator” sharing rule that was and is being applied to generic access seekers actually is a split of total costs, because in most cases true incremental costs—what DotEcon refer to as “sharer incremental costs”¹¹⁸—cannot be easily identified. In the case of NBI’s access, however, the incremental costs are identified—i.e., they are the accelerated pole replacement costs that are incurred as a result of NBI’s rollout, in both types of areas. Thus, we use a more precise version of the per-operator rule, in which we split only shared network costs, not total costs. We label this the “per operator plus” rule.
135. In the IA, the resulting differences in pole prices are significant (relative to base case) in the period 2021-2025, and even the 25-year average pole price changes by about 7% (€13.29 compared to €12.46 per pole). The effect of including shared network costs in the Commercial Areas is much more significant on a per-pole basis. We note too that the calculated per-pole

¹¹⁷ However, the incremental cost modelled in the Draft DAM and Draft PAM in the Commercial Areas is minimal. See ComReg, 424-425.

¹¹⁸ This is, roughly, the long-run costs that would be avoided if a particular sharer of the asset had not sought to share the pole.

prices assume that NBI only pays the “MIP wholesaling charge” rather than the standard commercial processing charge assessed to other operators.¹¹⁹

Table 9: Draft PAM prices per pole under Scenario 1

Area	2021	2022	2023	2024	2025	25-year average
NBP IA	€9.18	€9.36	€9.53	€9.57	€9.83	€13.29
Commercial Areas	€6.32	€6.64	€6.96	€7.22	€7.28	€7.87

Source: Draft PAM model provided to Eircom, BRG adjustments.

V.2.2. Scenario 2: Per-Operator Plus Sharing Rule, WACC at 5.61%

136. ComReg has calculated a fixed line telecom WACC of 5.61%,¹²⁰ which it has used for CEI pricing for generic access seekers. This scenario demonstrates the effect on prices if this WACC were to be consistently applied to pricing for NBI as well. As Table 10 makes apparent, applying ComReg’s 4.03% WACC instead of a 5.61% WACC—a level that is not just consistent with WACC determined for generic access seekers, but in-line with what utility regulators have calculated for utility WACCs, and well below fixed telecom WACCs—significantly depresses per-pole prices. Applying a standard WACC assumption on top of a standard sharing rule results in a price per-pole of €15.27 in the IA and €9.23 in the Commercial Areas, compared to the €12.46 and €0.07 under ComReg’s proposed assumptions.

Table 10: Draft PAM prices per pole under Scenario 2

Area	2021	2022	2023	2024	2025	25-year average
NBP IA	€10.91	€11.11	€11.28	€11.30	€11.60	€15.27
Commercial Areas	€7.39	€7.76	€8.15	€8.46	€8.53	€9.23

Source: Draft PAM model provided to Eircom, BRG adjustments.

¹¹⁹ See Draft PAM, sheet ‘Input_Parameters’, cells F69 and F71. However, we note that ComReg, 418 allows Eir to recover process costs by means of a one-off charge apart from the rental price. If all the costs currently included in the commercial process charge can be covered in this one-off payment, the difference between the commercial process charge and the MIP Wholesaling Charge is less important. We have therefore not run a scenario in which the commercial process charge is included in NBI’s price.

¹²⁰ ComReg, Table 12.

V.2.3. Scenario 3: Per-Operator Plus Sharing Rule, WACC of 5.61%, Common Cost Mark-Up in Commercial Areas

137. ComReg has currently proposed that NBI pay for none of Eircom’s corporate common costs. This scenario shows the effect if NBI’s prices included a mark-up for common costs in the Commercial Areas alone. ComReg has ruled out recovery of such costs from the IA in previous decisions, i.e., has ruled that all such corporate common costs be recovered from the Commercial Areas.¹²¹ This applies even to generic access seekers. For the Commercial Areas, the rationale for exclusion of such costs from NBI’s prices is the same as the rationale for excluding any non-incremental costs, i.e., that it will distort competition. As discussed in Section IV, we think this rationale is unjustified.

Table 11: Draft PAM prices per pole under Scenario 3

Area	2021	2022	2023	2024	2025	25-year average
NBP IA	€10.91	€11.11	€11.28	€11.30	€11.60	€15.27
Commercial Areas	€8.40	€8.82	€9.25	€9.60	€9.72	€10.57

Source: Draft PAM model provided to Eircom, BRG adjustments.

V.2.4. Scenario 4: Per-Operator Plus Sharing Rule, WACC of 5.61%, Common Cost Mark-up in All Areas

138. ComReg has currently proposed that NBI pay for none of Eircom’s corporate common costs. This scenario shows the effect if NBI’s prices also included a mark-up for corporate common costs in the IA. However, we note that the corporate common cost mark-up in the model has currently been calculated only on the basis of capex in the Commercial Areas, so we recognize that this mark-up would need to be adjusted downwards if it was extended to include capex in the IA as well. The results of this scenario therefore show a directional effect, rather than the precise increase in price that would occur if NBI were to bear a proportionate amount of the corporate common cost.

Table 12: Draft PAM prices per pole under Scenario 4

Area	2021	2022	2023	2024	2025	25-year average
NBP IA	€11.96	€12.20	€12.40	€12.46	€12.79	€17.47
Commercial Areas	€8.40	€8.82	€9.25	€9.60	€9.72	€10.57

Source: Draft PAM model provided to Eircom, BRG adjustments.

¹²¹ ComReg, paras. 279-83.

V.2.5. Net Present Value of Scenarios

139. We have calculated the net present value of the revenues in each scenario by multiplying the price per pole or price per meter of duct by the number of poles/meters of duct that NBI uses over the 25 years from 2021 to 2045.¹²² In the IA, this number is forecast in the model. In the Commercial Areas we have estimated the number of poles or meters of duct that will be used by NBI, keeping the amount proportionate to the amount NBI uses in the IA using the following formula.

$$\begin{aligned} & \#NBI \text{ Poles in commercial area} = \\ & \frac{\# NBI \text{ Poles in IA}}{\text{Total poles}} * (\text{commercial area poles}) \end{aligned}$$

$$\begin{aligned} & NBI \text{ meters of duct in commercial area} = \\ & \frac{\# NBI \text{ meters of duct in IA}}{\text{Total meters of duct}} * (\text{commercial area meters of duct}) \end{aligned}$$

140. For the NPV calculation, Eircom’s corporate WACC of 5.61% is applied as the discount rate, with the base year of the NPV set to 2021.

Table 13: Net Present Value of each scenario in the PAM

Area	Base Case	Scenario 1	Scenario 2	Scenario 3	Scenario 4
NBP IA	€137,017,918	€149,405,788	€172,119,148	€172,119,148	€196,091,118
Commercial Areas	€273,513	€30,903,463	€36,232,814	€41,507,304	€41,507,304
All Areas	€137,291,430	€180,309,251	€208,351,962	€213,626,452	€237,598,422

Source: Draft PAM model provided to Eircom, BRG calculations.

¹²² The reader is reminded that scenarios for ducts analogous to those presented in the above sub-sections are available in Appendix A.

Table 14: Net Present Value of each scenario in the DAM

Area	Base Case	Scenario 1	Scenario 2	Scenario 3	Scenario 4
NBP IA	€10,646,974	€11,152,118	€13,217,004	€13,217,004	€13,217,004
Commercial Areas	€3,344,305	€10,687,626	€12,775,093	€13,897,597	€13,897,597
All Areas	€13,991,279	€21,839,744	€25,992,097	€27,114,601	€27,114,601

Source: Draft DAM model provided to Eircom, BRG calculations.

141. These NPV tables show the scale of the transfer of value and potential subsidy from Eircom to NBI that ComReg has proposed. Of the measures taken, the largest transfer of value has come from ComReg’s choice to allocate shared network costs between NBI and Eircom based on customer share rather than usage of the network. We note too that this subsidisation of NBI comes at the expense of communications providers and thus consumers in the Commercial Areas—wholesale prices (which communications providers pay) may be higher than necessary, and thus so will be retail prices.

VI. Other Observations on ComReg's Approach

VI.1. FAILURE TO ALLOCATE INCREMENTAL COST CORRECTLY

142. ComReg's application of the "per operator" and "per metre" approach to NBI fails to account for incremental costs that are directly attributable to NBI. Incremental costs associated with NBI are clearly identified in the models and should therefore be allocated directly to them. Currently, the "per operator" and "per metre" rules are applied to both the shared and the incremental cost elements in the draft models¹²³.

VI.2. NATIONAL DUCT PRICING FOR GENERIC ACCESS SEEKERS

143. ComReg has changed the duct pricing methodology for generic access seekers. Rather than having different prices for duct access in Dublin and provincial areas, ComReg proposes using a single average price is now used across the whole country. ComReg has justified this by pointing out that subcontractor rates are now the same in all areas.¹²⁴

144. However, in the Draft DAM, this single average price is based on averaging prices across the urban Commercial Area and the rural Commercial Area. However, in the Draft DAM, duct costs and prices per meter in rural Commercial Areas are still well below those in urban Commercial Areas (with rural prices being at 60-70% the level of urban prices, excluding sub-duct costs). Moreover, almost all demand for generic access to Eircom's ducts is in urban areas.¹²⁵ ComReg's new modelling methodology will therefore result in under-recovery of cost for generic duct access, with demand being in urban areas but prices being set based on the average of urban and rural areas.

VI.3. BAU CAPEX IN THE DUCT ACCESS MODEL

145. No BAU capex has been included for the IA, despite the IA accounting for 10.4% of the access trench length. BAU capex is the largest element of cost in the Commercial Areas, so its exclusion in the intervention area will have a large impact on the price.

146. ComReg explains that BAU capex is excluded in the IA because it assumes that no routes have been renewed in the IA since 1989 and therefore that all ducts will have been fully depreciated. This should be investigated further.

¹²³ Draft DAM, sheet 'Output_Results', rows 72 and 74. See also Draft PAM, sheet 'Output_Results', rows 34 and 36.

¹²⁴ ComReg, 583.

¹²⁵ This is our understanding based on discussions with Eircom.

VI.4. BAU REPLACEMENT RATE IN THE POLE ACCESS MODEL

147. In the draft PAM, the incremental cost is based on the difference between the number of poles replaced because of NBI's fibre roll-out and the number of poles that would have been replaced anyway as part of Eircom's BAU 12-year testing cycle.
148. The number of poles to be replaced because of NBI's fibre roll-out is calculated based on an assumption that 16% of the poles that NBI connect each year (over the seven-year roll-out period) will need replacement. To calculate the number of poles that would have been replaced anyway in the counterfactual BAU scenario, ComReg has assumed that there is a 10% failure rate for poles tested as part of the BAU 12-year cycle, and that all poles that fail the testing would need to be replaced.¹²⁶ The difference between replacing 16% of poles over seven years and 10% of poles over twelve years gives the incremental pole replacement cost in the model.
149. This 10% BAU replacement rate assumption therefore has a significant impact on the incremental cost calculated in the model. And whereas the actual replacement rate can be observed and the assumptions in the model updated after the initial two years, this assumption is unlikely to be updated since it is a hypothetical counterfactual assumption (the BAU testing cycle has been suspended for the duration of the NBI roll-out, so there will be no additional data on BAU pole replacement in the intervention area). It is therefore particularly important for this assumption to be correct at the beginning of the process and it should be rigorously checked.

VI.5. HISTORICAL WACC IN THE DRAFT DAM AND THE DRAFT PAM

150. For each tranche of assets, the models calculate an annuity payment based on depreciation and cost of capital. This annuity is calculated from 2015 using the WACC selected in the model.
151. There is no functionality in the models to allow for a change in WACC part way through the period of the annuity. This means that the selected WACC (whether 4.03% or 5.61%) is applied as if it had been in use since 2015.
152. As a result, the annuities calculated for the period between 2015 and 2021 are incorrect in the models. This is an issue in the calculation of the tilted annuity depreciation method in the model (which is currently used to calculate the prices in the commercial areas). The value calculated in each year is a function of the level of WACC in both that year, and in the previous years. If the WACC changes halfway through the life of an asset, the level of

¹²⁶ Draft DAM, sheet Input Parameters, cell F93 and sheet Calc_Capex, cell G191.

the tilted annuity will need to be updated to reflect the change in value of the WACC. This is because, with the tilted annuity method, the WACC level affects the proportion of each year's payment that is accounting for cost of capital and the proportion that is accounting for depreciation.¹²⁷ If the actual (higher) historical WACC had been applied between 2015 and 2021, this would lead to a higher annuity for the period from 2021 onwards, as it would lead to a higher undepreciated book value in 2021. The annuities would need to be recalculated from this point onwards based on the new WACC. If this adjustment is not made, Eircom would under-recover costs in the Commercial Areas.

¹²⁷ This can be compared to a mortgage, where a higher interest rates means that a higher proportion of the payments in the early years of the mortgage are to cover interest and a lower proportion pays off the principal.

VII. Conclusions

153. Having reviewed ComReg and its economic advisers' proposals, we have the following conclusions:

- **WACC:** It is apparent that ComReg's proposed WACC suffers at both the conceptual and methodological levels.
 - *At the conceptual level*, there is no guarantee—whether from the Irish State's step-in rights or from other aspects of NBI's operations—regarding the level of future payment flows from NBI to Eircom's CEI business. The inherent demand risks faced by fixed-telecom infrastructure are not eliminated by NBI, and NBI itself has options to use substitute inputs (e.g., electricity or water infrastructure) to Eircom's CEI.
 - *At the methodological level*, the WACC proposed by ComReg (and estimated by Europe Economics) is based on inconsistent assumptions. While parameters such as the gearing level and asset beta are chosen based on the level of these parameters for utilities, the cost of debt is estimated by using one particular methodology applied to telecom bond data. ComReg and its advisers ignore actual utility adjudications regarding cost of debt, while emphasising the utility-like aspects of an NBI-facing CEI business. Unsurprisingly, ComReg's WACC of 4.03% is far below any recent WACC adjudication for both fixed telecom and utility companies.
 - *A more balanced approach*, based on an average of utility and telecom values for key parameters such as the cost of debt, gearing level, and asset beta, yields a WACC that is close to the 5.61% WACC that ComReg applies to generic access seekers. This WACC should be adjusted upwards further if ComReg were to also use the per-customer approach to cost sharing.
- **Cost sharing:** ComReg's proposals regarding cost sharing are also flawed and appear extreme. ComReg proposes to relieve NBI of any burden related to shared network costs in the Commercial Area. In the IA, it proposes that NBI assume this burden gradually, in proportion to its relative number of end-use customers. ComReg's economic advisers, DotEcon, offer justifications such as potential (but transitory, by their own admission) competitive distortions in the Commercial Area, but their primary justification is that allowing the sharing of any network costs will (via its effect on wholesale prices for other customers) disincentivise alternative providers from constructing their own CEI. Both these justifications should carry no weight.

As for the use of the per-customer sharing approach in the IA, this approach explicitly contradicts Europe Economics' reliance on a 2019 statement by NBI that the level of payment from NBI to Eircom would not depend on end-customer take-up of NBI's products.¹²⁸ Economic logic suggests that use of this approach increases the riskiness of payment flows from NBI to Eircom, and this additional risk should have been (but was not) reflected in the WACC calculation. DotEcon attempts to offer justifications such as Ramsey pricing or optimal copper-fibre migration for using the "per customer" approach, but we do not believe that these justifications have any weight.

154. We propose instead that ComReg use a WACC of 5.61% and a "per-operator plus" approach to sharing of costs. Under this cost sharing approach, truly incremental costs would be identified and NBI would pay for all of them. Shared network costs (and potentially also corporate common costs in the Commercial Area) should then be allocated based on the number of users of the CEI. This approach would reduce risk and also have the effect of aligning approaches as between generic access seekers and NBI. By doing so, it would eliminate the subsidy to NBI contained in ComReg's current proposals. This subsidy has a net present value in the hundreds of millions of Euros.

¹²⁸ It appears that Europe Economics did not consider the pricing methodology, i.e., per-customer versus per-operator (or "per operator plus"), when reflecting upon the risk associated with the CEI, and thus its WACC calculations ignore any additional risk associated with the per-customer approach.

Appendix A. Duct Access Model Prices under different scenarios

Table 15: Draft DAM prices per meter under ComReg’s proposals

Area	2021	2022	2023	2024	2025	25 year average
NBP IA	€0.49	€0.49	€0.51	€0.51	€0.50	€0.45
Commercial Areas	€0.16	€0.16	€0.16	€0.16	€0.16	€0.16

Source: Draft DAM model provided to Eircom.

Table 16: Draft DAM prices per meter under Scenario 1

Area	2021	2022	2023	2024	2025	25 year average
NBP IA	€0.61	€0.60	€0.60	€0.59	€0.55	€0.46
Commercial Areas	€0.51	€0.49	€0.47	€0.46	€0.50	€0.50

Source: Draft PAM model provided to Eircom, BRG adjustments.

Table 17: Draft DAM prices per meter under Scenario 2

Area	2021	2022	2023	2024	2025	25 year average
NBP IA	€0.72	€0.71	€0.71	€0.69	€0.66	€0.54
Commercial Areas	€0.60	€0.57	€0.55	€0.55	€0.59	€0.59

Source: Draft DAM model provided to Eircom, BRG adjustments.

Table 18: Draft DAM prices per meter under Scenario 3

Area	2021	2022	2023	2024	2025	25 year average
NBP IA	€0.72	€0.71	€0.71	€0.69	€0.66	€0.54
Commercial Areas	€0.66	€0.62	€0.60	€0.59	€0.64	€0.64

Source: Draft DAM model provided to Eircom, BRG adjustments.

Table 19: Draft DAM prices per meter under Scenario 4¹²⁹

Area	2021	2022	2023	2024	2025	25 year average
NBP IA	€0.72	€0.71	€0.71	€0.69	€0.66	€0.54
Commercial Areas	€0.66	€0.62	€0.60	€0.59	€0.64	€0.64

Source: Draft DAM model provided to Eircom, BRG adjustments.

¹²⁹ Applying the common cost markup in the intervention area has no impact on the price in the Draft DAM because this markup is applied only to BAU capex and the current Draft DAM includes no BAU capex in the intervention area.

4 National Broadband Ireland Ltd. (incl. Frontier Economics report)



Pricing of access to Eircom's Civil Engineering Infrastructure in the context of the National Broadband Plan

Response to ComReg's Consultation
and Draft Decision 20/81

**NONO- CONFIDENTIAL VERSION
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1 Introduction

National Broadband Ireland (NBI) is pleased to respond to this important ComReg consultation on the pricing of access to Eircom's Civil Engineering Infrastructure (CEI) in the context of the National Broadband Plan (NBP).¹

In November 2019 NBI signed a Project Agreement with the Minister for the Environment, Climate and Communications committing it to roll out a full-fibre network to those areas of the country that had been identified as unserved by commercial broadband providers. In the year since then, NBI has mobilised its operations and has begun to deploy the NBP network, with the first fibre connections due to be completed before year-end.

Under the Project Agreement, NBI has committed to completing the NBP network deployment within seven years. The onset of the Covid-19 pandemic early this year and the enormous changes this has engendered in how people live, work and study has made the imperative of a rapid NBP network deployment even stronger. NBI intends to do everything it can to ensure that this vital national resource is fully deployed as rapidly as possible.

NBI's NBP deployment plan involves extensive use of CEI (i.e. poles and ducts) under the control of Eircom Limited. Access to this infrastructure is provided for arising from Eircom's designation by ComReg as an operator with Significant Market Power (SMP) in the Wholesale Local Access (WLA) market. Prior to signing the Project Agreement with the Minister, NBI concluded a long-term Infrastructure Access Agreement (IAA) with Eircom, guaranteeing it access at scale to Eircom's regulated duct and pole products within a Major Infrastructure Programme (MIP) framework. Under this arrangement, NBI expects to utilise approximately 1.5 million Eircom poles and 15,000 km of duct as it rolls out its Fibre to the Home (FTTH) network to an estimated 537,000 premises within the NBP Intervention Area (IA).

It is demonstrably the case that the kind of CEI access NBI requires from Eircom is very different from the access to Eircom's ducts and poles that operators who compete with it outside the IA seek. While other operators' use of Eircom's CEI is of a small scale, tactical and commercially-minded nature, NBI's use is necessary to ensure deployment of the NBP network and will be long-term, large-scale and very stable. Under the design of the NBP, NBI is not competing with Eircom

¹ ComReg Consultation and Draft Decision, Document No. 20/81, 9th September 2020.

and other operators in the provision of commercial electronic communications services but is instead, with the injection of significant State resources under the NBP's gap-funded model, deploying a vital piece of national infrastructure in an area of the country where competition for Next Generation Access (NGA) services simply does not exist.

In light of the very different circumstances in the demand for access to Eircom's CEI, coupled with the unique nature of the NBP intervention that the Government has undertaken, it follows that there is a clear justification for treating differently the pricing of access to Eircom's CEI in the context of the NBP as opposed to the access granted to other operators. In this regard, NBI welcomes ComReg's proposals in its Consultation Document for a differentiated pricing approach to CEI access, which provides for one set of prices where 'generic' access to CEI is being granted to operators who compete commercially with the SMP operator and another to cater for NBI's large-scale, long-term access to Eircom's ducts and poles that it requires to deploy the NBP network.

In NBI's opinion, ComReg's proposed approach to CEI pricing is well formulated and is fair and reasonable, both from the point of view of access seekers and the SMP operator. Under ComReg's proposals, Eircom will be appropriately remunerated for the CEI access it provides while the price control will ensure that no over-recovery of costs will occur. In addition, the NBP-specific pricing approach also ensures that no concerns arise from a State aid perspective in relation to how Eircom is compensated for the use of its infrastructure in the deployment of the NBP network.

NBI's response to this consultation is structured as follows. In Section 2, we provide a broad overview of our response, touching on the key issues raised by ComReg in its Consultation and setting out on a high-level basis our position on each of these. In Section 3, NBI responds to each of the questions posed by ComReg in its Consultation. NBI's response to this Consultation is supplemented by an expert report which it commissioned from Frontier Economics, providing a critical assessment from an economic perspective of ComReg's proposals. The Frontier Economics paper is appended to and forms part of this consultation response.

2 Overview of NBI's response

Introduction

The regulated charges that are set for access to Eircom's ducts and poles will have a major bearing on the cost of rolling out the National Broadband Plan network. In light of the major public subsidy that underpins the NBP network deployment and the concomitant needs to ensure that value-for-money is achieved for the Irish taxpayer, that EU State aid rules are complied with and that no distortion of competition in the electronic communications market takes place, it is important that these access charges are set at the appropriate level. This means that no over-recovery of costs by the SMP operator should take place but it is also the case that Eircom should get fair recompense for the large-scale use of its CEI assets that is contemplated under the NBP.

In NBI's opinion, ComReg strikes the correct balance between these objectives in the proposals it has set out in its Consultation Document. ComReg recognises the need for differential pricing between 'generic' CEI access that is required by operators who compete with Eircom in the provision of downstream electronic communications services and the long-term, large-scale NBP-specific CEI access that NBI requires in order to deploy its FTTH network within the NBP Intervention Area, as well as the access it requires for transit purposes to secure connectivity of the network it is rolling out to the approximately 537k premises in the IA.

Differential pricing for NBP-specific CEI

NBI fully supports ComReg's approach to create **a differential pricing regime for CEI access in the context of the NBP**. As the DotEcon report² for ComReg demonstrates, this approach is supported by economic fundamentals. By properly calibrating the proposed per-customer approach to cost sharing, it can also provide Eircom with appropriate incentives for the migration of customers located in the IA from its existing copper network to NBI's fibre network. ComReg's approach also has a sound legal basis, as it aligns both with the provisions of the existing regulatory framework and the soon-to-be-implemented European Electronic Communications Code. There is also precedent from other jurisdictions for ComReg's proposal to put in place a new pricing regime for CEI access without first carrying out a fresh market review. Finally

² ComReg 20/81a.

ComReg's proposed approach also provides for a substantial degree of regulatory certainty on a forward-looking basis.

Cost base for setting NBP-specific CEI pricing in the IA

NBI agrees with **ComReg's overarching approach to defining the CEI cost base in the IA**, including its hybrid historic asset base and BU-LRAIC approach. However, ComReg should consider whether the estimated opening value of the asset base is appropriate, and consider whether an impairment adjustment to this opening value is required. ComReg should also adjust the pole asset lifetime used to calculate depreciation charges for poles, to make this consistent with its calculation of future pole replacement: the current assumption on the rate of replacement of poles implies an asset life of 75 years, compared to the 30-year lifetime currently assumed by ComReg.

Cost sharing under NBP-specific CEI access

NBI agrees with ComReg's preliminary conclusion that **it would not be appropriate for NBI to contribute, via the NBP-specific CEI access charges, to Eircom's corporate overheads**. As ComReg has previously determined and references in its Consultation, costs relating to such overheads should only be recovered from electronic communications services provided in the Commercial Area and so there is no justification for NBI to have to contribute as well to their recovery. To do so would lead to over-recovery of costs by Eircom.

NBI has given considerable thought to the relevant merits of the different approaches discussed by ComReg in the Consultation relating to cost sharing in the context of the CEI access Eircom provides in the IA. We agree with ComReg that the existing per-operator approach is not the appropriate method to use on a forward-looking basis. It would, as ComReg points out (Para. 513), fail to provide sufficiently strong incentives for Eircom to withdraw copper from its poles before NBI's fibre network has been fully deployed and its continued use would mean a less smooth transition from copper to fibre compared to the per-customer alternative.

Per-customer cost sharing

The proposal to switch to a **per-customer approach to cost sharing** has considerable merit. While NBI supports this approach, we believe that the manner in which ComReg plans to employ it needs further consideration as, in its current form, it may have some unintended consequences. In particular, pegging a per-customer approach to the current number of active copper-based

connections in the IA will not provide the right incentives for Eircom to migrate these customers smoothly to the new NBP network as it is progressively deployed. ComReg's proposed approach also risks over-compensating Eircom by shifting the cost sharing burden onto NBI far sooner than would be warranted in light of the proportion of the addressable customers it will have connected in the early years of the NBP network deployment.

Because of this, NBI does not share ComReg's view (Para. 516) that continuing with the per-operator approach "is a reasonable alternative." The per-customer alternative is feasible and it should not be "overly burdensome" to implement. Indeed, NBI's proposed method for doing so will make its implementation easier.

In light of the above, it is NBI's belief that while ComReg is correct to retain the principle of moving to a per-customer approach for cost sharing, it needs to make a slight alteration to how it is implemented in practice. In NBI's view, a per-customer approach that is based on the number of actual fibre connections on the NBI network as a proportion of the forecasted number of fibre connections in the IA once Copper Switch-off has been completed would provide an appropriate basis for cost sharing within the IA, as well as providing Eircom with the correct signals on the migration of customers from copper to fibre.

CEI access in the Commercial Area

For **CEI access in the Commercial Area**, which NBI will require solely for transit purposes, NBI supports ComReg's proposal that the appropriate cost basis is a Long Run Incremental Cost (LRIC). NBI will not be providing any customer connections outside the IA and a LRIC approach will guard against potential over-recovery of costs for NBP-specific CEI access in the Commercial Area. As ComReg points out, the adoption of a LRIC approach renders moot the question of the sharing of any overhead costs. .

NBP-specific WACC for CEI assets

NBI also supports ComReg's proposal in the Consultation that, as an input to the regulated NBP-specific CEI access charges, **a separate WACC for CEI assets in the context of the NBP** should be put in place. The returns from such a notional stand-alone activity would be very stable and so would be more akin to a core utility service such as water. NBI's economic advisers, Frontier Economics, have provided an opinion on the relevant WACC parameters that would differ when considering CEI access to NBI. Arising from this, NBI estimates that the appropriate level for an NBP-specific WACC could be 3.8% as opposed to ComReg's proposed 4.03%. NBI believes

that, as a result, ComReg should re-examine the WACC issue to see if a further reduction is warranted.

Annual review of charges

Key to ComReg's proposals will be the ease with which they may be implemented in practice. In this regard, NBI has some concerns about how ComReg envisages **the annual reviews of the NBP-specific charges** will be undertaken. NBI supports ComReg's proposal that the charges should be set for an initial two-year period but it is concerned that an approach that places primary responsibility on Eircom to update the PAM and DAM, including the generation and validation of the input data required to update the models, will not work in practice.

Instead, NBI believes that ComReg itself needs to play the central role in the updating of the cost models and it should use the statutory powers it holds to require Eircom to provide the relevant input data. NBI is also of the belief that it should be involved in this process (ComReg's proposed approach envisages no formal role for NBI) because it will have relevant data in its possession (for example, on annual pole replacement rates), which ComReg could use to validate data being supplied to it by Eircom.

Conclusions

In conclusion, NBI welcomes ComReg's proposal to put in place a differentiated price control for access to Eircom's CEI in the context of the NBP and supports the overall thrust of ComReg's proposed approach. While we disagree with ComReg on some elements of detail – in particular the calibration of the per-customer approach to cost sharing – and have some concerns about how ComReg's proposals might best be implemented in practice, it is our belief that the slight modifications we propose in this response will strengthen the approach ComReg has set out in its Consultation. This will result in CEI access charges that are fair and reasonable from the perspective of both NBI and Eircom within a framework that should prove durable over the long-term and which will aid the migration of customers from copper to fibre services over this period.

3 Responses to ComReg's consultation questions

In this Section, NBI provides its response to each of the questions posed by ComReg in its Consultation Document. In doing so, NBI makes reference to a report commissioned by it from Frontier Economics, which is being submitted to ComReg as part of this response and which is appended to it.

Q. 1 Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

Section 3 of the Consultation Document provides broad context for ComReg's CEI pricing review, including the regulatory objectives it seeks to pursue in the review. NBI notes the context to the review provided by ComReg and is in broad agreement with the regulatory objectives that ComReg has set out.

In terms of the pricing of CEI services generally, this review is a welcome one as the regulated charges for pole and duct access are overdue for reassessment. The price control period set in ComReg's Decision D03/16 – which was published in May 2016 - was intended to run for three years, i.e. up until end-June 2019, and the charges set out in that Decision for 2019/2020 and 2020/2021 were only included for transparency purposes as indicative rates. In practice, however, these charges have been applied in the market and so an in-depth review of the charges is required.

CEI in the context of the NBP

NBI welcomes ComReg's approach in the Consultation Document to look specifically at NBI's large-scale use of CEI access from Eircom. A clear distinction is warranted between the CEI access required by NBI to roll out the State-subsidised NBP fibre network and the more limited, route-specific pole and duct access that other operators require to supplement their own network deployment in situations where they compete commercially against Eircom for retail customers.

This is obviously true in terms of the scale of access NBI envisages it will need over the NBP network deployment period, encompassing access to approximately 1.5 million Eircom poles and in the region of 15,000 km of its ducts. It is also the case that the type of access required to facilitate the deployment of the NBP network calls for a different, more collaborative approach. This much is acknowledged in the Major Infrastructure Programme ('MIP') that NBI has put in place with

Eircom as part of the 25-year Infrastructure Access Agreement ('IAA') signed by the two companies. The MIP provides for NBP-specific arrangements in relation to Eircom's provision of pole and duct access and so it naturally follows that a separate pricing regime is an appropriate approach to consider, so that it is tailored to the unique set of circumstances under which NBI is rolling out the NBP network and making such large-scale and stable, long-term use of Eircom's pole and duct network.

NBI notes that much of the infrastructure it will need to access has already been deployed by Eircom on the basis of investment decisions, which did not rely on NBP for cost recovery. NBI believes that ComReg's proposals also take account of the fact that Eircom's ability to recover an adequate return on these pre-existing investments is reflected in the proposed pricing for Generic Access.

State aid considerations

As ComReg notes in the Consultation Document (Para. 81), NBI is prohibited under the Project Agreement and under relevant State aid regulations from using the subsidy it has been granted for the rollout of the NBP network to provide electronic communications networks or services outside the NBP Intervention Area ('IA'). This prohibition, combined with other unique aspects of the NBP project, supports the notion that differential arrangements are warranted for the provision of CEI access to NBI on the one hand and operators competing commercially with Eircom on the other.

The pricing proposals set out in the Consultation facilitate two key goals of the NBP from a State aid perspective, i.e. it facilitates rapid and cost-effective deployment of an NGA network in the IA and it ensures access to CEI on a reasonable and proportionate basis. As such, ComReg's proposed approach appears to be well aligned with the State aid rules - including the Commission's decision in relation to the NBP³ - particularly as the pricing change arises from an open and transparent assessment by a National Regulatory Authority (NRA) and is intended to address the specific competitive circumstances arising from the NBP.

The key questions in the context of the Consultation are the extent to which ComReg's proposals could be said to provide an advantage to Eircom and the extent to which the proposals could give

³ Decision SA.54472 *Irish National Broadband Plan* (the 'State Aid Decision').

rise to a distortion of competition. NBI is pleased to note that there are no apparent concerns on either basis.

In terms of ComReg's plans providing an advantage to Eircom, it should be noted that the proposed price control in respect of NBI access in the IA is designed to ensure that Eircom may recover only its efficiently incurred investment (plus a reasonable rate of return) when upgrading its CEI assets for the purposes of sharing of those assets with NBI. Similarly, the proposed price control in respect of NBI access outside the IA is designed to ensure that Eircom does not earn significant additional revenues which were not contemplated when setting the existing price control. One reason why this is important is because NBI's access to CEI outside the IA will not entail any loss of wholesale or retail revenues or market share for Eircom. As a result, any argument that the proposed NBP-specific CEI charges would lead to over-recovery is unlikely to be sustained, particularly compared to the approved subsidy levels in the State Aid Decision. As such, the pricing controls proposed by ComReg in the Consultation appear to have been developed with a view to ensuring that Eircom will not be in receipt of an advantage. Notably, the new price control envisaged by the Consultation is likely to result in prices that are below the current regulated prices charged to NBI, pursuant to ComReg Decision 03/16. In these circumstances, no advantage for Eircom could arise.

As regards the possible distortion of competition, it is worth recalling that ComReg's statutory objectives under Section 12 of the Communications Regulation Act include the promotion of competition, the encouragement of efficient investment in infrastructure and the promotion of innovation. As outlined by ComReg in the Consultation, promoting competition and encouraging efficient investment in the NBP Intervention Area means: ensuring that CEI access is made available to NBI to deploy an NGA network, to enable it to provide wholesale access services to operators who will supply retail broadband services to customers in the IA. This means that Eircom should be allowed to recover its efficiently incurred investment (plus a reasonable rate of return) when upgrading its CEI assets to allow for the sharing of those assets with NBI. ComReg's proposed price controls are therefore designed to ensure that effective competition can take place at the retail level between operators using NBI's network in the Intervention Area. In these circumstances, the Consultation does not give rise to a distortion of competition since it does not place any operator in a more advantageous position compared to other undertakings. This is underpinned by the non-discrimination obligations placed on NBI vis-à-vis all retail operators within the NBP Project Agreement.

Competition and the NBP Project

NBI also agrees with ComReg's preliminary view (Para. 104) that it should have regard to the varying degrees of competition across the WLA market – within which CEI access is mandated – and the different purposes for which operators seek access to CEI services from Eircom. As ComReg notes, the large-scale nature of the access to poles and ducts required by NBI means that NBI's CEI access is very different from that sought by operators who compete directly with Eircom for downstream retail services. This is so, particularly when coupled with the fact that the NBP network build will, from an end-user access point of view, be confined to the IA, with further extensive build required to traverse areas outside the IA in order to provide connectivity inside it. By the nature of the NBP intervention, NBI will be deploying its fibre network in areas of the country where no competition exists for high-speed broadband services and, as ComReg has itself noted, no prospect exists for the deployment of any NGA networks over the medium-term. In addition, under the NBP Project Agreement, NBI's activities are limited solely to the wholesale level and, as noted earlier, it is prohibited from using the State subsidised network to provide any electronic communications services at all outside the IA.

ComReg is, then, correct when it states (Para. 107) that, in the context of the NBP, its regulatory obligation of promoting competition and encouraging efficient investment is best interpreted as an approach that allows for the cost-effective deployment of the NBP network while avoiding the inefficient duplication of CEI assets. In pursuing its NBP policy, the Government identified a market failure in that large swathes of the population, in particular those living in rural areas, would have been left unserved for high-speed broadband services if NGA build was confined solely to operators' commercial plans over the coming years. NBI's requirement for CEI access stems directly from the Government's approach to dealing with this market failure and so, absent any credible prospect of competitive NGA build within the IA over the medium-term, it is absolutely appropriate for ComReg to align its regulatory objectives to support this important Government initiative.

Copper Switch-off and Universal Service

Globally as well as nationally, fixed telephony services now stand at a transformative point of development. The copper lines which met customers' needs for so long are now being so rapidly supplanted by optical fibre and high-speed cable connections that the ending of telephony services over copper lines – a process termed as Copper Switch-off (CSO) – is being actively planned in a number of jurisdictions.

ComReg recognises this trend in its Consultation Document (Para. 108 onwards) but only in the context of (i) the supplanting of Eircom's copper network by NBI's fibre network within the IA; and (ii) in light of the discussion in the DotEcon report on providing Eircom with appropriate signals in relation to the pricing of CEI access for the purposes of the NBP. While it makes sense to factor in such price signals within a differentiated NBP-specific CEI pricing regime, ComReg needs to bear in mind that the end of copper-based services will happen regardless; at this point, the question is when this will occur. In this respect, ComReg needs to (i) guard against unintended effects of proposals to incentivise a shift from copper to fibre and (ii) ensure that it creates no incentive for any operator to 'game' the situation.

It also needs to be borne in mind that CSO is an issue that impacts not just on the provision of fixed telephony services within the IA. CSO is of equal relevance to telephony (and high-speed broadband) provision in the Commercial Area. While the greater rollout of NGA services in that area means that customers can and are choosing to migrate from copper to fibre, many more have yet to make that choice. Significant numbers of customers remain subscribed to copper-based networks, including for high-speed broadband services. For CSO to be completed, all these customers will need to shift to a fibre or cable NGA network as well.

Seen in this light, it is clear a public debate on CSO must be framed as a discussion about the ending of copper-based telephony services on a national basis, not just within the NBP IA. Such a debate would need to be led by DECC or ComReg (or both), with significant input from Eircom, as the provider of copper-based network services, as well as from all NGA network providers and other stakeholders, including operators and end-users. Such a debate would need to focus on the optimal timing at a national level for the completion of CSO, at which time all of the country's telephony services would be provided via NGA networks. It is also worth noting in this respect that, in practice, CSO is unlikely to occur as a single event. Instead, it could happen by customer, by part of a route and/or by exchange area. What services are being provided over the legacy copper network (and where) is also a relevant factor. Underground copper supporting the provision of 100Mbps VDSL services is least in need of switch-off and would also be the most expensive to remove. In contrast, the thin overhead cables at the end of rural routes are the least future-proofed and most costly to maintain and so, in a CSO environment, it is this part of the copper network that will be decommissioned first.

In the meantime, NBP-specific CEI pricing designed to encourage migration from copper to fibre within the IA makes sense, as do retail pricing promotions in the Commercial Area aimed at the take-up of NGA services. Such measures will undoubtedly help to shift the market closer to a

position of CSO. In light of the wider societal issues at play, however, CSO should not solely be dealt with from a policy perspective as a by-product of a pricing decision.

In this regard, the issue of CSO cannot be separated from the future consideration of the Universal Service Obligation ('USO'). A fundamental reassessment of USO is now due in light both of widespread NGA deployment and the provisions on this topic contained within the soon-to-be implemented European Electronic Communications Code ('EECC').⁴ In essence, CSO and USO are two sides of the same coin.

NBI notes ComReg's statement (Para. 121) that, in line with what was stated in its 2016 USO Decision, it plans to review the impact the NBP initiative may have on the provision of electronic communications services in this country. NBI would suggest that this review presents the opportunity to encompass consideration of the linked issue of CSO. In addition, as ComReg notes (Para. 129 onwards), provisions within the EECC oblige it to ensure that end-users have access to very high capacity broadband networks and to facilitate a migration process from legacy to NGA networks that is in the interests of end-users. NBI is willing to play a constructive part in such a review and to do what it can to ensure that a user-friendly migration process happens within the IA.

Legal basis for ComReg's proposals

In the context of ComReg's regulatory objectives for proposing NBP-specific CEI access charging arrangements, it is important to be clear about the legal basis for such a move. NBI is happy to note that ComReg has a sound legal basis for its proposed approach. This is because ComReg is under no obligation to undertake a fresh market analysis prior to putting in place the proposed price control and its proposals are wholly consistent both with the current regulatory framework and the EECC, which is due to come into effect in December. There is also precedent from other regulators having adopted new pricing decisions without having undertaken a new market analysis. It is also the case that ComReg's proposals in the Consultation are consistent with earlier statements made

⁴ Directive EU 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast) ("EECC"), which must be implemented by 21 December 2020.

in the context of Decision D03/16 and Decision D10/18 and are appropriate in the interests of regulatory predictability.

While the Access Directive⁵ requires NRAs such as ComReg to conduct market reviews in order to determine whether regulatory obligations should be imposed on operators deemed to have SMP in particular markets, the prevailing regulatory framework does not prevent an NRA from imposing regulatory obligations on SMP operators outside the context of a specific market analysis. Indeed, the Access Directive specifically contemplates that regulatory obligations may be imposed by NRAs without having to engage in an additional market analysis.⁶

This same principle has been carried through to the EECC.⁷ It is also entirely consistent with the terms of the EECC that it is not necessary to conduct a new market review in order to take account of new market developments during a relevant regulatory period. In fact, the EECC specifically contemplates that a new market analysis may not be required in these circumstances.⁸ In addition, the EECC envisages that obligations imposed on undertakings designated with SMP should be reviewed in the context of competitive conditions existing in the market during the lifetime of the relevant regulatory period. The EECC also makes clear that it would be against the principle of legal certainty and predictability of regulatory measures for NRAs to undertake a new market analysis before understanding the impact on competitive conditions of new market developments, which is reflected within the Code with the extension of the review period for market analyses from three years to five years.⁹

It is also entirely consistent with the EECC for ComReg to take into account different competitive conditions in different geographic areas (for example, in relation to different CEI access pricing

⁵ Directive 2002/19/EC of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities, implemented in Irish law through the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011).

⁶ Access Directive, Recital 15, which states that: “*The imposition of a specific obligation on an undertaking with significant market power does not require an additional market analysis but a justification that the obligation in question is appropriate and proportionate in relation to the nature of the problem identified.*” [Emphasis added].

⁷ EECC, Recital 178, which states that: “*The imposition of a specific obligation on an undertaking designated as having significant market power does not require an additional market analysis but rather a justification that the obligation in question is appropriate and proportionate in relation to the nature of the problem identified on the market in question, and on the related retail market.*” [Emphasis added].

⁸ EECC, Article 86(6).

⁹ EECC, Recital 177.

within and outside the Intervention Area).¹⁰ Finally, the EECC specifically contemplates that obligations in respect of CEI might be imposed in markets other than those in which a market analysis has been carried out.¹¹

In this respect, ComReg's current proposals are consistent with the principle of regulatory predictability. While NBI has commenced deployment of its network, the speed of its roll-out and practical limitations on rates of connections are unlikely to impose competitive constraints on Eircom as an SMP operator during the lifetime of the current review period. Therefore, on any plausible geographic market definition, it is highly likely that, had a market analysis taken place, Eircom would still have been designated with SMP in the relevant market. It should also be noted that ComReg envisaged a full market analysis would not necessarily be required immediately following award of the NBP contract, and that such an analysis would not necessarily be proportionate or appropriate in circumstances where the impact of the NBP was not fully understood.¹²

Consistent with the reasoning alluded to above, that ComReg set out in D10/18, the present Consultation does not preclude ComReg taking action to assess relevant markets in light of the deployment of the NBP. ComReg's forward-looking approach, which is consistent with the EECC,¹³ ensures a far greater degree of regulatory certainty than the proposed approach advocated by Eircom during the consultation in respect of Decision D10/18.¹⁴

The UK regulator Ofcom adopted a very similar approach to that being taken by ComReg in this Consultation when, in 2009, it modified existing price controls on Openreach without undertaking a

¹⁰ EECC, Recital 179.

¹¹ EECC, Article 72(2).

¹² Decision D10/18, Para. 4.181.

¹³ See EECC, Recital 168: "*The analysis of effective competition at the retail and at the wholesale level is conducted from a forward-looking perspective over a given time horizon, and is guided by competition law, including, as appropriate, the relevant case law of the Court of Justice*". [Emphasis added].

¹⁴ Decision D10/18, Para. 4.33.

new market analysis. Ofcom made specific reference to Article 15 of the Access Directive (see above) in justifying its grounds for taking the action it did then.¹⁵

In summary, then, there appears to be no issue from a regulatory framework perspective with ComReg's proposal to put in place an NBP-specific price control for CEI access without first undertaking a new market analysis. As noted above, there is also precedent for such a move, both in relation to past practice by ComReg itself but also from moves made by the UK regulator Ofcom.

¹⁵ See Ofcom "A new pricing framework for Openreach", 22 May 2009. Available at: <https://webarchive.nationalarchives.gov.uk/20160702190226/http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/statement.pdf>.

Q. 2 Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

In Sections 5.2 and 5.3 of the Consultation Document, ComReg sets out its preliminary position on general costing methodology principles, which it then applies to the pricing of access to CEI for the purposes of NBI's NBP network rollout and more generally. NBI's view on ComReg's discussion of this latter point are set out in our response to Q.3 below.

ComReg prefaces its discussion on general costing methodology principles with some preliminary remarks, in Section 4 of the Consultation Document, where it introduces for the first time the proposal that the CEI price control on the SMP operator could be differentiated to reflect the existence of two very different types of CEI access seekers in different geographic footprints across the country. Specifically, the notion that ComReg introduces here is that a differentiated price control should exist for CEI access that is used by NBI in the deployment of the NBP network (both within in the NBP IA and outside it) compared with the type of 'generic' CEI access that other operators (who compete directly with Eircom) use as a regulated input in deploying their own network connections.

NBI strongly supports and very much welcomes ComReg's proposal to differentiate the price control for CEI in this way. While it has agreed a 25-year IAA and an accompanying Major Infrastructure Programme (MIP) with Eircom, this was based on Eircom offering access to the same regulated duct and pole products, priced in the same way, as those used by operators who compete commercially with Eircom. In NBI's case, minor discounts to the maximum regulated charges have been granted by the SMP operator, to reflect the use at scale of pole and duct access for the NBP network deployment, which has necessitated different programme management and ordering processes. These processes have meant that Eircom has been able to avoid some costs that it would typically incur in the provision of pole and duct access and these cost savings are reflected in the lower pole and duct charges that have been levied on NBI.

This offering does not, though, reflect the fact that the NBP deployment is one that can only take place on the basis of significant State aid and that, absent such funding, the widespread and very significant demand for pole and duct access from NBI would not exist. This is an important point in deciding on the appropriate levels at which the price of CEI access in the context of the NBP should be set, not least in light of ComReg's previously held position, which it references in this Consultation, that the recovery of properly-validated common costs should be made exclusively from commercial services.

As ComReg points out in the Consultation Document (Para. 145 onwards) it has itself previously noted the likely “objectively justified” differences in the kind of CEI access that would be sought arising from the NBP compared to the small-scale ‘generic’ access that was already being requested by some operators. NBI is happy that ComReg has, in this Consultation, put substance to this prior observation and has now proposed a price control for NBP-specific CEI access which is differentiated from ‘business as usual’ access in a number of important respects.

In this regard, all of the factors outlined by ComReg in Para.149 of the Consultation Document are relevant to its consideration of a differentiated pricing regime for NBP-specific CEI access. NBI agrees with ComReg’s reasoning which leads it to conclude that a separate differentiated pricing regime for NBP-specific CEI access is warranted in both the Commercial Area and within the NBP IA. Under a unitary CEI access pricing regime there is a strong danger of excess cost recovery by Eircom for its provision of CEI access to NBI, in light of the fact that the NBP market design combined with the State aid rules mean that NBI will not be in a position to earn revenues from the provision of its wholesale services in this area. Instead, NBI will solely make use of Eircom’s CEI to transit the Commercial Area in order to provide connectivity to and from the network it deploys within the IA. As regards the latter, NBI is likely to be the only user of CEI access from Eircom within the IA and so, once CSO has happened and Eircom has removed all of its copper cabling from its pole network, the only revenues accruing to Eircom from these poles will be from NBI.¹⁶

ComReg’s discussion on general costing methodology principles for CEI access in Section 5 of the Consultation Document is largely descriptive in nature and follows standard regulatory practice.

NBI agrees with the general costing methodology principles set out by ComReg. NBI accepts that, for non-reusable assets where the objective is to send the correct build-or-buy signals to alternative providers in a situation where it is desirable to see the deployment of alternative infrastructure, the use of a bottom-up model incorporating an incremental costing methodology is appropriate. In the case of reusable assets, which covers the bulk of Eircom’s CEI, an approach that determines the cost base in a way that reflects costs actually incurred is more appropriate. This reflects the fact that the assets in question are re-usable and that the deployment of alternative infrastructure is not a desirable objective in light of the lack of contestability. As a result, the focus should be on stable

¹⁶ It should be noted that, even after Eircom has ended its provision of copper-based services within the IA, it is likely to make continued use of its pole infrastructure there as it will still have trunk or junction cable deployed.

returns over time rather than build/buy considerations and, as ComReg states, the use of a top-down approach on a HCA basis is the best way to achieve this objective.

Further observations on the general costing methodology are set out in the Frontier Economics report. Please see Section 3 of the Frontier report for further details.

Q. 3 Do you agree with ComReg’s preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI’s MIP access to CEI in the NBP IA and for NBI’s transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation.

Please provide reasons for your response.

NBI largely supports ComReg’s preliminary view on the appropriate access cost for each of the three separate cases, as set out in the table below.

Table 1: CEI access types and costing methodologies

Access Type	Costing Methodology
Generic Access to CEI (other than NBI)	LRAIC+ (with TD HCA)
NBI MIP Access in the IA	LR(A)IC (with TD HCA)
NBI MIP Access in the Commercial Area	LRIC

NBI’s views on the costing methodology to be used for CEI access in the context of the NBP are aligned with Frontier Economics, whose report forms part of and is appended to this response. Please see Section 3 of their report.

Frontier consider that the use of a hybrid costing approach using a historic asset base coupled with the BU-LRAIC approach is appropriate to calculate the cost base for CE in the IA. However, Frontier recommend that ComReg reassess the opening value of the asset base to ensure it reflects the value that Eircom would have expected to earn in the counterfactual and consider whether an impairment adjustment is required. Frontier also recommend the asset life for poles be adjusted so that the depreciation charge calculations are consistent with the replacement rate of poles.

While NBI will not avail of Generic Access to CEI, we do have an opinion on the appropriate outcome of the choice of costing methodology used to calculate the regulated rates for such access. In essence, nothing should change as a result of the NBP subsidy, other than the availability within the NBP IA of high-speed broadband services where these would otherwise not be provided. This means it is essential that the application of the NBP subsidy should not result in higher or lower costs for Generic Access to CEI. If the choice of the costing methodology in any of the three cases were to cause higher or lower charges for Generic Access, the net effect would be

a distortion of the market in the competitive area. ComReg has already determined (in D11/18 and preceding Decisions) that the appropriate costing methodology is LRAIC+ for any newly incurred costs and TD HCA for previously incurred costs. ComReg has further determined (Para. 6.226 of D11/18) that all general overheads should be recovered in the charges set for the competitive area.¹⁷

Within the IA, we consider the same general principles should apply to NBI's MIP Access to CEI but with appropriate modifications. We agree that common overheads which are fully recovered in the Commercial Area do not need to be added to the LRAIC cost. NBI also agrees that LRAIC is the correct measure for costs incurred by Eircom as a result of providing access. We note there is a need to understand exactly which costs these are, and that some details may need to be elaborated further to aid such understanding. In general, NBI will provide any new poles or duct it requires – and it will not request Eircom to build any new CEI for it to use - but where possible will rent existing infrastructure from Eircom. This is an important feature of the new network and it means that Eircom will never be asked to build CEI to premises it did not previously serve with such infrastructure in the provision of copper-based services.

Therefore, the issue of “replacement” poles is quite a subtle one, in the context of a planned CSO. The following hypothetical situation bears this out.

Suppose NBI requests that a pole it wishes to use be replaced, at the point of CSO. Eircom can correctly say “that pole would not have been replaced, because we had no need for it, so you pay the full cost of a replacement pole.”

What if the pole is replaced before CSO? Now, the question is whether Eircom would have had to replace it anyway to maintain its own copper service. If that were the case, the replacement cost is

¹⁷ Note the result of this 2018 Decision is clearly laid out in footnote 161 of 18/95: “One consequence of this approach to common cost recovery is that it recognises that all services offered in the non-commercial area cannot be expected to make a contribution to Eircom’s common costs as these costs are already fully recovered from the services offered in the commercial area. As a result, the prices that Eircom might charge an NBP operator for access to poles and ducts in the Intervention Area do not need to include a common cost mark-up and so should be lower than the prices set by ComReg for duct and pole access under the 2016 Access Pricing Decision (D03/16), which did include such a mark-up.”

not an incremental caused by NBI, except to the extent that this cost is incurred by Eircom when replacing poles at NBI's request earlier than it would otherwise have done so.

What if the pole might have survived until CSO, but is only tested because NBI requests its use, and is therefore replaced because it fails the test? In this case, the cost appears to be an incremental one, caused by NBI.

Let us turn now to the reusable poles, to which NBI may seek access but which are in good repair and do not need to be replaced. In this instance, ComReg is proposing Top Down HCA cost – in essence the Net Book Value of such poles is the basis for calculating cost. While NBI accept that this is the correct starting point, we again consider that appropriate definitions and relevant adjustments may be required in order to derive the most appropriate access charge.

Firstly, it is likely that Eircom's pole testing and replacement has been concentrated in the Commercial Area (and in particular, the 300k rural FTTH project) in recent years. Poles in the IA may therefore be more likely to be old and perhaps fully depreciated. So, the average net book value per pole may be lower in the IA than outside it. The relevant NBV for poles within the IA must be determined, and not just a national average NBV per pole or an average per exchange area. Otherwise, NBI would in effect be funding past replacements which did not benefit it, or which should be funded by other wholesale customers (including Eircom itself) in the commercial area.

Secondly, the proposed CSO and the existence of the NBP Project may be considered to provide a windfall gain for Eircom unless the costing methodology takes full account of this. If the NBP Project had not proceeded, or if it was delivered using other infrastructure (for example via NBI own-build, through the use of ESB's poles and ducts or by way of a wireless solution) then CSO would still proceed (albeit the NBP may advance CSO by a year or two). If at the time of CSO, the pole (and duct) infrastructure in the IA had a positive NBV, it would be written off. In fact, there might even be costs incurred to dispose of old creosoted poles in an environmentally friendly way which are not fully captured in the ARO. In addition, recovery of the actual copper cables may result in a net cost or net benefit¹⁸. This write-off, and the cost or benefit of cable disposal, must

¹⁸ One might assume that the fact copper cables are frequently stolen would imply that recovery of copper cables is always profitable. However, recovery of large urban cables can be costly because it involves traffic disruption and may damage other cables in the same ducts. Safe recovery of small aerial cables is also costly in terms of

also be taken into account in the cost model so that the true incremental difference¹⁹ between the case of NBP and no NBP can be calculated.

We suggest the appropriate way to do this is to consider a valuation exercise of the pole and duct infrastructure in the IA, assuming no re-use by NBI. The lower of this valuation figure, or the actually recorded NBV, should be used in the cost model. The “impairment” approach proposed in section 3.2.2 of the Frontier report sets out in considerable detail how this calculation can be conducted.

Frontier suggest that the correct opening value of the CEI in the IA should reflect the cost that Eircom would expect to recover from that area in a counterfactual scenario – i.e. absent NBP deployment. What would Eircom’s downstream WLR and Bitstream/VUA products pay to use the CEI if there was no NBP? If the discounted future cash flows generated by those payments would be less than the Net Book Value of the assets (which was calculated by applying straight line depreciation) then, Frontier suggest, it would be appropriate to apply an impairment adjustment to align the value with the NPV of future cashflows. This adjustment should be undertaken specifically for the IA, as any national approach would disguise the differences in cash flows between geographic areas. This is because CEI outside the IA is reused by Eircom itself for FTTH and/or FTTC.

Further observations on the costing methodology that should be used in the case of NBI’s access to CEI in the IA and the transit area are set out in the Frontier Economics report.

road closures and traffic management, and the value of the copper recovered may not offset these costs. There may be some instances where the value of copper in medium sized suburban cables is sufficient to offset the cost of recovery.

¹⁹ Copper cable removal may reduce the load on a pole and help prolong its life, so such removal should be encouraged after CSO. This issue of cable recovery may be relevant in incentivising efficient timing and scope of CSO. Suppose we assume that Eircom would spend €50m to recover cables and €20m to dispose of all the poles. The cost model can initially assume these costs are avoided by the existence of NBP, reducing the NBV of reusable assets. Eircom could earn back €50m of this value by removing all copper after CSO.

Q. 4 Do you agree with ComReg's preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets?

Please provide reasons for your response.

ComReg has set out arguments for how assets should be valued in order to determine the appropriate costs for access to CEI. In doing so, ComReg proposes different approaches for reusable and non-reusable assets.

NBI notes that ComReg's approach is in line with previous decisions in this area, in particular the 2016 Access Pricing Decision (D03/16) and the 2018 WCA/WLA Pricing Decision (D11/18), where ComReg stated the following:

*In Chapter 5 of the Consultation we recognised that there are reusable civil engineering assets, including duct, poles and chambers that Eircom can reuse for the provision of NGA. We refer to these assets as Reusable Assets. In the Consultation we proposed that Reusable Assets should be valued by way of Eircom's accounts and with an asset price index applied. This approach is referred to as '**Eircom's Indexed Regulatory Asset Base (RAB)**'. We proposed to use the approach taken by ComReg in the Revised CAM in the 2016 Access Pricing Decision so as to ensure consistency across all current generation and next generation services".²⁰*

This RAB approach ensures Eircom is not recovering more than it has already invested in reusable infrastructure assets. As such, the approach appears to be consistent with Paragraph 34 of the 2013 EC Recommendation.

ComReg has set out in the Consultation how the RAB approach has been implemented in the Pole Access Model (PAM) and Duct Access Model (DAM). We highlight some issues of concern in this regard in our response to Q8 below.

However, we have two key concerns relating to costing principles that are applied in the case of CEI assets. These are set out below.

²⁰ D11/18, Para. 5.4.3.

Firstly, it is important to ensure that the RAB for CEI in the IA is properly based on the actual CEI that is in place in the IA. There has been considerable recent replacement of CEI by Eircom to facilitate roll-out of FTTC, rural FTTH (i.e. Eircom's 300k project) and lately urban FTTC.

CEI in the IA has not been remediated to the same extent and so it will generally be older, have lower initial investment and greater accumulated depreciation. Therefore, it is important that this value per pole and duct be calculated specifically for the IA because the national average pole or duct cost may result in the base including assets which are fully depreciated²¹ at the wrong valuation.

Secondly, the reasonable rate of return allowed to Eircom in respect of reusable assets (i.e. those which were already in place before NBP) should be the return that Eircom could have expected to make if the NBP Project had not happened, or if it had been awarded to a bidder that did not make use of Eircom's CEI in its deployment solution.

This means that, for the purposes of calculating an appropriate start-point for the valuation of reusable assets in the PAM and DAM, Eircom should be required to revalue the relevant infrastructure based on its earning potential. If, in a counterfactual model (where Eircom would choose CSO in the IA in the absence of any other potential reuse) a write-down would have been required, it follows that the existence of the NBP Project in the form that it has happened, involving extensive use of Eircom's CEI, should not be used to avoid that write-down. To do so would, in effect, award Eircom a substantial windfall profit, which would be funded largely with State aid.

Revaluation of the relevant infrastructure based on its earning potential is also a factor when the issue of CSO is discounted altogether. In this respect, it is unclear that Eircom will be able to recover fully HCA costs from existing copper customers in the IA over the remaining expected lifetime of the copper network.

ComReg proposes that non-reusable assets should be valued at replacement cost. NBI supports this position but only to the extent that the asset is efficient and is required for NGA. Where Eircom replaces a pole and the replacement cost includes labour and equipment to move existing copper

²¹ Para. 34 of the NGA Recommendation, final sentence, states that "NRAs should not include reusable legacy civil engineering assets that are fully depreciated but still in use."

cables to the new pole, we do not consider that the costs of moving the copper assets is relevant to NBI's use.

We can perhaps best illustrate this with an extreme example. Suppose the cost of erecting a new pole (including all transport, labour etc.) is €400. Assume that replacing a pole with no cables costs €500 (€100 more, because the old pole has to be removed and disposed of in an environmentally friendly manner). Suppose the cost of moving the copper service to the replacement pole is €600. The total expenditure by Eircom in replacing the pole for use by the copper is then €1,100.

But the value that NBI would have from this pole is only €400 – it is only as useful as a brand new pole. In this instance, even if NBI shared 50% of the cost of €1,100 in perpetuity, it would make economic sense for NBI to install its own new pole rather than pay a share of the €1,100. Now, the actual balance of costs differs, but if CSO is to happen in the IA, NBI will end up taking 100% of the shared cost of such poles, which could be far more than the full cost of a new pole. To ensure NBI is incentivised to reuse, the share of the net replacement cost funded by NBI must always be capped at 100% of the investment required for a new pole that is capable of being used in the deployment of the fibre network.

One might argue that in such a situation Eircom will incur a cost of which a portion cannot be recovered. ComReg can fix this by adding the investment needed to preserve copper infrastructure to the relevant cost models, i.e. it can be recovered from copper-based services nationally. ComReg could also amend the USO so that Eircom could avoid excessive investment more generally. There is already a provision, i.e. the Reasonable Access Threshold (RAT) which allows Eircom to refuse to supply where costs are excessive.²²

NBI notes that if the pole would have been replaced prior to whatever CSO timing exists absent NBI then Eircom would have incurred this relocation cost in any event. In this instance it would simply be a matter of timing. It is likely that pole replacement costs are primarily driven by labour costs which will track inflation so the NPV of bringing this activity forward is neutral for Eircom and so on a whole of life basis there is no incremental cost attributable to NBI.

²² This is set out in ComReg's Decision D05/16.

Alternatively Eircom can avoid some or all of these costs by migrating copper users to alternative infrastructure, such as a fixed cellular service. As a last resort, Eircom could make a claim for Universal Service funding if it believed the cap on replacement assets resulted in a net cost to it in fulfilling the USO.

An analogous situation arose when switched interconnection services were first introduced after the market was liberalised over two decades ago. Eircom had incremental costs arising from new equipment and network upgrades needed to facilitate interconnection, but the costs were shared equally across all minutes on the network – and so the cost fell largely on Eircom itself. At the time ComReg (then the ODTR) argued this was simply a cost of doing business. Eircom did benefit from new capability and increased traffic capacity and, in fact, over time the full cost was allowed between wholesale and retail prices: just not all on the wholesale interconnection rates it levied on other operators.

Similarly, where extra costs are incurred to maintain or improve copper-based services, it is only reasonable that ComReg should ensure full cost recovery. However, it is not appropriate for NBI or its wholesale customers – and, ultimately, retail FTTH customers in the IA - to pay for an improved copper network.

Issues relating to costing principles are also considered further in the Frontier report that is appended to this response.

Q. 5 Do you agree with ComReg's preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI's MIP access in the NBP IA and (iii) the CEI costs for NBI's transit access in the Commercial Areas? Please provide reasons for your response.

NBI is in broad agreement with the depreciation approaches ComReg proposes in the Consultation Document.

Regarding the depreciation treatment for Generic Access, NBI agrees with ComReg's preliminary conclusion that the approach already in force should continue. The advent of NBP should not change the existing decision on this, one that was accepted by all market players.

Regarding (ii) and (iii) NBI does not disagree with the logic set out by DotEcon and ComReg. This position is also supported by the reasoning provided by Frontier Economics in their economic report, which is appended to NBI's consultation response. However, as Frontier state in their report (Section 3.2.3), ComReg do not set out clearly why the selected approach is superior to other alternatives. In particular, Frontier highlight a significant problem which arises due to the combination of accelerated replacement and the mismatch of accounting asset life and actual life in service. In Figure 4 of their report, Frontier demonstrate how the Gross Book Value and Net Book Values vary in unpredictable ways, such that a simplistic use of straight-line depreciation will lead to large and unpredictable fluctuations in pricing. Frontier consider alternative approaches (including the Infrastructure Renewals Accounting approach, which was also proposed by Eircom and its advisors CEG in their response to consultation 15/27) but conclude that straight-line depreciation, with appropriate adjustment to the relevant asset life to keep the GBV and NBV on a smooth, predictable path without major discontinuities, is the most appropriate method to adopt.

Using a tilted annuity in the Competitive Area makes logical sense as it aligns the LRIC-based charges paid by NBI with those paid by Generic Access Seekers in the same area. There is no valid reason for ComReg to depart from using a tilted annuity approach in this instance.

The IA will have only one significant user of Eircom's CEI and this will be comprehensive, widespread and predictable usage. As such, NBI's usage of CEI within the IA is quite different to the case of Generic Access to CEI or, indeed, to access outside the IA to wholesale services such as Virtual Unbundled Access (VUA) or Wholesale Line Rental (WLR).

The correct choice of depreciation method is important to ensure prices remain stable and predictable and that recovery is more evenly spread over time. This may be particularly important in

the case of the NBP as the end of the initial 25-year contract approaches. A tilted annuity approach would not achieve this aim. The shape of a tilted annuity curve results in high and increasing contributions towards the end of the asset life and so this might jeopardise the viability of NBI as the subsidy period nears its end. If the average pole lifetime is only 30 years, then a tilted annuity approach could mean that many of the poles erected during the NBP deployment will be more than 70% through their lifetime, but over 50% of the cost apportioned to them would remain to be recovered. This means that a titled annuity approach does not ensure Eircom recovers appropriate costs within a reasonable timeframe.

In conclusion, a straight-line approach, but with adjustments to asset lives of pole and duct to ensure a smooth evolution of the NBV, best meets the long-term requirements of both NBI and Eircom.

Q. 6 Do you agree with ComReg's preliminary view that the existing regulatory asset lives for Eircom's poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

NBI agrees with ComReg's preliminary view that the existing regulatory asset life of Eircom's ducts should be maintained at 40 years. NBI is of the opinion, however, that ComReg should give further thought to its preliminary position that the pole asset life should be maintained at 30 years. In NBI's view, there is merit in considering a longer asset life for poles and NBI's preference is that this is aligned with the 40-year assumption used for ducts.

ComReg's analysis on regulatory asset lives concentrates solely on poles and it does not consider in any detail if the existing regulatory asset life for ducts should be altered from the current 40 years. ComReg's preliminary view is that the assumed asset life for ducts should be maintained at 40 years and, absent any compelling evidence to the contrary, NBI would tend to agree with this view.

On poles, ComReg references its 2009 Asset Lives Decision²³ in which significant changes were made to the prevailing assets lives. In the case of poles, the assumed asset life was doubled from 15 to 30 years. It is worth considering at this juncture the appropriateness of maintaining a 30-year asset life for poles, both from the point of view of the impact of asset lives on access charges (in light of significant downward movements in the WACC) and evidence more generally that has come to light in recent years about actual pole lifetimes, which appear to be much longer than typical lifetimes assumed for regulatory purposes.

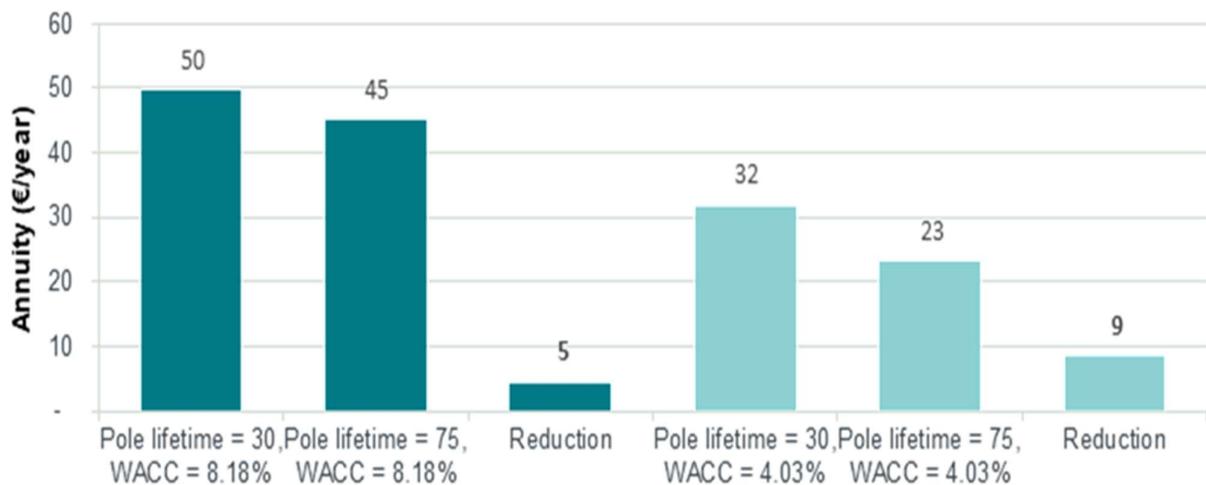
In 2009 the applicable WACC was 10.21% which meant the asset lifetime had little impact on annual rental charges, so in its Decision ComReg erred on the lower end of the scale. At that time one could legitimately argue that a lifetime of 30, 40 or 50 years for poles made little difference to the eventual annual rental charge for poles – for which there was little or no access demand then - and almost none at all for the WLR or Bitstream charges that were the focus of regulation at that time.

²³ ComReg Decision D03/09.

The situation now, as regards the interplay between asset lives and the WACC and the impact this has on pole rental charges, is completely different compared to 2009. Regulated WACC figures have fallen everywhere in the past decade and this means that the use of a lower WACC in the pricing model (be it the new fixed line rate of 5.61% or the proposed CEI-specific rate of 4.03%) makes the impact of asset lifetime much more significant for 2021 pole prices than it was for any product back in 2009.

This is illustrated in the worked example set out below, which considers the lifetime of a single pole under different WACC assumptions. As may be seen from Figure 1 below (left-hand side), significantly altering the assumed pole lifetime (in the example, from 30 to 75 years) does not alter the annual annuity in a substantial way when the WACC is set at the previous regulated rate of 8.18%. In this case, the annual annuity reduction is approximately 10%. However, if the WACC rate is set at 4.03% as proposed in the Consultation (right-hand side), the same alteration to the assumed pole lifetime results in an annual annuity reduction of more than 30%.

Figure 1: inter-relationship between pole lifetimes and WACC



Because of this effect, NBI is of the view that ComReg should reconsider regulatory precedents since 2009 before deciding that no departure from existing regulatory asset lives for Eircom's poles is required.²⁴

Current operational practice is also relevant when determining appropriate asset lives for regulatory purposes. It is NBI's understanding that, in the past, Eircom's pole testing procedures included a practice that poles with an age greater than 40 years would be marked for replacement, regardless of condition. NBI's belief is that in recent years Eircom came to the conclusion that this practice was resulting in many perfectly sound poles being replaced prematurely and so may have decided not to continue this practice. NBI understands that at the present time Eircom only replaces poles when its condition makes it necessary to do so and that age is no longer an automatic criterion for replacement. This suggests to us that Eircom takes the view – at least implicitly - that many of its poles have a lifetime that is far longer than 40 years and so the actual average life is considerably longer than the assumed lifetime for regulatory purposes. As a result, ComReg might want to confirm details of Eircom's pole testing and replacement practices.

Eircom's previous operational practice (as NBI understands it) also had the effect of artificially deflating the nominal operational life of poles, as poles older than 40 years were replaced before they had reached the end of their useful life. This means that basing asset life estimation on Eircom's historic replacement rate will underestimate the true useful asset life, even if Eircom has now apparently altered its policy on when poles should be replaced.

The Commission for Regulation of Utilities (CRU) recently reviewed the lifetime of poles in the Irish electricity network²⁵. In doing so, CRU's consultants²⁶ provided evidence to show that a 70-year life

²⁴ The need to do so is underlined by the fact that, when the current pole lifetime of 30 years was set in 2009, the applicable WACC rate was 10.21%. At this WACC level, extending the lifetime of poles would have had no material impact on the price of pole access or any downstream wholesale access service such as Wholesale line Rental (WLR) or Bitstream. At a lower WACC rate, however, even a small change in lifetime is material.

²⁵ We understand that the DSO (ESB Networks) says that the new (wood) poles will have a 50% expected survival rate of 55-60 years, in comparison to a 50% survival rate of 35-40 years for poles purchased in the early 2000s. See report for CRU by GHD and CEPA at: <https://www.cru.ie/wp-content/uploads/2020/07/CRU20077a-Consultancy-Support-for-Electricity-Distribution-Revenue-Control-2016-2025.pdf>. This report quotes UK Power Networks who suggest "The current modelled average end-of-life for a wooden pole is 60 years without intervention. With intervention, a wooden pole can have an average end-of-life extended to 70 years." https://library.ukpowernetworks.co.uk/library/en/RIIO/Asset_Management_Documents/Volume_Justification/SPN_UKPN_SPN_Asset_Plan_Wood_Poles_Narrow_Based_Steel_Towers_%26_Conductors.pdf

²⁶ GHD/CEPA (see previous footnote).

is appropriate for such poles in the UK. However, CRU concluded that the Irish climate, coupled with the lack of damage mitigation (e.g. boron rods or other repairs) suggest that a lifetime of 45 years may be more appropriate in an Irish context. CRU have adopted this lifetime for distribution assets since the second DSO price review (PR2) and have stated that they do not propose to change this for the next price control period 2021-2015 (PR5).²⁷ According to CRU's consultants, ESB Networks apparently expects its new wood poles will have a 50% survival rate in the range 55-60 years.²⁸

The CRU benchmark is appropriate as it relates to the other main deployment use for wooden poles in this country. CRU's decision that the regulated asset life of poles in the Irish electricity market should be set at 45 years, combined with Eircom's revised policy of not automatically marking all poles in place for more than 40 years as being in need of replacement, would suggest that the current 30 years lifetime for Eircom's poles is far too short.

Arguments in favour of a longer assumed lifetime for poles are supported by a 2016 report prepared by Jeffery J Morrell of the Department of Wood Science & Engineering at Oregon State University on behalf of the North American Wood Pole Council.²⁹ This report advocated a predicted service life for poles of over 40 years, even in the most demanding regions of the US, with the report further stating that the actual lifetime is likely to be in excess of 55 years.

Such an extended pole lifetime would, it should be noted, be consistent with figures outlined in ComReg's Consultation Document. In Para. 385 ComReg sets out a 12-year testing cycle, or 8% of poles tested per year, with a 10% failure rate or 0.8% failure rate per year. Even if the replacement rate due to in-service damage equalled this it would still give an overall replacement rate of 1.6%. This is less than half the expected replacement rate for a 30-year asset life with an evenly aged pole base. This mismatch would eventually lead to a discontinuity in NBV of the kind illustrated in the Frontier report (Section 3.2.3, Figure 4) and highlighted above in response to Q5.

²⁷ CRU/20/077. This CRU consultation on PR5 was issued on 20/7/20 with closing date 18/9/20. At the time of writing no final decision had issued from CRU.

²⁸ GHD/CEPA (Supra), Section 4.4.1B.

²⁹ https://woodpoles.org/portals/2/documents/TB_ServiceLife.pdf

Arising from this, NBI is of the opinion that ComReg ought to reconcile pole lifetime and replacement rates to ensure that the straight-line depreciation approach leads to predictable access prices over time.

NBI is of the view that at this time there is insufficient information to form a view that the 40-year asset life proposed for ducts is too short. However, we urge ComReg to keep this assumption under review and to assess the actual replacement rates as part of the update of the DAM.

Q. 7 Do you agree with ComReg’s preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI’s MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

ComReg states (Para. 418) that “it is likely that additional Eircom resources may be assigned to process and manage the delivery of the requirements for CEI access for NBI’s MIP.” NBI can confirm that this is the case and that this requirement is catered for within the relevant contractual arrangements.

Under the MIP that Eircom and NBI concluded as part of the IAA, Eircom agreed to and has established a MIP Programme Team whose responsibility is to deliver the CEI access programme for the NBP network rollout. Eircom have undertaken that this Programme Team will remain in place until the completion of the NBP network rollout. Eircom’s MIP Programme Team is responsible for the management and implementation of pole replacement and sub-duct access requests within the IA, along with the management of building access requests within the IA and the production of a number of financial and operational reports on a monthly basis.

Under the MIP, NBI has contracted to pay Eircom [X █████ X] for its maintenance of the MIP Programme Team. NBI is not aware if this charge was pre-notified to ComReg but it assumes that it should have been.

In addition, NBI was obliged to conclude a Deposit Agreement with Eircom when it signed the IAA with it in November 2019. This entailed NBI paying Eircom a deposit of [X █████ X] and, in order to secure its later repayment, to commit to minimum usage levels of both pole and duct access over the NBP network deployment period.

NBI notes ComReg’s statement (in Para. 418) that certain process costs – which, within the MIP, relate largely to the cost of work items undertaken by Eircom’s MIP Programme Team – have been excluded from its proposed NBP-specific CEI rental charges. In this regard, NBI believes it would be worthwhile for ComReg to cross-check the cost items Eircom has identified as relating to its MIP Programme Team to ensure that none of these items are also still included in the NBP-specific charges element of the PAM and DAM .

NBI notes, in particular, that ComReg (Para. 416) identifies “field surveying” as a process cost that might be included as part of a one-off charge. ComReg needs to be aware that, under the NBP Project, NBI undertakes its own route survey work in order to compile a detailed survey design for

each of the 227 Deployment Areas (DA) within the IA. This survey design, which, under the Project Agreement, must be approved by DECC before approval to proceed with network deployment is granted, includes details, by route, of all Eircom poles that NBI intends to use within the DA and of these which poles need to be replaced. Similarly, NBI surveys its requirement for duct access within the DA and identifies within its detailed design all duct routes to which it requires access. This survey information is provided to Eircom by DA to notify Eircom of NBI's make-ready requirements for the CEI to which NBI requires access. As a result, Eircom incurs no costs relating to field survey work when fulfilling orders from NBI relating to pole and duct access and so it needs to be confirmed that this cost item is excluded from the proposed NBP-specific charges for pole and duct access.

Two other types of one-off costs also need to be considered by ComReg when determining what costs should be included or excluded from the recurring rental price for NBP-specific duct access. These relate to duct blockages and differential charging for new-build sub-duct compared to 'in situ' sub-duct. In NBI's experience the current charging arrangements for both of these items are, at best, extremely opaque and warrant regulatory scrutiny. Whatever charges are to be recovered in relation to both also need to be pre-notified by Eircom to ComReg.

As regards **duct blockages**, ComReg states in the Consultation (Para. 401) that it has estimated an average of two duct clearances per kilometre of underground route, based on information supplied to it by Eircom. On this basis, ComReg states that *"the proposed costs (and draft prices) determined in this Consultation for duct access include the cost of clearing duct blockages."* NBI's arrangement with Eircom under the MIP is that it recompenses Eircom for the cost of clearing all duct blockages but, on the assumption that these costs are wholly catered for within the regulated duct access charge, ComReg needs to satisfy itself that NBI is not paying twice for this same activity. NBI would welcome clarification from ComReg on this point and how it proposes to address it within the new price control.

In addition, Eircom introduced **differential charging for duct access** under the MIP, with effect from 1st July this year, depending on whether or not NBI was availing of duct access by way of new sub-duct build (for which it is obliged to pay Eircom upfront) or if it was instead using in-situ sub-duct. The differential charging was introduced within the price change for duct access from 1st July that Eircom was entitled to make pursuant to D03/16 and it took the form of differential discounting under the MIP based on whether or not duct access was for new build or in-situ sub-duct. When NBI queried the basis for this new differential pricing, Eircom explained that the discount it was willing to offer within the MIP pricing for in-situ duct had to be less than that offered for new-build

sub-duct because it had incurred different costs for each. Specifically, in the case of in-situ duct, Eircom explained that it had incurred costs relating to the clearance of duct blockages, the repair of manholes and the installation of new sub-duct. Eircom's position was that prices set by ComReg in D03/16 allowed it to charge a rental rate for duct access that recovered a contribution from NBI for the investment made by Eircom in that sub-duct over the 40-year life of the asset. In contrast, in the case of new sub-duct build, where Eircom had not made any recent investment and NBI paid for the cost of installing the sub-duct, Eircom stated that the rental price under the MIP had been reduced so as to recover only the initial investment in the original duct, some of which was fully depreciated.

NBI does not know if Eircom's differential pricing for duct access under the MIP was notified to or was approved by ComReg before it took effect on 1st July. NBI furthermore is not clear to what extent this differential duct access pricing within the MIP is aligned with ComReg's position that the cost of duct access is assumed to include the cost of clearing duct blockages. As outlined above, NBI's over-riding concern on this issue is that it should not be required to pay Eircom twice for the same item. As a result, NBI requests that ComReg examine this issue in detail to make sure that, within the new price control, no over-recovery of costs is taking place, either by way of costs that are included in the recurring monthly charge also being levied separately by Eircom as once-off charges or by any other means.

Q. 8 Do you agree with ComReg’s proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

NBI has reviewed the proposed cost modelling approach in the Draft PAM and Draft DAM to assess its consistency with the processes outlined by ComReg in its Consultation Document and in the Cartesian document. In doing so, NBI checked to see if the models contained any formulaic errors.

Based on the review we carried out, we found that the CEI charges derived in the models were consistent with the approach set out in the Consultation Document and the Cartesian report. We did, though, discover two potential errors in the models relating to the calculation of NBV and depreciation. We explain these in more detail below.

Calculation of NBV

Within the PAM and the DAM, Eircom’s CEI capex in each year is assumed to be incurred at the beginning of the year. In particular:

- In the year the capex is incurred, the annualised capital cost includes the depreciation charge for the full year. For capex in 2020, see PAM sheet “Calc_Annuity” row 513 (BAU pole replacement capex) and DAM sheet “Calc_Annuity” row 1066 (sub duct capex).
- In the PAM, the 2014 closing Net Book Value (NBV) for capex made in 2014 is the actual capex, net of 1 year’s depreciation (see PAM sheet “Calc_Capex”, cell AA43)

It would be more reasonable to assume that the capex is incurred in the middle of the year, which reflect that in practice, expenditure is usually made throughout the year.

Impact on CEI price if changed: Increase or decrease

Correcting the approach would have two competing impacts:

- The change would increase the capital charge for existing assets, as it would increase the opening asset value of these assets.
- It would however reduce the capital charge for forecast future capex, as it effectively pushes back new capex.

Calculation of depreciation

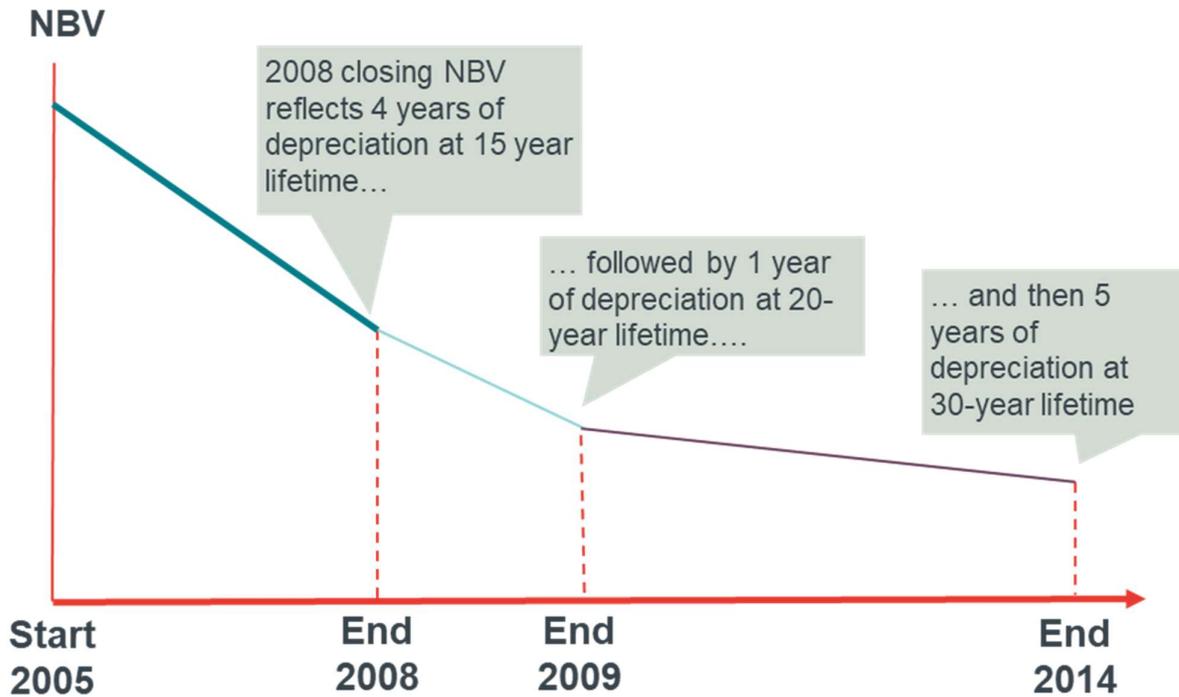
Within the PAM, the first step in calculating the opening value of historic pole capex is to calculate the closing NBV of the assets in 2014. This calculation aims to account for the change in Eircom's pole asset lifetime in September 2009 (from 15 to 30 years), which results in a change in the annual depreciation charge. The calculation is done in stages within the PAM, by calculating in turn the closing NBV of assets as of 2008, 2009, and 2014:

- The closing NBV in 2008 is calculated using an annual depreciation charge based on a 15-year lifetime.
- The closing NBV in 2009 then starts with the 2008 closing value and applies a depreciation charge in that year based on the 2008 NBV and an asset lifetime of 20 years i.e. a depreciation charge = 2008 closing NBV / 20.³⁰
- The closing NBV in 2014 then takes the 2009 closing value and depreciates this based on a 30-year lifetime (depreciation charge = 2009 closing NBV / 30).

This is done in rows 40-43 of sheet "Calc_Capex" in the PAM. See an illustrative example below, for capex incurred at the start of 2005.

³⁰ The 20-year life reflect an assumed lifetime of 15 years over January-September, and 30 years over October-December.

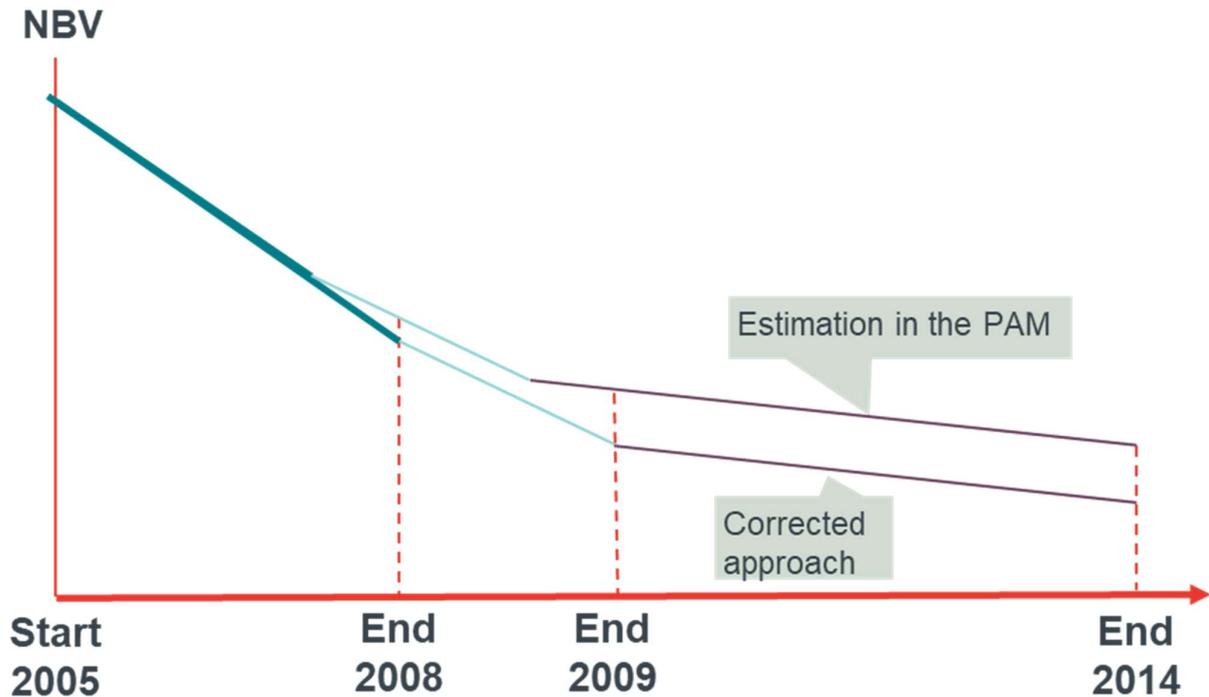
Figure 2: Calculation of closing NBV in 2014 – illustration for capex incurred at the beginning of 2005



Source: Illustration based on PAM model

We agree with this approach, but this has been implemented incorrectly within the PAM. In particular, in row 43 of "Calc_Capex", the PAM applies "pre-2009" depreciation for one year less than is appropriate, and "post-2009" depreciation for one year too many. For example, for capex incurred at the start of 2005, the PAM applies 3 years of "pre-2009" depreciation and 6 years of "post-2009" depreciation, rather than 4 and 5 respectively. This is again illustrated in the diagram below.

Figure 3: Calculation of closing NBV in 2014 – for capex incurred at the beginning of 2005 – PAM approach vs corrected approach



Source: Illustration based on PAM model

Impact on CEI price if changed: Decrease

The error results in an overestimation of the 2014 closing NBV, as the “post-2009” depreciation charge is smaller than the “pre-2009” charge, given the increase in the pole asset lifetime.

This is particularly apparent for the capex incurred at the start of 1994 – these assets would have been fully depreciated by the end of 2008 given the 15 year asset lifetime that applied over 1994-2008, but the PAM estimates a positive NBV for this capex in 2014.

The table before summarises the estimated and corrected 2014 closing NBVs, for the capex incurred in each year over 1994-2008.

Table 2: 2014 closing NBV - PAM estimate vs corrected approach

Year capex incurred	PAM estimate	Corrected estimate	Difference (PAM minus corrected)
1994	344	0	344
1995	107	39	67
1996	550	313	237
1997	100	69	31
1998	587	447	140
1999	641	521	120
2000	278	236	42
2001	802	702	100
2002	2,192	1,964	229
2003	3,872	3,528	343
2004	4,224	3,902	323
2005	5,639	5,264	375
2006	6,703	6,312	391
2007	1,254	1,190	65
2008	7,621	7,270	351

Source: Estimate based on the PAM

NOTE: This error applies only to the PAM, as this does not impact the estimated prices in the DAM. This is because ComReg assumes that all existing Eircom duct assets in the IA are fully depreciated by 2020, meaning they have a starting value of zero in the DAM.

Q. 9 Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to poles and for NBI's MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

NBI is in broad agreement with the proposals set out by ComReg in the Consultation Document on the proposed cost sharing methodologies for NBP-specific pole access in the IA and the Commercial Area.

ComReg outlines four different forms of CEI access and examines the cost sharing methodologies associated with each. As NBI will not be availing of Generic Access in the Commercial or Intervention Areas we will limit our responses on the methodologies for setting the price for Generic Access in these areas to aspects which intersect with ComReg's proposals for cost sharing for NBP-specific access in both the Commercial and Intervention Areas.

Generic Access in the Commercial Areas

ComReg's proposal is that a per-operator approach be used for cost sharing for Generic Access in the Commercial Areas. From a MIP access point of view the exact sharing mechanism for Generic Access is not the most germane aspect. Rather it is the costs which are to be "shared". ComReg's proposal for cost sharing for Generic Access in the Commercial Areas is based on the recovery and sharing of all of Eircom's efficiently incurred shared network costs and common corporate in the Generic Access pricing. Because of this there is no interplay between the cost sharing methodology chosen for Generic Access and MIP Access in the Commercial Areas.

Generic Access in the Intervention Area

A very limited volume of Generic Access to Eircom's CEI (if that) is likely to occur in the Intervention Area. Arising from this, any cost sharing or recovery mechanism will not result in a material contribution to cost recovery within the IA and so, for the purposes of considering the MIP Access sharing mechanism, can be considered independently.

NBP-specific Access in the Commercial Area

NBI notes that the boundaries of the IA and Commercial Areas are set by the Project Agreement between the Minister and NBI and in light of the State aid constraints. The boundary that has been set in this respect reflects the assumed long-term competitive environment in both areas.

As pointed out in the Consultation Document (Para. 465), if ComReg decides to adopt an incremental cost recovery approach for NBI's CEI access in the Commercial Area³¹ then there would be no shared network costs or common corporate costs to be allocated to the rental price set for such access. NBI supports this approach and has set out its reasoning in relation to the cost recovery mechanism in its response to Question 11.

ComReg has also considered in its Consultation Document the modalities of cost sharing if alternative cost recovery approaches were to be adopted. ComReg outlines that a per-operator approach would potentially lead to competitive distortions within the Commercial Area. This would occur where Eircom effectively obtains excessive returns from the CEI access it provides to NBI in the Commercial Area, which ultimately is paid for via State subventions, in an area of the country outside of the IA and so is where normal competitive conditions prevail. Because of the structure of the NBP such value transfer of State funds is not available to competitors of Eircom in the Commercial Area. Given the scale of NBI's CEI access for the purposes of the NBP network deployment, such a transfer and the consequent market distortion has the potential to be very material.

In considering the per-customer approach to cost sharing within the Commercial Area, ComReg clarifies that the customers it is talking about here are those located within the Commercial Area. It follows that, under a per-customer approach, the number of customers attributed to NBI whose service will be delivered via the NBP network in the Commercial Area will be zero and that, as a result, there will be no requirement for NBI to make a contribution to cost sharing for the CEI access it uses in the Commercial Area.

The nature of the NBP Project means that NBI's network deployment in the Commercial Area is incremental to the normal competitive operation of the market in these areas. It is also the case that the NBP project is solely dependent on State aid intervention which was not guaranteed to materialise. This means that Eircom's investment and cost recovery planning in the Commercial Area has been based solely on the normal competitive commercial activity

Consider the counterfactual where the NBP contract was either not awarded at all or else awarded to an entity that used an alternative deployment solution, not involving Eircom's CEI assets. In this

³¹ Consultation Document, Section 5.4.1.

scenario Eircom would have no choice but to seek to fully recover its costs from its commercially derived revenue. Indeed, it is the case that Eircom's current price controls reflect this position as the basis for cost recovery.

NBI's NBP-specific access to Eircom's CEI arises from a State intervention to address a specific market failure within the IA relating to the deployment and availability of fibre-based NGA networks and services, in particular FTTH-based broadband services. This intervention is incremental and separate to previous regulatory interventions by ComReg relating to competition within the wider market. Care must be taken to avoid intertwining the State Aid market intervention with ComReg's previous regulatory actions. A failure to do so runs significant risk both of distorting competition in the wider telecoms market and invalidating the State Aid approval relating to NBP.

Put simply, a sharing mechanism which treats the NBP-specific CEI Access in the same way as Generic Access would yield windfall revenue to Eircom paid for by the State. Even where the cost recovery mechanism attributes costs to all access seekers the sharing of the proportion of such costs should take account of the fact that the NBP-specific Access Seeker is subject to usage constraints which mean that it is not similarly situated as Generic Access Seekers. This difference is not a matter of commercial choice or financial constraints but is bounded by the State Aid approval relating to NBP. As such it is a legal and contractual constraint.

Differential cost sharing apportionment for an NBP-specific Access Seeker that is not similarly situated does not impair Eircom's ability to fully recover its costs from normal commercial activity in the Commercial Area, from either its own commercial operations, from Generic Access Seekers and from users of its wholesale services more generally. In this regard it is NBI's view that the principles informing any sharing mechanism are similar, as ComReg itself has pointed out ³² to those which underpinned the Line Share pricing decision.

The economic principles relating to Line Sharing were examined in a report³³ prepared for ComReg in 2008 by TERA Consultants which formed the basis of ComReg's Decision (set out in D04/09) on the regulated rental charge for Line Sharing. In this Decision, ComReg switched from using a 50:50 methodology for setting the Line Sharing charge (i.e. where Eircom and the other operator using

³² Paragraph 469 of the Consultation document.

³³ ComReg 08/106a.

the line each paid 50% of the associated costs) to one based on the incremental cost incurred by Eircom in providing the line.

The rationale for switching from the 50:50 approach to one based on incremental cost in setting the rental charge for Line Sharing was that, with retail tariffs fully rebalanced, the full cost of the local loop was being recovered, on a Forward Looking Long Run Incremental Cost ('FL-LRIC') basis, via the monthly rental price for the Unbundled Local Metallic Path ('ULMP'). In light of this, continuing to set the Line Sharing charge on a 50:50 basis would have resulted in excessive cost recovery. Instead, ComReg determined that the rental charge for Line Sharing should be derived, on a FL-LRIC basis, as a component of the ULMP price. The revised regulated charge, provided for in D04/09, was set on this basis.

NBI agrees with ComReg that a move to a charging principle based on incremental cost would be justified in the case of NBI's NBP-specific CEI Access in the Commercial Areas, as the economic circumstances are broadly similar to the Line Share case.

NBI's NBP-specific Access to poles in the NBP IA

When considering NBI's NBP-specific access to Eircom's poles, ComReg considered three possible sharing mechanisms, i.e. a primary/secondary user approach, a per-operator approach and a per-customer approach. NBI agrees with ComReg's preliminary conclusions that a per-customer approach is the best option both in terms of ensuring appropriate cost recovery and to drive the correct incentives with Eircom, in particular relating to Copper Switch-off.

NBI notes ComReg's analysis setting out the potential difficulties with a primary/secondary user approach. NBI agrees that the mitigations required to address these would lead to a degree of complexity and in all likelihood would still not fully resolve all of the issues. NBI agrees with ComReg that this approach should not be pursued.

A per-operator model for cost sharing is superior from a cost causation and revenue realisation point of view than a primary/secondary operator approach but this option also has a number of drawbacks.

The first relates to monitoring. While NBI can identify each pole it wishes to occupy it is not clear what validation mechanism would be employed to determine the occupancy on a pole. NBI notes that in a per-operator model the notional cost causation is pole occupancy even if the cable on the pole is not carrying any electronic communications traffic. While Eircom has a clear incentive to

track NBI's fibre deployment on its poles it has fewer incentives to track its own cable recovery as assiduously. In the context of CSO does Eircom "self-certify" that it no longer occupies a pole or is this independently verified? Whatever method is used, the per-operator charge would need to be based on appropriately verified pole occupancy, i.e. it would not be sufficient for Eircom to demonstrate that the copper cables on its poles along a particular route no longer carried any live traffic but instead that all the copper cables on the route had been removed and so that the sole occupant on the pole was NBI.

A per-operator approach has a further drawback in that it would decouple costs relating to pole access from downstream cost recovery. In the initial stages of NBI's rollout, when customer take-up of FTTH services on the NBP network would be very low, it would face having to pay 50% of the cost of poles while only having access to minimal downstream service revenues. On the other hand, Eircom would maintain its downstream copper-based service revenues (because of its national pricing structure) while at the same time benefiting from the additional wholesale revenues it is earning from NBI's use of its poles. Such windfall gains would provide Eircom with a revenue stream that could potentially be deployed to other commercial activities which would strengthen its competitive position in the Commercial Areas.

A per-operator model could also produce distortive incentives for Eircom to accelerate CSO prematurely, by migrating customers to non-copper solutions such as fixed cellular and 4G/5G mobile broadband services. Eircom would have incentives to "force migrate" residual copper customers even before they could potentially be served by NBI and it would have a clear incentive to do this, in light of the choice it faces between continuing to offer low revenue copper-based services to a limited number of customers over long pole routes or else decommissioning its copper network and pushing these customers onto non-copper solutions. In this scenario customers would, at least in the short-term, face being moved down the value chain to more limited capacity services instead of migrating via an upgrade path to services offering higher broadband data speeds.

The per-customer approach, by contrast, helps to smooth the transition from a position where Eircom fully pays for shared costs relating to CEI access to a long-term situation where, post-CSO,

it is NBI that fully pays for these costs.³⁴ Absent NBI Eircom would have to absorb all of these costs. A per-customer approach to cost sharing scales the NBI contribution to shared costs to the opportunity for cost recovery which Eircom loses as customers migrate from Eircom to NBI. As is set out in the Frontier paper a properly designed per-customer sharing mechanism would ensure that Eircom is adequately compensated for this loss of cost recovery.

The Frontier paper also outlines that in order to ensure that Eircom it is not over compensated an appropriate counterfactual must be used to establish the correct level of sharing attributable to migration from Eircom as opposed to the growth in NBI's base due to market expansion. This requires identifying a baseline scenario where Eircom would have to meet the full costs in the absence of NBI.

In addition a properly designed per-customer sharing mechanism would avoid potential adverse incentives outlined in the Frontier paper such as premature acceleration from copper in the short term and delayed migration in the longer term while at the same time providing positive incentives for Eircom to actively encourage uptake of fibre-based services. Such a design would also provide predictability regarding the trajectory of the sharing burden.

³⁴ Note, though, that, as stated earlier, Eircom may make continued use of its CEI in the IA post-CSO and this use will need to be factored in by ComReg from a cost-sharing perspective. The simplest solution might be to categorise all poles which carry fibre as non-IA poles.

Q. 10 Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI's MIP access to duct in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

In light of ComReg's proposals for a differentiated NBP-specific price control for duct access both within the NBP IA and for transit purposes in the Commercial Areas, the arrangements for the pricing of Generic Access to duct by other operators are not directly relevant to NBI and so we have no comments to offer on the cost sharing methodologies ComReg proposes to apply in order to determine the rental price of such access.

In relation to NBI's use of Eircom's ducts in the IA and for transit access in the Commercial Area, NBI supports ComReg's proposal that cost sharing for such access should be set on a per-customer basis. The logic for adopting a per-customer approach in the case of duct access is largely the same as for poles and the implementation issues are also the same. Please see NBI's response to Q9 above and the Frontier report for further details on NBI's position in relation to adopting a per-customer basis for cost sharing. In addition, as we have also pointed out in our response to Q9 above, the per-customer formula should be set on the basis of NBI's projected number of fibre connections at CSO, as this sends the correct incentives to Eircom to encourage migration of customers from copper to fibre.

NBI notes ComReg's statement (Para. 547) that, in light of the fact that the NBV of the Eircom duct network in the IA is close to zero, the majority of costs to be recovered by Eircom in its provision of duct access to NBI in the IA will relate to the repair and remediation of ducts. This makes it even more imperative that no double-counting occurs in relation to the charges that are levied on NBI for duct access. Please see NBI's response to Q7 above for further detail on this.

Q. 11 Do you agree with ComReg’s preliminary view on the use of number of customer lines and in particular the use of the number of each operator’s active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI’s MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI’s transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator’s active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI’s transit access in the Commercial Areas.

NBI does not agree with ComReg’s preliminary view that the per-customer approach to cost-sharing for NBP-specific CEI Access in the IA should be based on the number of each operator’s active connections on their networks within the IA.

ComReg’s approach risks over-compensating Eircom compared to the existing per-operator approach. This is because under ComReg’s proposals the key metric in determining who pays what (and by when) is the number of Eircom copper lines that are in service within the IA. This ignores the existence of other broadband platforms in the IA, i.e. fixed wireless and 4G mobile, on which many households are dependent for connectivity at home, which is needed in light of the ongoing Covid crisis. As the NBP network is rolled out – providing download speeds of 500 Mbps and higher – it is likely that significant numbers of these customers located within the IA will quickly migrate from these ‘fringe’ platforms and so the overall active base within the IA will rise, compared to the situation now.

In addition, NBI is strongly of the view that the possibility of Eircom being over-compensated needs to be considered in light of the counterfactual position where the NBP contract was not awarded at all or was awarded to a company that did not require the use of Eircom’s CEI. In such a scenario, Eircom would have no option but to recover the cost of its entire CEI network in the IA from whatever volume of active customers it has. Clearly, it cannot recover these costs from alternative platforms or from unserved demand. The introduction of State aid to deal with a market failure in relation to supply should not, then, provide additional revenue for Eircom arising from the CEI Access cost sharing mechanism over and above what it would otherwise have obtained. This view is supported by the Frontier paper which also sets out the need to assess the per-customer sharing burden by reference to an appropriate counterfactual.

ComReg's proposal to use the total volume of NBI's active customers would overcompensate Eircom in comparison to its current situation. This is because the proposal fails to take account of the fact that the NBI volume of active users is comprised of two elements. The first is active Eircom customers who migrate from Eircom and in respect of whom Eircom should be compensated for the loss of the shared cost recovery opportunity (for as long as they would have remained active, absent NBP) and where NBI should bear some burden for Eircom's shared costs. The second component of NBI's active base arises from those additional customers who were not previously active customers of Eircom and for whom Eircom loses no shared cost recovery opportunity. In respect of these, NBI should not make any contribution towards Eircom's shared costs.

ComReg's proposal also has a variable denominator as the total volume of active users is growing based on the incremental market expansion driven by NBI.

The inclusion in both the numerator and the denominator of the variable market expansion effects of NBI over time means that ComReg's proposal results in NBI bearing a larger proportion of Eircom's shared costs than is warranted by the lost cost recovery opportunity that Eircom suffers due to NBI's presence in the market. For this reason, the proportion of the costs to be borne by NBI should only be the proportion of the existing Eircom base that migrates to retail FTTH-based services provided over the NBP network.

It is possible to keep the benefits of the per-customer approach while addressing the risk of overcompensating Eircom by modifying the basis on which the denominator is determined.

NBI believes that this could be achieved by using the projected volume of active NBI customers at the completion of CSO in the IA as the denominator. This would consist of Eircom's base in the counterfactual and the market expansion due to NBI. Using the total volume of NBI active customers as the numerator automatically compensates for the market expansion component. This is because it would consist of the volume of customers that had in effect migrated from the counterfactual and for which NBI should bear some of the shared costs and those active customers added by virtue of market expansion and for which Eircom has no lost shared cost recovery opportunity. At CSO the numerator would consist of Eircom's base in the counterfactual and the market expansion due to NBI.

This approach has a number of other advantages. These include that fact that there is a "fixed" additional contribution from every additional customer that NBI adds. This is in contrast to the ComReg approach which has a non-linear effect as the denominator is increasing due to market expansion and the contribution from each individual added customer consequently decreases. The

linear effect gives consistent incentives over time for Eircom to migrate customers to NBI. It avoids a situation where there are declining incentives for it to migrate residual copper customers as NBI's active base grows. It also removes the incentive that Eircom has, approaching CSO, of simply shedding copper customers independently of whether they migrate to the NBI network or not. This analysis is also reflected in the Frontier paper.

In terms of practicality the NBI suggested approach has the virtue of simplicity. Its projected uptake of fibre connections is known and has been validated as part of the business case activity for the NBP Contract award. Selecting an appropriate timeline for the full completion of CSO within the IA allows the denominator to be set. This is likely to be well beyond the end of the proposed price control period and so errors in forecasting the exact date are unlikely to materially affect the sharing burden during the period. The forecast could be reviewed as part of the process to consider any follow-on price control at the end of the current price control period.

In terms of the numerator it is only required to have the total active NBI users at a point in time. By definition these are only in the IA and NBI can confirm that this information will be readily available for supply to ComReg as it already forms part of NBI's reporting to DECC. By contrast ComReg's proposed approach would also require Eircom to identify its volume of active users in the IA. It is not clear that this information is readily available or verifiable.

Where ComReg adopts an approach which requires more granular reporting of either roll-out or active numbers, NBI would only be in a position to provide this on the basis of its Deployment Areas. As we have already pointed out elsewhere in this response, these will not correspond to Eircom's exchange areas.

Q. 12 Do you agree with ComReg's preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or undercharging by Eircom? Please provide reasons for your response.

In the Consultation Document (Para. 578) ComReg acknowledges that the per-customer approach it has proposed gives rise to greater price uncertainty than other cost-sharing mechanisms. ComReg also points out that NBI will have to provide details of active customers on quarterly basis to both ComReg and DECC.

As outlined in our response to Question 11, NBI believes that modifying the proposed methodology to use the total projected NBI active base at the completion of CSO in the IA as the denominator would only require total active NBI users in the IA to be reported on an ongoing basis.

NBI notes that ComReg has proposed that the prices be set on the basis of forecasts for the first two of the five years of the price control.

NBI suggests that if a stable denominator using the NBI projected active base at CSO is used then, after the initial two-year period, it may be more operationally efficient to continue using a forecasted approach based on forecasted uptake of fibre connections on the NBI network over an annual or multi-annual basis to set the sharing burden rather than a quarter-by-quarter reconciliation and adjustment.

An alternative would be for Eircom to move to billing in arrears using actual active customer numbers to determine the billed sharing burden for the period for which the charges are levied.

In practical terms NBI notes that ComReg can compel Eircom to provide it with data on active users or to update the PAM/DAM by way of the SMP remedy but it cannot compel NBI to provide information directly to Eircom. To obtain information from NBI ComReg would have to exercise its formal information gathering powers under Section 13D of the Act. This information would only be deliverable to ComReg. ComReg has a duty of confidentiality and it is not clear that ComReg could then lawfully forward or disclose this information to Eircom, even if only for the purposes of validating Eircom's updating of the model.

There is also an asymmetry in the consequences in failure to comply with an SMP obligation as opposed to failure to comply with a formal information request. For the reasons outlined, then, NBI

takes the view that ComReg might want to manage the collection of the required data via the use of its formal data gathering powers.

These practical considerations could, however, be avoided altogether if ComReg held the PAM/DAM and updated them on the basis of information obtained using the same legal mechanism from all relevant parties.

NBI notes that its proposal for the calculation of the per-customer sharing burden uses NBI figures which have significant levels of external independent oversight from DECC on an ongoing basis. NBI's roll-out commitments are similarly overseen and NBI's ability to vary or "game" expected coverage or uptake rates is extremely limited.

This is in contrast to ComReg's proposal which relies heavily on Eircom's internal data. In addition, Eircom exercises significant control over the treatment of its own active base, in particular its ability to affect the rate of migration to NBI or migration to other platforms. As this forms a significant portion of the ComReg denominator in the short to medium term ComReg's proposal effectively places control of the pricing back into the hands of what it has determined to be an SMP operator i.e. one that can act independently of the market.

On balance between the two proposals NBI's makes the sharing mechanism subject to a greater degree of independent oversight and less amenable to gaming by an SMP operator.

Q. 13 Do you agree with ComReg's preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

This issue is not of direct relevance to NBI and so we have no comments to offer by way of response to ComReg's preliminary view on the issue.

Q. 14 Do you agree with ComReg's preliminary view on a differentiated WACC rate of 4.03% for Eircom's CEI in the context of access by NBI's MIP NBP IA and for NBI's transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

NBI agrees with ComReg's preliminary position that there should be a differentiated WACC for Eircom's CEI in the context of its provision of CEI access to NBI for the purposes of the NBP network deployment in the IA and in the Commercial Area. NBI further agrees that the WACC for CEI should be updated on an annual basis.

Chapter 4 of the Frontier report sets out an analysis of the supporting arguments:

- The risk profile of CEI in the IA - both demand risk and cost risk – is quite different to other aspects of Eircom's wholesale or retail electronic communications business, and is more akin to a distribution utility such as water or electricity;
- Although it has been argued that a different WACC is not appropriate for different aspects of wholesale and retail telecoms because demand is interchangeable and assets are difficult to identify, for CEI the assets and demand are clearly identifiable. Indeed, many telecoms operators - fixed and mobile, Eircom included – have divested part of their CEI (such as towers) because these physical assets can be more efficiently financed if separated from downstream activities.

NBI agrees with ComReg's view that the long-term rental of the vast majority of Eircom's poles in the IA is quite different than rental of wholesale telecommunications generally. If we consider, for example, wholesale broadband provision in competitive areas, there may be 1,000,000 homes passed but only 400,000 connected. There is constant churn as some homes connect to a broadband service that uses an Eircom wholesale input while some others disconnect. There is varying demand for peak throughput at different points in the network depending on the mix of VUA and Bitstream. The usage typically grows each year but by random amounts, requiring upgrades that are somewhat unpredictable in scale, location and timing.

In contrast, given the requirement under the NBP Project Agreement for NBI to pass all premises in the IA regardless of whether a connection is forthcoming, NBI pole rental demand is likely to scale quickly and be stable and predictable for very long periods of time. Furthermore, as the rationale behind the NBP is to provide NGA access to areas where commercial operators have not invested

and do not intend to invest, it is highly unlikely in the short to medium term that there will be overbuild of network or direct competition with the NBP for wholesale provision of NGA services. As such NBI's pole rental demand closely resembles a core utility like water. Indeed, water would be a better fit than other utilities such as energy, as electricity or gas distribution networks operate in an environment where end-users can switch between different energy sources, such as oil, wood, solar and so on. The risk in electricity and gas distribution networks also reflects cyclical effects in consumption, to the extent that distribution networks are affected by changes in consumption. As a result, if ComReg decides to proceed with a separate WACC for CEI – which NBI believes it should – then we would expect the allowable return to be closer to water than to energy utilities.

This is supported by the view of Frontier Economics, who conclude that the systematic risks associated with CEI access to NBI for the purposes of the NBP is more akin to a water utility than other utilities such as an electricity network provider. In particular, Frontier points out that:

- The demand associated with CEI access by NBI is not affected by economic cycles. Water utilities are less pro-cyclical than energy utilities. For example, the global energy demand is set to fall by 5% in 2020 according to the IEA World Energy Outlook 202035 as a result of the COVID-19 pandemic, whilst there is no such evidence of water usage being affected.
- In addition, water utilities also bear no technology risk, as there is no real prospect of significant structural changes in the water sector. Energy utilities are however face uncertainty associated with reaching a Net Zero economy:
 - The future demand for gas is highly uncertain. There are future scenarios where the existing networks continue to deliver low/no carbon sources of gas. In other scenarios, gas demand would fall markedly.
 - Electricity networks are facing significant challenges, with high investment programmes needed to adapt to the penetration of renewables and electrification of sectors. For example, uncertainty over the level (and location) of electricity demand from new technologies (such as electric vehicles), and of new electricity generation sites (such as

³⁵ <https://www.iea.org/reports/world-energy-outlook-2020>.

wind farms), means there is significant uncertainty around the required capacity on electricity distribution networks in different areas.

Water companies such as Irish Water are mainly government-funded, which can be considered comparable to the provision of CEI to NBI which is, in effect, backed by the State through the provision of the NBP subsidy and associated step-in-rights. Energy utilities do not typically operate with the same degree of government funding. Regarding the specific value of the WACC, NBI provided its comments on the generic WACC parameters included in the proposed CEI-specific WACC in its response to ComReg's WACC consultation.³⁶ As a result, there is no need to repeat these here.

NBI have however calculated the implied value of the WACC, if the value of the asset beta and gearing reflected the values for water utilities outlined in the ComReg consultation. This indicates that a WACC estimated based on water utilities would be 3.83%, as set out in the table below. To reach this figure, an asset beta at the mid-point of the range estimated in CRU's RC3 Water consultation (0.28 to 0.36) was used, along with a gearing of 50% as also used in that consultation.³⁷

Table 3: ComReg's proposed WACC vs WACC based on water utilities

Parameter	ComReg's proposed WACC	WACC based on water utilities
Nominal risk-free rate	0.824%	0.824%
Nominal ERP	7.21%	7.21%
Asset beta	0.34	0.32
Equity beta	0.76	0.64
Nominal cost of equity	6.30%	5.44%
Nominal cost of debt (pre-tax)	1.44%	1.44%
Gearing	55%	50%
Tax	12.50%	12.50%
Nominal pre-tax WACC	4.03%	3.83%

Source: NBI, based on WACC parameters for water utilities outlined in ComReg 20/81

³⁶ NBI's response to ComReg's WACC consultation is contained in ComReg Document 20/96c, available at: <https://www.comreg.ie/publication/review-of-weighted-average-cost-of-capital-wacc-submissions-to-comreg-document-19-54-and-to-draft-decision>

³⁷ See Europe Economics report, Section 3.2.

In relation to **the inflation forecasts used by ComReg**, NBI has some further observations, which it believes are relevant in the context of setting the NBP-specific WACC.

Put simply, this is because of the prevailing inflation rate within the Irish economy and the expected inflation rate over the next few years are both well below the 1.7% figure assumed in the WACC calculation. At the present time the Consumer Price Index (CPI) for Ireland is measured at MINUS 1.5%, i.e. over 3% lower than the assumed figure.³⁸ Alternatively, if ComReg were to consider the expected Irish inflation rate as per the latest Central Bank of Ireland forecasts for the next three years³⁹ (as the initial price is expected to apply based on model costs for 2020-2022), then the initial inflation figure should be 0.33% (i.e. the simple average of -0.6%, 0.2% and 1.4%).

The European Central Bank (ECB) currently expects Eurozone inflation to be negative in the short term, but positive on average over 2020. The ECB's latest (Q3 2020) quarterly forecast for its Harmonised Index of Consumer Prices (HCIP) shows that the Eurozone inflation rate is expected to increase from 0.4% in 2020 to 1.0% and 1.3% in 2021 and 2022, respectively.⁴⁰ The ECB's current expectation appears to be that the period of deflation will be limited, with the inflation rate averaging 1% over the course of 2021.⁴¹ It should be noted that the ECB's latest forecast estimates that Eurozone inflation will not rise above 1.3% over the next three years, which is well below the ECB's target annual inflation rate of below, but close to, 2%.

In its WACC Notice⁴², the Commission states (at Para. 63) that, for Eurozone economies, it is appropriate to use a Eurozone-wide inflation estimate. The Notice goes on to specify that the ECB's five-year inflation forecast may be used. The current ECB five-year inflation forecast is 1.6%. The Notice also provides (at Paras. 64-7) a role for BEREC to estimate and publish WACC parameter values on an annual basis. BEREC's first report in this respect was published in June

³⁸ <https://www.cso.ie/en/releasesandpublications/er/cpi/consumerpriceindexseptember2020/>.

³⁹ Central Bank of Ireland Quarterly Bulletin October 2020 (Table 2): <https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/qb-archive/2020/quarterly-bulletin---q4-2020.pdf>

⁴⁰ https://www.ecb.europa.eu/stats/ecb_surveys/survey_of_professional_forecasters/html/table_hist_hicp.en.html

⁴¹ See comments by ECB President Christine Lagarde to the European Parliament's Committee on Economic and Monetary Affairs on 28th September 2020:

https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200928_2_transcript~aee0db0fa5.en.pdf

⁴² Commission Notice on the calculation of the cost of capital for legacy infrastructure in the context of the Commission's review of national notifications in the EU electronic communications sector (2019/C375/01).

2020, in which it states that the latest available five-year inflation forecast (as at March 2020) was 1.7%.

However, it is worth emphasising that this WACC Notice is appropriate for an overall, unsegregated electronic communications business. In calculating a separate WACC for CEI, as if it were provided by a separately financed entity, ComReg correctly adjusts the ERP, Beta and Gearing to those that would apply to such an entity.

In the case of inflation, the Commission and BEREC have proposed a treatment which is designed to encourage discretionary future investment. In the case of reuse of CEI assets, there is no need to encourage enhancement or expansion (NBI will be responsible for this activity in the IA via the deployment of the NBP network). Therefore, we consider that an alternative treatment could apply.

If ComReg intends to update the WACC for CEI annually, ComReg could use a one-year forecast for inflation and apply a correction for over- or under-estimation at each review. Alternatively, to the extent that ComReg intends to undertake an annual review of CEI access charges to reflect actual investment and operating cost, it might make sense for ComReg to apply a real WACC rate (i.e. excluding inflation) and to add the actual annual inflation experience at the time of each review when determining whether the return achieved by Eircom fell short or exceeded that appropriate allowable return. Such an approach would eliminate the kind of guesswork that is inherent in the use of nominal WACC rates.

NBI also notes that there has been some controversy over recent WACC determinations made by the water services regulator Ofwat in the UK. Appeals to these determinations, which were made in the context of Ofwat's proposed 2020-25 price control, have resulted in the Competition and Markets Authority (CMA) proposing partial adjustments to the WACC rates determined by Ofwat.⁴³ For the four water companies who appealed the Ofwat determination, the CMA is proposing to apply a nominal WACC of 3.5% compared to the 2.95% rate determined by Ofwat. The thirteen other water companies operating in England and Wales did not appeal Ofwat's decision and so the CMA proposes that the original 3.5% WACC rate should still apply to them.

⁴³ <https://www.gov.uk/government/news/provisional-findings-published-in-cma-review-of-water-price-controls>

Ofwat recently responded to the CMA's proposals to adjust its WACC determination. In doing so, Ofwat pointed to errors in the CMA's approach and it strongly defended its approach to setting the water companies' WACC at the level it had determined, pointing out that the CMA's proposals would, in light of the higher WACC, mean that any increase in returns enjoyed by the water companies would be "likely to return to dividends".⁴⁴

Regardless of the respective merits of the arguments advanced by Ofwat and the CMA, we note that many of the parameters determined by Ofwat and reviewed by the CMA are closely aligned with the values chosen by ComReg in its consideration of a separate WACC for CEI access in the context of NBP. ComReg proposes a higher risk-free rate (0.824%) than that put forward by Ofwat (0.58%), but marginally lower than the CMA provisional determination (1.02%).

ComReg is also proposing to adopt a gearing figure of 55% compared to the Ofwat and CMA figure of 60%. This is somewhat offset by a large difference in cost of debt, where ComReg uses an EU recommended euro rate for telecoms debt in its WACC calculations and so the higher rate the CMA uses for sterling denominated debt would not be appropriate when setting a separate WACC for CEI access in the context of the NBP in Ireland.

Finally, NBI notes the differential in corporate tax rates between Ireland, where a rate of 12.5% applies, and the UK, where the prevailing rate used in recent regulatory decisions is 17%. It follows that ComReg's proposed 4.03% WACC for CEI access in the context of NBP is more generous from the perspective of the regulated entity than is the CMA's proposed 3.5% rate.

⁴⁴ See <https://www.ofwat.gov.uk/wp-content/uploads/2020/10/Reference-of-the-PR19-final-determinations-Overview-response-to-CMA-provisional-findings.pdf>

Q. 15 Do you agree with ComReg's preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

NBI agrees with ComReg's proposal that Eircom should be able to recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced.

The analysis set out by ComReg in respect of the two options clearly outlines relative advantages and disadvantages of both approaches.

NBI is of the view that pole furniture is an asset associated with the cable and not the pole. The nature and form of the furniture is determined by the cable configuration and not the pole. As a result, the cost associated with relocation of the furniture should be attributed to the cable and not to the pole. The approach whereby the costs associated with furniture relocation are paid to Eircom by way of a single upfront charge potentially allows the Access Seeker to capitalise these costs as part of its cable asset deployment.

NBI also notes that one-off charges would allow the charge to be directly attributed to the specific costs associated with a particular pole replacement in a single billing cycle. The approach whereby Eircom capitalises the cost results either in some type of averaging of costs across all replacements to derive a single recurring charge with the associated risk of under or over recovery of costs. Alternatively, it would involve assigning a different recurring charge relating to the actual costs incurred across multiple billing cycles against each pole where the cost has been incurred.

In both of the scenarios outlined by ComReg NBI is of the view that only the incremental costs of dealing with NBI pole furniture should be incorporated into the charge. Over the 25-year time horizon of NBI's usage of the pole it is likely that Eircom would have to replace the pole for its purposes given the assumed asset life of the pole (currently at 30 years). Therefore, Eircom would have to incur the cost of relocating its own furniture. Where Eircom already has deployed staff to relocate its own furniture the incremental costs to deal with NBI furniture will exclude mobilisation costs and will only involve the direct additional incremental effort.

As NBI has already pointed out in its response to Q.4, where pole replacement undertaken in the IA involves relocating or refixing pole furniture that Eircom requires for its copper network, costs

relating to such activity should not be borne by NBI. Instead the pole replacement cost included within the PAM should only include the investment required for a new pole that is capable of being used in the deployment of the fibre network.

NBI's view is that these costs are unlikely to be amenable to efficiency gains over time and are primarily labour related and therefore are likely to track or exceeded inflation. Therefore, the NPV of future relocation of pole furniture will approximate to present day costs. In these circumstances even where pole replacement occurs earlier than otherwise required due to the NBI deployment the charge levied on NBI should only be the incremental cost as the costs associated with Eircom's furniture rearrangements have simply been brought forward at a constant NPV.

Finally, as ComReg will be aware, Eircom has been seeking to levy a recurring "pole furniture charge" on NBI in the form of a surcharge on the annual pole rental charge under the MIP, with this surcharge set at €5.69 per pole. NBI has consistently opposed the introduction of such a recurring surcharge on the basis that no clear basis had ever been established for it. NBI is satisfied that, in light of the discussion in the Consultation Document on charges relating to the placement of pole furniture, the notion of a recurring "pole furniture" charge may now be dispensed with.

Q. 16 Do you agree with ComReg's preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg's proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

NBI agrees with ComReg's preliminary views on the treatment of costs related to tree trimming, both in relation to trimming undertaken in advance of cable deployment and trimming associated with pole replacement. In relation to the former, however, it will not necessarily always be the case that this work will be carried out by Eircom but, if it is, a one-off charge for such activity would be appropriate.

Where tree trimming between poles is required to prepare aerial routes in advance of cable deployment this activity and costs are not intrinsic to the supply of CEI. In relation to the deployment of NBI cables this activity need not be carried out by Eircom, it could be directly contracted by NBI to a third party. Requiring that the tree trimming associated with preparing routes for cable deployment is recoverable as a one-off charge ensures that Eircom's CEI charges are sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested.

NBI believes that where trimming is required to facilitate cable deployment this will have the effect of reducing the need for Eircom to carry out preventative maintenance related trimming. In addition, it is likely that trimming associated with route preparation will also reduce in-life cable damage thereby improving Eircom's Mean Time Between Failure (MTBF) and reducing its overall maintenance costs. While on a single route this might not be material, given the scale of the NBI uptake of CEI in the IA the savings are likely to be non-trivial. Therefore, any one-off charges levied by Eircom (and agreed to by NBI) related to the preparation of cable routes should be discounted to take account of these maintenance savings to Eircom.

By contrast tree trimming related to pole replacement is required to allow the pole to be erected or pole furniture attached and it is a cost necessary for the supply of the CEI service. The cost of excavating the hole for the subterranean portion of the pole is recovered in the rental price and there seems to be no valid reason to treat the costs associated with clearing space for the above ground section of the pole in a different manner.

Q. 17 Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI's MIP as an upfront fee levied on NBI's MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

NBI regards as interesting ComReg's proposal that Eircom might recover its incremental investment as an upfront fee rather than as a recurring annual rental charge. While NBI does not envisage entering into such an arrangement with Eircom at any stage in the immediate future, it believes ComReg is correct to identify it as an option that might be used at some point, should both parties agree to it.

From NBI's perspective the option of an upfront fee would raise obvious issues from a project funding point of view, which would inevitably impact on the timing of agreed subsidy payments under the Project Agreement it has concluded with DECC. As a result, any discussions with Eircom about such an arrangement would, of necessity, also need to involve DECC.

Were such an arrangement to be agreed, it would also be necessary for an agreement to be put in place – which, in light of the significant State subsidy, would need to include DECC as a party – guaranteeing continued availability of high-quality pole and duct access over the lifetime of the Project. Any such agreement would, of necessity, need to include an appropriate Service Level Agreement (SLA) underpinning the commitment to provide high-quality pole and duct access, with stringent penalties for non-performance.

In reality, it is difficult to envisage a situation where such an agreement would prove to be of mutual interest to the three parties. That said, it is good that ComReg sees no difficulty in it being pursued by the parties should they so wish at some future point.

Q. 18 Do you agree with ComReg's preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

NBI agrees with ComReg that Eircom needs to develop its cost accounting systems (including its HCAs) in a way that ensures its CEI costs can be reported in a meaningful and transparent way. In NBI's opinion, the proposals made by ComReg in this respect are necessary but are not sufficient to enable the costs and returns relating to Eircom's CEI to be reported in a meaningful way.

For Eircom's reporting to be sufficiently transparent, its accounting systems and HCA reporting format needs to be developed in such a way that it captures revenues, costs and returns from its CEI-related activities. It should be capable to do this, given that Eircom's Regulatory Accounts typically contain a significant amount of information on each main wholesale service it provided.

By way of illustration, the most recent set of Regulatory Accounts, for the financial year ended 30th June 2019, contains, at page 14, a statement of Average Cost and Revenue by service. This shows both the current (2018/9) and prior year (2017/8) data.⁴⁵ In these Financial Statements services are analysed by connection and rental for various products, including LLU and Line Share connection and rental. These vary in revenue from €23,000 to €1,037,000. It would make sense for CEI services, analysed by Project fees, Pole Rental and Duct Rental – all of which are likely to have much larger annual incomes for Eircom compared to LLU and Line Share - should be shown in the same level of details in such a statement.

Information within Eircom's Financial Statements relating to CEI should separately identify revenue, operating cost, return, percentage return on turnover, mean capital employed, and ROCE at a summary level and volume, average revenue, FAC unit cost and the ratio Average revenue/cost for each product. NBP-specific CEI access charges represent a significant new revenue stream for

⁴⁵ Historical Cost Separated Accounts for the year ended 30th June 2019, Eircom Limited, available at: https://www.eir.ie/opencms/export/sites/default/.content/pdf/regulatoryinformation/hca_fy_1819.pdf

Eircom and so this activity deserves to be made subject to the same auditing and levels of transparency that apply to other existing forms of wholesale access provided by the SMP operator.

Q. 19 Do you agree with ComReg's preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg's proposal that Eircom should publish it on its website? Please provide reasons for your response.

NBI agrees that Eircom should provide ComReg with information on an annual basis on its investment in ducts and poles in both the NBP IA and the Commercial Areas. In NBI's view, however, while the information ComReg proposes to collect, as per the templates contained in Annexes 5 and 6 of the Consultation Document, is absolutely necessary it is not sufficient to provide the level of transparency that is required on the returns Eircom makes from the CEI access products it makes available. See response to Q18 above.

The reporting requirement proposed in Annex 5 will simply involve the collection of data about the number (and value) of poles which have been installed each year. The data are to be provided separately for both Commercial Areas and the NBP IA. The reason for installing a pole can be one of just three, i.e. replacement for pole access, replacement for other reasons or pole additions. ComReg also proposes that Eircom should provide a forecast of the number and value of poles installed for the subsequent three years (but is requesting just the totals and so not split by reason for installing). The information ComReg is seeking is necessary for it to update its cost and pricing models but it does not provide transparency on actual returns from CEI enjoyed by Eircom.

Similarly, Annex 6 as presented will simply involve the collection of some data about the length (and value) of ducts which have been installed each year. The numbers are to be shown for the Commercial Area and the NBP IA separately. As is the case with poles, the reason for installing duct can be one of just three, i.e. remediation for duct access, remediation for other reasons, or duct/trench additions. ComReg also proposes that Eircom provide a forecast of the length and value of duct installed for the subsequent three years (but, as it has requested for poles, just the total, not split by reason for installing). This is necessary information for ComReg to update its cost and pricing models, but it does not provide transparency on Eircom's actual returns from CEI.

NBI further notes that ComReg proposes this information would be supplied in the form of Additional Financial Information (AFI). ComReg has not, however, set out in the Consultation any clear rationale as to why the information it is proposing to seek from Eircom should be supplied in this manner.

NBI's understanding is that Eircom provides three forms of regulatory statements to ComReg, along with the Accounting Documentation. These are:

- (i) the published, audited Regulated Accounts;
- (ii) the Additional Financial Statements (AFS), which are partially audited in that the auditors review them for consistency with the published statements;
- (iii) Additional Financial Information (AFI), which is provided in unaudited form.

It is not clear why this duct and pole information that ComReg is proposing to oblige Eircom to supply should be provided by way of an unaudited statement or, indeed, why Eircom should be obliged to publish it on its website at the same time as the Regulated Accounts. It may be that a more appropriate way to do this would be for this information to be audited to a defined standard prior to its submission to ComReg. NBI also believes that there is merit for such audited information to be shared with both ComReg and with the users of Eircom's CEI rather than being placed in the public domain before either ComReg or users of regulated access services can see it.

In line with almost all other material prepared as part of the regulatory statements submitted to ComReg, including the AFS and AFI, the material at Annex 5 and 6 that ComReg is proposing to oblige Eircom to prepare should include data for the current and prior accounting year so that large movements can be highlighted. In addition, the three-year forecast data should be presented alongside the current year and prior year, for the same reason.

Q. 20 Do you agree with ComReg's preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

On the assumption that ComReg's proposals for NBP-specific CEI access charges are confirmed, NBI will not be availing of Generic Access to Eircom's pole and duct access products. As such, the manner in which the prices for Generic Access are set are not of direct relevance to NBI, except for when decisions made about such access impinge on price-setting for NBP-specific CEI access.

That said, NBI supports the general principle of regulatory certainty, in particular in a period of transition within the electronic communications market where the end of life of the legacy copper network is coming into view as the shift towards a full-fibre future gathers pace. As this transition continues, both Eircom and operators availing of access to its CEI need certainty and stability in relation to prices. This principle was recognised in 2018 by the UK regulator Ofcom⁴⁶, with the aim of underpinning investment in full-fibre networks, and the same principle hold true for the Irish market as well.

In NBI's opinion, ComReg's proposal to direct the prices for Generic Access to Eircom's CEI for a period of five years is consistent with the principle of promoting regulatory certainty and, as such, NBI supports the proposal.

⁴⁶ *Regulatory certainty to support investment in full-fibre broadband*, Ofcom Strategic Policy Position, 24th July 2018, available at: https://www.ofcom.org.uk/_data/assets/pdf_file/0025/116539/investment-full-fibre-broadband.pdf.

Q. 21 Do you agree with ComReg's preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI's MIP? Please provide reasons for your response.

NBI agrees with ComReg's proposal set in Section 10.2.1 that the NBP-specific charges for pole and duct access should be set for an initial two-year period and that they are then reviewed on an annual basis. An annual review of the regulated charges makes sense in any event, in light of the fact that an annual review of the applicable WACC rate will need to be undertaken and this can be done as part of the wider annual review of the charges proposed by ComReg in Section 10.2.2. ComReg has anticipated this, as it states (Para. 731) that as part of the annual review Eircom will be required to use the most up-to-date WACC for CEI in the context of the NBP.

NBI has a concern, however, that ComReg appears to view the annual review of the PAM and the DAM as an Eircom-led exercise. ComReg states (Para. 727 onwards) that it would be Eircom's responsibility to update all the relevant key assumptions and associated costs in the PAM and the DAM and that only after this exercise has been completed would ComReg become involved in an oversight capacity. While the level of oversight that ComReg proposes as part of this process is welcome, NBI believes that ComReg needs to go further. Specifically, it should be ComReg, not Eircom, that updates the PAM and DAM each year.

Clearly, most of the data that will be needed to undertake the annual PAM and DAM update will have to come from Eircom. That does not, however, mean that it is Eircom that should be given responsibility for and control over the annual updating of the models. These need to be under the direct control of ComReg and, once Eircom has supplied all of the key inputs, along with relevant certification from Eircom that all the data it has supplied are accurate and correct, ComReg should then update the models and decide if any change in NBP-specific duct and pole charges are warranted for the next twelve months.

It is also important that NBI is part of this process too. ComReg's proposals in Section 10.2.2 provide for no role at all for NBI in the annual review of the PAM and the DAM, an omission that appears to make little sense in light of the fact that NBI will possess significant relevant information (for example on pole replacement rates, ducts cleared etc.) that ComReg will be able to obtain and use as a cross-check on the data that Eircom will be supplying to it. This is another reason why the annual review of the PAM and the DAM is an activity that should be the responsibility of ComReg, not Eircom.

As we have already outlined in our response to Q12, ComReg should give consideration to the use of its formal data gathering powers under Section 12D of the Act to obtain from Eircom and NBI all the information it requires to enable it to undertake the proposed annual update of the PAM and the DAM. As we have already pointed out in response to Q12, ComReg's ownership of the annual update would provide a far greater degree of independent oversight to it and render it less amenable to gaming by an SMP operator.

Q. 22 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.

NBI is broadly in agreement with the Regulatory Impact Assessment carried out by ComReg. However, NBI wishes to make a number of additional observations set out below.

Context for variation of Price Control

NBI notes that the matter under consultation relates to the variation of an existing SMP price control remedy to take account of new demand side conditions for CEI.

This new demand has not arisen due to normal market functioning. In fact, the opposite is the case. The new demand for CEI is driven by a State Aid intervention designed to address a specific market failure in the IA.

The SMP obligations imposed by ComReg address the functioning of the market within the boundary of the network that has been deployed on commercial terms. In contrast the State Aid intervention is designed to deal with supply side issues beyond this boundary.

There is no suggestion by ComReg that there has been any change in the market conditions which led to the original SMP designation underpinning the existing price control nor that the price control itself is inappropriate as it relates to market functioning unrelated to the State Aid intervention. These price controls have been designed to balance allowing Eircom obtain an adequate return on its investment while at the same time protecting the market from Eircom abusing its SMP position.

In this context NBI is of the view that the key test to be applied when assessing the impact of the proposed changes in the price control relating to the State Aid intervention does not cause a distortion in the portion of the market that is operating within a normal commercial framework. It should also be the case that the proposed changes should not undermine the original purpose of the SMP obligations.

Because of this, a baseline should be established comprising a counterfactual scenario in which there is no State Aid support to NBI and there is no NBI demand for CEI in the IA. The proposed changes in the price control should be tested against this baseline to ensure that they do not result in leakage of State Aid supports targeted at a specific market failure into the areas where there is

network deployment on commercial terms. In particular, this approach should be used to determine the recoverable asset value in the IA.

In addition, any proposed variation should be assessed to ensure that it avoids gifting Eircom revenues or profits over and above what it would have otherwise derived from its baseline activity in the IA or the Commercial Area.

This, of course, needs to be balanced by ensuring that Eircom is in a position recover any investment it makes, plus a reasonable rate of return, as a result of additional activity it undertakes as a direct result of NBI's use of its CEI.

State aid leakage into the Commercial Areas

The current price control allows for full cost recovery by Eircom from commercial activity within the Commercial Area. Eircom's investment decisions relating to the Commercial Area appear to have been predicated on the recovery of costs from downstream retail and wholesale service revenues in the same geographic area. For example, the investment by Eircom in its 300k FTTH rollout is not reliant on revenues from other geographic areas.

A pricing model that results in the State, via NBI, contributing to the recovery of costs that would otherwise be recovered from normal commercial activity would either lead to 'windfall' gains for Eircom if it did not lower prices to reflect this or alternatively an indirect retail subvention where this is not required for the correct operation of the market.

The current price controls also have the effect of promoting efficient market entry by competing infrastructure providers such as SIRO. Injecting a contribution to Eircom's commercial cost recovery from non-commercial State Aid activity would alter the competitive dynamics in the Commercial Area and could, as a result, imperil investment in alternative NGA infrastructure in this part of the market.

ComReg's proposed approach whereby NBI pays for the incremental costs associated with its use of Eircom's CEI avoids these distortions while maintaining Eircom's ability to recover its investment. As such, ComReg's proposed approach seems well calibrated to avoid distorting competitive dynamics in the Commercial Area.

Cost sharing in the Intervention Area

NBI notes the balancing exercise that ComReg has undertaken in assessing the relative merits of a per-operator and per-customer approach to cost sharing in the IA. While NBI agrees that on balance the per-customer approach is preferable we believe that modality of the per-customer approach proposed by ComReg would likely lead to over-compensation by Eircom. As such, it may not yield optimal incentives and may instead give rise to pricing uncertainty.

As outlined in the paper by Frontier Economics an approach based on using the NBI active base at CSO as the denominator in any burden sharing calculation would avoid the risk of overcompensation of Eircom, provide better incentives, greater certainty and be simpler to implement.

Copper Switch-off

In the Consultation Document (Para. 764) ComReg addresses the timing of any potential CSO by Eircom and, in particular, the effect of any of setting prices for CEI too high or too low.

In this regard NBI believes that it is appropriate to consider the counterfactual scenario where the NBP Contract had been awarded to an entity which did not need to use Eircom's CEI or where no NBP Contract had been awarded at all.

In both of these scenarios the commercial decision by Eircom on when it would be appropriate to cease providing copper-based services would be based on the total retail and wholesale revenues available to Eircom from the base of direct and indirect end-users served via the Eircom network which contribute to CEI cost recovery. This would take into account any decline in the copper base over time. It would also take account the residual value of any CEI which would become 'stranded' after CSO without any cost recovery mechanism.

In the baseline scenario, where a customer migrated from the Eircom network to the network of the third party NBP provider, Eircom would receive no contribution towards CEI from a third party NBP provider.

Even absent a third party NBP provider Eircom is likely to face declines in its copper base due to migrations to FWA and 4/5G. In this scenario it would still not receive any contribution towards CEI from an alternative service provider in circumstances where a customer migrated from the Eircom network to the network of the alternative provider.

In order to avoid any distortions in the timing of CSO, ComReg should ensure that, absent any direct incremental costs due to NBI, any change in the price control does not affect either the

revenues receivable by Eircom in respect of its CEI or contribute to reducing the residual value of 'stranded' CEI at the time of CSO when compared to the baseline scenario.

To avoid such distortions ComReg proposal should exclude the residual NBV of stranded assets due to copper absent NBI from the cost to be recovered from pricing NBI's CEI use. To do otherwise would provide Eircom with CEI revenues in excess of what would have been earned absent the NBI Contract and potentially affect Eircom's economic breakeven point for CSO.

European Electronic Communications Code (EECC)

NBI notes that the EECC is due to be transposed by 21 December 2020. It is therefore all but certain that any variation of the current price control will come into effect after the entry into force of the national legislation giving effect to the EECC.

While the substance of the current regulatory framework conforms to the EECC, the Code has additional objectives relating to the availability and take-up of very high capacity networks. In this context NBI believes that where a balancing exercise is carried out in relation to the consultation proposals ComReg is fully justified, from a forward-looking regulatory perspective, in adopting measures which have the effect of promoting the availability and take-up of very high capacity networks.

Q. 23 Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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.

NBI does not have specific comments on the draft text of the proposed Decision Instrument but considers that the proposed Decision Instrument requires updating to reflect NBI's comments provided as part of this Response, including in particular the following aspects:

Appropriate basis to implement the per-customer approach for NBI's MIP in the NBP IA

As outlined in the response to Q11 above, NBI does not agree with ComReg's preliminary view that the per-customer approach to cost sharing for NBP-specific CEI Access in the IA should be based on the number of each operator's active connections on their networks within the IA. NBI has proposed using the projected volume of active fibre connections on the NBI network at the completion of CSO in the IA as the denominator for these purposes. As outlined above, this approach has a number of advantages, including in terms of its practical application.

On this basis, NBI considers that ComReg should update the Decision Instrument to reflect use of the projected volume of active fibre connections on the NBI network at the completion of CSO in the IA as the appropriate denominator for the per-customer approach to cost-sharing for NBP-specific CEI Access in the IA.

Level of the NBP-specific WACC

As outlined in the response to Q14 above, while NBI agrees with ComReg's preliminary position that there should be a differentiated WACC for Eircom's CEI in the context of its provision of CEI access to NBI for the purposes of the NBP network deployment in the IA and in the Commercial Area, NBI considers that the appropriate level for an NBP-specific WACC could be 3.8% as opposed to ComReg's proposed 4.03%. Therefore, NBI considers that the ComReg should re-examine the WACC to determine whether a further reduction is warranted.

Following such re-examination, NBI considers that ComReg should reflect any relevant reduction in the applicable WACC in the terms of the Decision Instrument.

Responsibility for updating the DAM and the PAM

As outlined in the response to Q21 above, while NBI is in broad agreement with ComReg's proposals regarding the setting of NBP-specific charges for pole and duct access for an initial two-year period subject to review on an annual basis, NBI has concerns regarding the practical implementation of the model for updating the DAM and the PAM. Specifically, NBI has outlined why it should be ComReg, not Eircom, that updates the PAM and DAM each year.

NBI therefore considers that the draft Decision Instrument should be updated to provide that ComReg will have responsibility for updating of the PAM and DAM on an annual basis.

Quality of Service

There is an embedded assumption in ComReg's approach that quality of service for CEI will remain constant. Quality is, however, a key driver of long-term cost reductions and quality of service standards allow associated reductions in operating expenditure due to reduced maintenance costs. This would not be an issue absent NBI because Eircom would maintain a significant proportion of the retail and wholesale customer base on its network in the long-term and so any short-term cost savings would ultimately be self-defeating, as they would be counterbalanced by higher maintenance costs over the longer-term. However, in a scenario where NBI eventually displaces Eircom from the wholesale market within the IA (including Eircom's self-supply) then potentially Eircom's share of the retail market in the IA could be too small to provide an adequate incentive for Eircom to maintain the quality of its CEI.

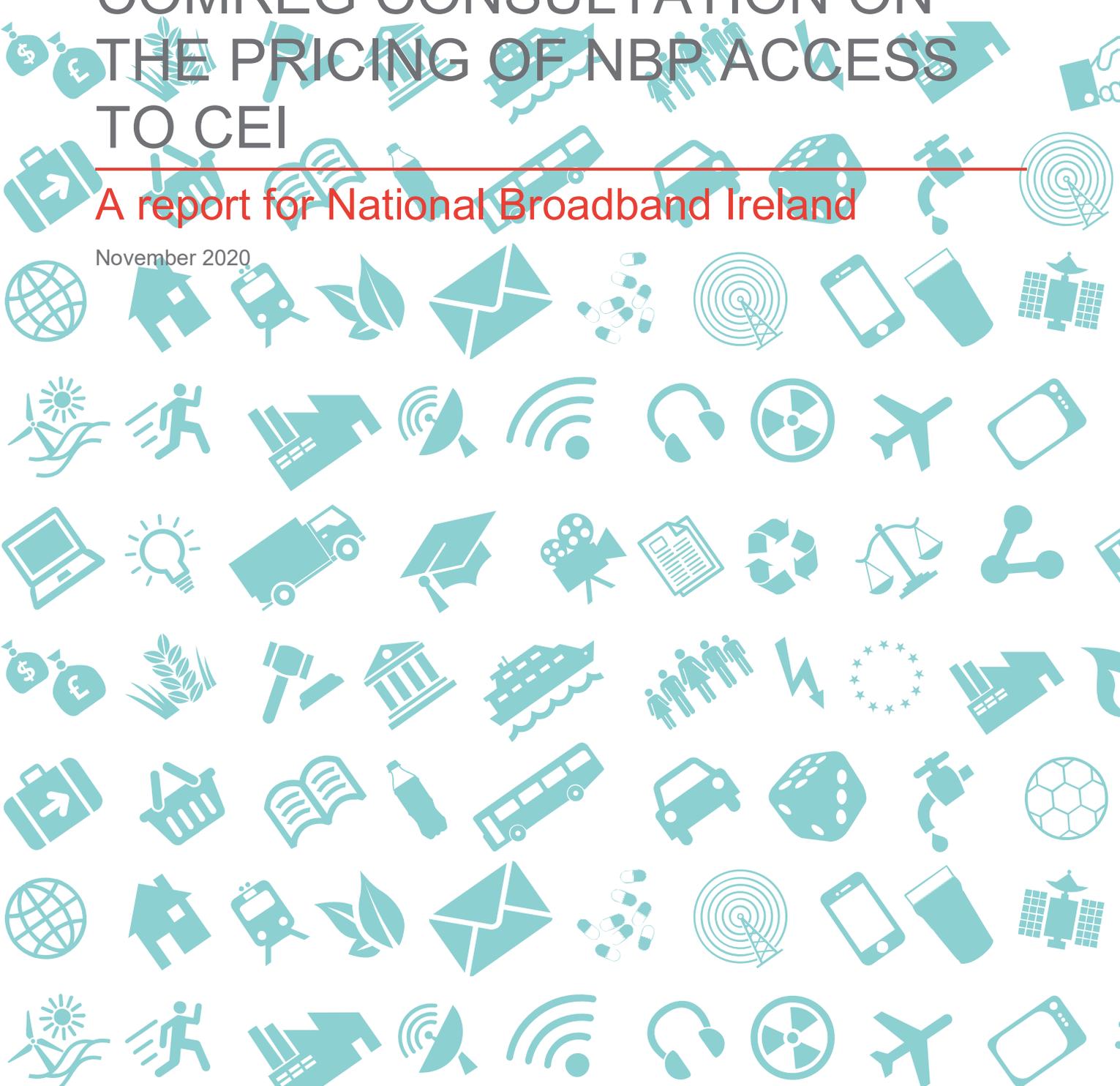
Because of this, ComReg should specify within the Decision Instrument appropriate requirements ensuring the long-term continuity of, at least, current levels of quality associated with the provision of CEI.

Appendix - Report by Frontier Economics

COMREG CONSULTATION ON THE PRICING OF NBP ACCESS TO CEI

A report for National Broadband Ireland

November 2020



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EXECUTIVE SUMMARY

ComReg's 2016 Access Pricing Decision (ComReg Decision D03/16) set out the cost-orientated prices for access to Eircom's Civil Engineering Infrastructure (CEI).

Since that Decision, National Broadband Ireland (NBI) have been confirmed as the winning bidder of the National Broadband Plan (NBP) tender process, under which it has committed to deploy a fibre broadband network to premises in Ireland that are not currently served (and not expected to be served) by superfast broadband in the medium term (the "intervention area" or "IA"). NBI plan to rely on access to Eircom's CEI to deploy its network in the IA, which will require access to both CEI in the IA itself, and in "commercial areas" in order to "transit" to different parts of the IA. ComReg has now released its Consultation and Draft Decision 20/81, where it has assessed whether the existing pricing approach for CEI access is appropriate for the use of CEI by NBI for the purposes of the NBP.

ComReg has proposed to set differentiated prices for CEI access by NBI, and proposes a different pricing approach for access in the IA to that in commercial areas:

- In the IA, ComReg proposes to use a "hybrid" costing approach, using a Top Down-Historic Cost Accounting (TD-HCA) approach for Eircom's existing "re-useable" CEI assets, and forecasting future capex for new CEI assets on a bottom-up basis (BU-LRAIC). Within this ComReg has identified "incremental costs" to NBI, which it proposes to recover solely from NBI through CEI prices, and fixed and common (or "shared") costs, which it proposes to share between NBI and the Eircom copper network on the basis of NBI's share of active customers in the IA.
- In commercial areas, ComReg proposes to set CEI prices for NBI based on the incremental costs (LRIC) of NBI's deployment, with the fixed and common costs recovered from Eircom's commercial activities.
- ComReg is also proposing to use a specific (lower) WACC in order to determine the appropriate return from CEI used by NBI.

NBI has commissioned Frontier to conduct a review of ComReg's proposals, and identify appropriate changes to ComReg's approach where relevant. To assess the proposals we first outlined the relevant objectives that ComReg should aim to meet with its approach, and an appropriate conceptual framework for assessing whether a given approach is consistent with those objectives. We then provide our assessment of the key elements of ComReg's proposals, including:

- The appropriate cost base in the IA for CEI pricing for NBI;
- The cost of capital (WACC) that should be used when setting CEI prices for NBI;
- The appropriate mechanism for allocating "shared costs" between NBI and other operators in the IA; and
- The appropriate costing / pricing methodology for NBI's CEI prices in the commercial areas outside the IA.

ComReg objectives and appropriate framework for setting CEI pricing for NBI

In communications markets, regulatory price controls often attempt to proxy competitive prices to send appropriate build or buy signals to rivals of the regulated operator. However, given the market for superfast broadband in the IA is, almost by definition, not contestable, the need to send appropriate pricing signals to rivals is not relevant when setting the price of CEI services to NBI in the IA. The key objectives for ComReg should therefore be to ensure that:

- Eircom has an expectation that it can make a reasonable return on its investments; and that CEI prices do not over-compensate Eircom for the use of the CEI;
- Eircom has appropriate incentives to invest and operate efficiently, and to migrate end users to the NBI network; and
- NBI has appropriate incentives to re-use existing CEI rather than deploy its own infrastructure.

Whilst the promotion of wholesale competition is not a key objective for CEI access for NBI in the IA, ComReg should consider the potential impact of regulated pricing for NBI on competition in the commercial areas.

A key characteristic of an appropriate pricing approach is that it provides both Eircom and NBI's investors with certainty, both through ensuring consistency in the valuation of existing assets over time, and in providing certainty that future investments in CEI will be recovered, but not over-recovered. When assessing the suitability of policy options, a helpful starting point is to consider the position of Eircom in a "counterfactual scenario" where the NBP tender had not taken place. Certainty for investors is then provided by ensuring that:

- the pricing approach does not revalue the existing assets from the level expected in the counterfactual (either upwards, providing Eircom with a windfall gain, or downwards resulting in 'asset taking'); and
- that CEI prices reflect any change in cash flows from operating and maintaining the CEI as a result of NBI deployment versus that counterfactual.

Our assessment and recommendations based on this framework

Overall, we conclude that ComReg's overarching pricing approach is appropriate, but that some adjustments should be made to ensure that CEI prices for NBI are fully consistent with ComReg's relevant objectives and the specific circumstances of NBI's use of CEI:

- The use of a hybrid historic asset base and BU-LRAIC approach is an appropriate approach to defining the CEI cost base in the IA. However, we recommend that ComReg re-assess the estimated opening value of the asset base to ensure it reflects the value that Eircom would have expected to earn in the counterfactual, and consider whether an impairment adjustment is required to bring the asset valuation into line with the expected future cash flows from operating the legacy copper network. We also recommend that ComReg adjust the pole asset lifetime used to calculate depreciation charges to make this consistent with its calculation of future pole replacement . Based on the current

assumption on the rate of replacement of poles this would increase the asset life for poles from 30 to 75 years,.

- Considering a specific WACC for pricing CEI access for NBI is appropriate, as demand for Eircom's CEI from NBI is certain and highly predictable. This means that Eircom face significantly lower systematic risk in relation to the provision of CEI access to NBI compared to other regulated services.
- ComReg's overarching approach to sharing costs between NBI and Eircom in the IA is also appropriate. Recovering incremental costs to NBI solely from NBI, and "shared costs" from both NBI and Eircom, is consistent with cost causality. Allocating shared costs using a "per customer" approach ensures that Eircom is appropriately compensated for lost wholesale margins due to NBP deployment, provides appropriate migration incentives for Eircom and NBI, and reduces variability in CEI cash flows. This approach also appears to be the most practical to implement. However, we recommend that ComReg implement this approach by setting the denominator in the sharing formula to the expected number of NBI subscribers at copper switch off, rather than the combined number of active NBI and Eircom copper subscribers. This will result in more appropriate recovery of costs by Eircom, prevents Eircom having an incentive disconnect subscribers from the copper network, and also minimise the data required to implement the approach.
- Finally, ComReg's proposals to set prices based on LRIC for NBI's use of CEI in commercial areas appears appropriate. This is because Eircom will already recover the fixed and common CEI costs in commercial areas from its own customers and other CEI users, both on the current scenario and in a counterfactual where the NBP did not take place. Recovering some of these costs from NBI in addition would therefore lead to over-recovery of costs by Eircom. This over-recovery could lead to distortions in Eircom's investment incentives in commercial areas, and could be considered as illegal state aid.

These findings are explained in more detail in the remainder of this report.

1 INTRODUCTION

1.1 Context for ComReg's review of CEI pricing

1.1.1 Existing regulation of CEI

ComReg's 2018 WLA / WCA Market Review Decision (ComReg Decision D10/18) designated Eircom as having SMP in the market for wholesale local access at a fixed location (the WLA Market).

The Decision maintained an obligation of cost orientation for access to Eircom's Civil Engineering Infrastructure (CEI), as well as the costing methodology (and the associated maximum prices) which ComReg had imposed in its 2016 Access Pricing Decision (ComReg Decision D03/16). This decision set out that:

- CEI access is regulated on a national basis;
- Pricing is uniform nationally and is based on fully allocated costs (FAC);
- The allocation of costs between operators (including Eircom's own use) using a given piece of infrastructure is based on the number of operators for poles, and for duct based on the total number of cables using the duct.

These decisions were made when the tender process for the National Broadband Plan (NBP) was ongoing. The tender process was designed to ensure roll out of a future proof broadband network to all those premises in Ireland that were not currently served by superfast broadband and would not be expected to be served in the medium term. These premises formed the intervention area (IA), as opposed to 'commercial areas' where operators, including Eircom, had or were expecting to roll out superfast broadband.

The winner of the NBP tender, National Broadband Ireland (NBI), plan to rely on access to Eircom's CEI to deploy its network to serve all premises in the IA. The CEI infrastructure used by NBI will be both within the IA itself; and in commercial areas. The infrastructure in commercial areas is needed to transit to the IA from an NBI point of presence located within the commercial area. There are a large number of such cases, because many centres of population close to or surrounded by the IA are within the commercial area.

NBI's use of the CEI has differences compared to use of CEI by other access seekers in commercial areas. In particular, while other access seekers will choose where to use CEI in order to compete with Eircom in downstream markets, NBI has a contractual obligation to pass all premises in the IA. There is an expectation that in the long run Eircom will largely exit the downstream wholesale markets in the IA, being unable to compete with a subsidised future proof full fibre network.

Given these differences, ComReg has assessed whether the existing pricing approach for CEI access is appropriate given NBI's use of CEI for the purposes of the NBP, or whether alternative costing and pricing methodologies should be adopted. It has published its assessment and proposals in its Consultation and Draft Decision 20/81.

1.2 ComReg's proposals in 20/81

ComReg is of the view that the different and unique circumstances of NBI's use of CEI justifies a different approach from 'generic' access used by other access seekers. ComReg is also proposing to differentiate the pricing for NBI on a geographic basis between CEI in the IA and CEI used in commercial areas for transit.

ComReg states that its objectives with regard to the NBI price control are:

- To allow Eircom to recover its efficiently incurred investment plus a reasonable rate of return when upgrading CEI assets due to NBI's deployment;
- To discourage duplication of the CEI assets; and
- Provide appropriate incentives to Eircom for customer migration from its copper network to NBI's network.

Within the IA, ComReg proposes to estimate the costs of the CEI assets as a combination of:

- HCA costs derived from Eircom's historic capital expenditure ("top down") to estimate the cost of existing "reusable" assets, i.e. assets which exist before NBI's deployment;
- Operating expenses forecast from historic expenditure; and
- Forecast capital expenditure for new assets, calculated on a bottom up basis (BU-LRAIC).

ComReg proposes to include no contribution to common corporate costs, as these costs are fully recovered elsewhere.

ComReg is also proposing to use a specific WACC in order to determine the appropriate return from CEI used by NBI, applied to both reusable and new assets.

In the long run, when Eircom has de-commissioned its copper network in the IA, NBI charges will have to cover the whole cost of the CEI assets in the intervention area. However, during the co-existence of Eircom's existing network and NBI's network, some of the costs can be recovered by Eircom from its downstream copper customers. ComReg has made two proposals regarding the recovery of costs during this period of co-existence:

- ComReg considers that the charges payable by NBI should recover all CEI costs incremental to the roll out by NBI.
- In addition, ComReg is proposing that NBI makes a contribution to fixed and common ('joint') costs proportionate to its share of customers in the IA, should such a mechanism be practical to implement.

In the commercial areas, the Eircom network will be operated indefinitely and will continue to contribute to the costs of CEI in the commercial area. For NBI transit in commercial areas, ComReg proposes that the charges payable by NBI should only recover the incremental costs (LRIC) of NBI's roll out, with the fixed and common costs recovered from Eircom's commercial activities.

ComReg's proposals are supported by an economic report by Dotecon (Annex 2 of the Consultation), and recommendations on the appropriate WACC provided by Europe Economics (Annex 3).

1.3 Scope of this study

NBI has commissioned Frontier to conduct a critical review of ComReg's proposals, including the economic arguments and analysis provided by Dotecon and Europe Economics. Our review focusses on whether ComReg's CEI pricing proposals for NBI are appropriate and proportionate given the specific circumstances of NBI's use of CEI infrastructure.¹

In order to assess ComReg's proposals, we first outline the relevant objectives that ComReg should be aiming to meet with the approach to CEI pricing for NBI, and an appropriate conceptual framework for assessing whether a given approach is consistent with those objectives.

We then provide our assessment of the key elements of ComReg's proposals, including:

- The appropriate cost base in the IA for CEI pricing for NBI;
- The cost of capital (WACC) that should be used when setting CEI prices for NBI;
- The appropriate mechanism for allocating "shared costs" between NBI and other operators in the IA; and
- The appropriate costing / pricing methodology for NBI's CEI prices in the commercial areas outside the IA.

We then provide overall recommendations on the approach to regulated price setting for NBI.

¹ We have not been asked to consider the appropriateness of the market definition, SMP determination or remedies applied.

2 FRAMEWORK FOR SETTING CEI PRICING FOR NBI

Regulatory price controls generally require balancing a number of regulatory objectives, which often conflict to a degree. In order to determine the optimal approach to setting regulated prices it is necessary to understand the regulatory objectives, which are defined by statute. For a given price control, an analysis of the market situation and dynamics will indicate which of these objectives are applicable and the weight that should be given to different objectives where there is a trade-off between meeting two or more objectives.

In this section we consider which of ComReg's objectives are applicable in the case of CEI prices for NBI, and note where this differs from generic CEI access. We then outline an appropriate economic framework for considering how to appropriately meet ComReg's objectives.

2.1 Regulatory objectives

2.1.1 ComReg's statutory objectives

ComReg's general objectives as set out in the Communications Regulation Act / Regulation 16 of the Framework Regulations are to:

- Promote competition;
- Encourage efficient investment and innovation;
- Promote the interests of users by encouraging access to the internet at a reasonable cost; and
- Contribute to the development of the internal market.

2.1.2 Application of these objectives to CEI pricing in the IA

Promotion of competition

Following the award of the NBP tender, there is unlikely to be effective competition **within** the market for wholesale fixed broadband services within the IA, at least in the medium term. Competition was not expected absent intervention, as the high costs of deployment makes roll out of multiple commercial wholesale broadband networks infeasible. The entry of NBI as a subsidised operator was approved by the European Commission on the basis that there was no realistic prospect of effective deployment of superfast broadband networks emerging from commercial conditions in the IA, even if there were significant changes such as technological advances that significantly reduced the costs of roll out. This differs from the situation for generic CEI access, where access seekers would be in almost all cases using CEI to compete with Eircom in downstream markets in the long term, and the level of CEI pricing will affect the degree to which these access seekers can enter to compete with Eircom.

Effective competition in the provision of CEI for NBI is also unlikely to develop following NBI's roll out, given the high switching costs in moving cables between different CEI providers.

To the degree that the NBP tender introduced a degree of competition **for** the market, the expectation of the terms and conditions on which CEI would be made available will have influenced this competition. In particular, if other bidders considered that Eircom as a supplier of CEI could potentially discriminate in favour of its own bid, this would have distorted the tender process. As such it is reasonable for ComReg to consider whether the pricing approach applied to NBI as the winner of the tender is non-discriminatory compared to a counterfactual where Eircom was the successful bidder or indeed where there was no bidder.

ComReg can also reasonably take account of the impact of the pricing of NBI's access on competition in commercial areas. While NBI is not a competitor in the commercial areas, Eircom competes with other operators both for and within markets in commercial areas, and the charges Eircom levies for use of the CEI within the commercial areas could affect this competition.

Encouraging efficient investment and innovation

To a large degree the downstream investment by NBI is determined by the NBP contract, independently of the level of CEI prices that NBI pays. This contrasts with generic CEI access where access seekers face a 'build or buy' decision, and CEI pricing can affect the level of investment and hence innovation in downstream markets.

However, it is possible that NBI could deploy its own CEI rather using Eircom's infrastructure, and this decision is influenced by the level of CEI prices to NBI. Duplication of CEI by NBI would not represent efficient investment, given the expectation that all customers will migrate from Eircom's copper network, and that this network would then being decommissioned – this would therefore result in the creation of two parallel CEI networks, with one being largely unused in the medium to longer term. CEI pricing should therefore incentivise NBI to use Eircom's CEI rather than deploy parallel infrastructure.

CEI pricing will affect Eircom's expectation of returns from future CEI investment and as such, could impact on its investment decisions for CEI. However, to the degree that Eircom has an obligation to supply, the quality of service is regulated in the IA. In addition, Eircom will require CEI assets in the commercial areas and so it is not clear that Eircom foregoing investment is a realistic prospect.

CEI price regulation can also be set in a way that encourages efficiency by Eircom in investment in CEI assets, either by providing higher returns for over-performance in terms of efficiency, or excluding inefficient investment from the asset base.

Given that NBI's activity in the market is by way of State subsidy, care must be exercised to avoid this external intervention "leaking" into the commercially competitive portion of the market and in turn distorting efficient investment incentives.

Promote the interests of users by encouraging access to the internet at a reasonable cost

The NBP tender was designed to support the deployment of a superfast broadband network in the IA, in order to provide access to high-speed internet services at a reasonable cost for premises which would otherwise not be served.

As noted above, the CEI price paid by NBI does not directly affect either NBI's deployment and therefore the availability of high-speed internet access in the IA, or the price charged by NBI for wholesale provision to its network (which ultimately determines the cost to end users), as both are determined by the NBP contract.

However, two indirect effects can be considered by ComReg:

- The incentive of Eircom to actively migrate customers to the NBI network, as both a retail operator using the NBI network, and a provider of copper-based wholesale services which are partial substitutes for the services provided by NBI.
- The potential impact of higher CEI prices on the subsidy required from the Government. This may impact the willingness of the Government to support the provision of affordable internet access in the future, to the extent that such support is needed.²

Contribute to the development of the internal market

The NBP involves state aid, in the form of a subsidy to NBI. This state aid has been determined to be compatible with the relevant EC Treaty provisions.

The level of the subsidy is dependent on the CEI charges, due to the mechanisms under the NBP contract which allow variations in NBI's costs to alter the subsidy paid. Decisions made by ComReg as a 'national public authority' which result in an increase in the subsidy being made available to NBI, which would be passed through to Eircom through CEI charges, could be considered to be state aid to Eircom incompatible with community law.

Summary

The specific nature of the NBP, and hence the pricing of NBI's usage of CEI, means that the key objectives for ComReg should be to ensure that:

- Eircom has an expectation that it can make a reasonable return on its investments;
- Eircom has appropriate incentives to invest and operate efficiently;
- Eircom has appropriate incentives to migrate end users to the NBI network;
- NBI has appropriate incentives to use existing CEI rather than deploy its own infrastructure; and
- the regulated access charges do not over-compensate Eircom for the use of the CEI, which could ultimately be considered illegal state aid.

² This could arise where the deployment of future internet technologies is not viable on commercial terms in certain parts of Ireland.

While the first two of these objectives are common to generic CEI access, the latter three objectives are specific to NBI access.

In addition, promotion of effective downstream competition is a key objective in generic access which does not apply to CEI access for NBI, as neither the provision of CEI nor the downstream wholesale market in the IA are likely to be contestable. However, ComReg should consider the potential impact of pricing on competition in the commercial areas.

2.2 A framework for determining the appropriate pricing approach

2.2.1 Providing investors with certainty

Much of the CEI used by NBI will consist of existing assets rolled out by Eircom for the purposes of delivering copper services in the IA but which can be re-used by NBI, as well as the CEI assets in the commercial areas which will continue to be used by Eircom to deliver both copper and fibre-based services. This requires ComReg to determine both the appropriate costs to recognise for these assets, but also how these costs should be recovered between NBI and Eircom's own use of the assets.

One of the key rationales for setting prices to reflect past investment decisions by stakeholders is to provide re-assurance that a similar treatment will occur for similar future investment decisions. If investors view that ComReg has reduced the value of sunk assets (i.e. engaged in 'asset taking'), or acted in a way which leads to asset stranding with respect to sunk assets, then those investors will not invest in further assets without a significant risk premium above the cost of capital. This will in turn increase the cost of providing services.

Conversely, if regulators can put in place a framework which provides a high degree of certainty that future investments will be fully recovered, this can reduce the cost of capital. This is the motivation behind RAB approaches, which seek to provide an implicit or explicit regulatory commitment that forward looking investments can be recovered.

Similarly, although the Government does not continually make investments in telecoms infrastructure, providing certainty on the operating costs of their investment in the NBP through the vehicle of NBI is important to set appropriate expectations for any potential future interventions.

In terms of the framework for setting CEI prices for NBI, this suggests that a pricing structure that allows a high degree of certainty that an appropriate proportion of Eircom's past and future investments in CEI can be recovered from NBI is appropriate.

However, these principles still leave a number of questions open:

- What is the appropriate opening valuation of assets in the IA?
- What is the appropriate division of the recovery of fixed and common costs between NBI and other users, principally the downstream network operations of Eircom?

2.2.2 An appropriate counterfactual

A helpful starting point for the assessment of the appropriate approach to pricing CEI access by NBI is to consider the position of Eircom in a “counterfactual scenario” where the NBP tender had not taken place. This was effectively the status quo before the NBP tender process started, and hence provides a reasonable base line for the implied regulatory ‘contract’ at that point in time.

Under this scenario, Eircom would have to fully recover the costs of CEI in the IA from subscribers in the IA. In the medium term at least, these subscribers would be served by the legacy network (if there had been any plans to roll out NGA to these premises, then they would have been excluded from the IA). The revenues generated from customers in the IA would also be affected by cost-based regulation applied by ComReg, which should also be taken into account.

The award of the NBP contract to NBI has changed Eircom’s forward looking cash flows compared to this counterfactual:

- Eircom will incur some additional costs associated with preparing CEI poles for the NBI deployment;
- In the long run, Eircom can expect NBI to fully cover the ongoing costs of the CEI assets in the IA, while in the counterfactual the ability to fully recover these costs from Eircom’s own customers may not be clear;
- Eircom will have to continue maintaining its CEI network, whereas in the counterfactual it could potentially decommission some CEI as customers migrated off the copper network avoiding some costs; and
- Eircom will see a faster reduction in subscribers on the copper network in the IA, with a loss in revenues from these customer offset to a degree by the avoidable costs of serving these customers, and the retail margins that could be earned through providing retail services on the NBI network.

A reasonable regulatory approach would seek to ensure that the CEI prices charged by Eircom reflect these changes in cash flow as a result of NBI deployment.

In terms of asset valuation, ComReg should not seek to revalue the existing assets from the level implicitly or explicitly established in the counterfactual, i.e. the implicit regulatory contract. If the prices paid by NBI effectively increases the value of existing assets, (i.e. a ‘holding gain’) this will be an unjustified transfer of value to Eircom. This transfer would deter investment by the state in providing internet access and, if this was the expectation at the time of the NBP tender, could have distorted bidding in the NBP tender.³

³ In particular, an expectation of this transfer of value would impact the subsidy required by Eircom to deploy the NBP network, but not other bidders.

3 RELEVANT COST BASE FOR NBI CEI PRICING IN THE IA

3.1 ComReg’s proposed approach

The starting point for developing the proposed CEI access prices in the IA is the calculation of the relevant cost base, including both capital and operating costs.

Capital costs

Regarding capital costs, ComReg proposes a “mixed” approach, considering a Top Down Historic Cost Accounting (TD-HCA) approach for “reusable” CEI assets, and a Bottom-Up Long Run Average Incremental Cost (BU-LRAIC) approach for “non-reusable” assets.⁴

In practice, this involved estimating the opening Regulatory Asset Base (RAB) for Eircom’s existing CEI assets based on an HCA approach. While this should be consistent with Eircom’s accounts, in order to disaggregate assets by geographic area, ComReg’s consultants have modelled this based on past expenditure, rather than drawing values from Eircom’s fixed asset register.

The model also forecasts future investment in CEI assets on a bottom-up basis. However, unlike bottom-up models used elsewhere, the bottom-up model developed by ComReg is not used to estimate costs independently of Eircom’s actual costs, but instead to provide a forecast of costs which may be adjusted when information on actual incurred costs becomes available.

To identify the relevant costs to be recovered by NBI in the IA, ComReg defines three categories of CEI costs with respect to NBI and Eircom’s own use of CEI:

- **Incremental costs to NBI**, which are those incurred solely as a result of providing CEI access to NBI;
- **Incremental cost to the Eircom copper network**, which are defined as CEI costs that “provide no benefit to the access seeker”⁵; and
- **Fixed and common costs (“shared costs”)**, which are the CEI costs needed to serve both the NBI and the Eircom copper network.

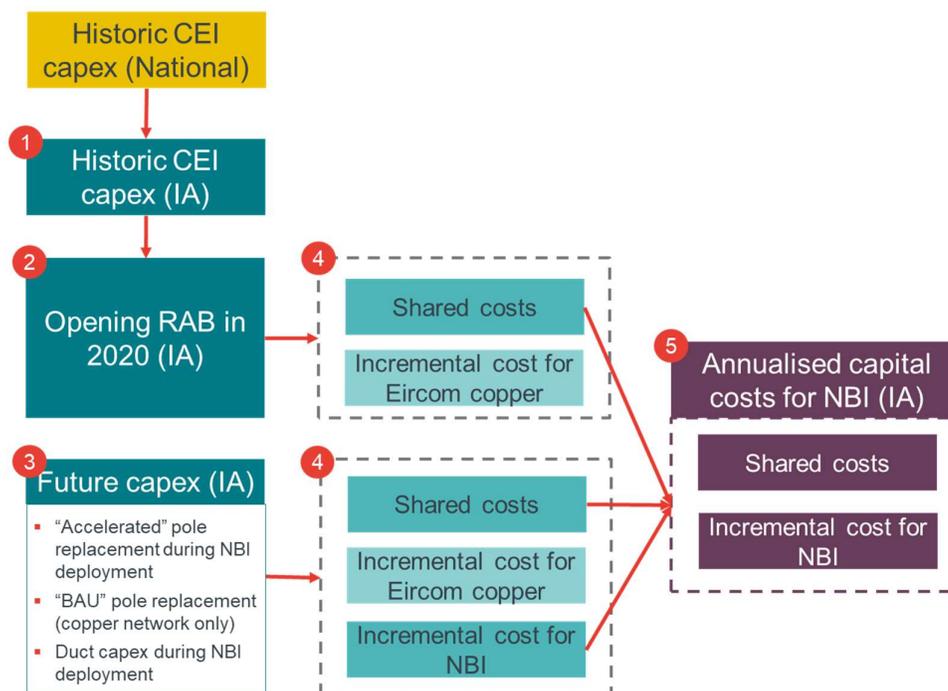
ComReg proposes to recover the incremental costs to NBI and the Eircom copper network from those individual networks, and therefore excludes the latter costs from the cost base considered for NBI. Shared costs are then to be recovered from both networks, with a share of these costs therefore allocated to NBI.

In practice, the capital costs in these three categories are calculated in five main steps, as illustrated in the diagram below.

⁴ Reusable CEI assets are those that can be used to support fibre roll out without the need for replacement or remediation, whilst the non-reusable assets are those which require replacement or remediation to facilitate this roll out.

⁵ See ComReg 20/81, para. 377

Figure 1 ComReg’s approach to estimating the relevant capital cost base in the IA



Source: Frontier based on ComReg 20/81

1. **First, a time series of historic capex for Eircom’s CEI investments is allocated between the IA, “Commercial Area” and “Rural Commercial Area”⁶.** This is done by separately identifying Eircom’s CEI investments as part of its fibre roll out in the Rural Commercial Area, and then allocating the remaining capex to the three footprints based on the number of poles and length of duct in each area.
2. **The opening RAB for the existing assets is then calculated.** This is done by taking the historic time series of capex that was allocated to the IA, and calculating the accumulated depreciation to 2020 on a straight-line basis, consistent with the approach in Eircom’s HCA accounts. ComReg considers the RAB for duct assets in the IA to be zero, on the basis that any historical investment in ducts in the IA are now fully depreciated.
3. **Forecast capex on CEI assets is then calculated.** For poles, ComReg estimates both an “accelerated” profile of testing and replacement needed to support the deployment of the NBI fibre network, and “BAU” testing and replacement assuming that the poles continue to serve only Eircom’s existing copper network. For ducts, ComReg forecasts the duct capex incurred during the NBI fibre deployment.⁷ It considers that no duct capex would be incurred to support only the Eircom copper network, on the basis that duct remediation is

⁶ The Rural Commercial Area is the area covered by Eircom’s rural FTTH deployment.

⁷ This includes the installation of sub-duct for NBI fibre (including blockage clearance), chamber remediation or replacement, and the reinstatement of footpaths and carriageways. See ComReg 20/81, para. 399.

not needed once underground cabling has been installed. No replacement capex is forecast.

4. **Shared and incremental costs are then identified.** The incremental cost to NBI is calculated as the “brought forward” pole replacement due to NBI deployment, and the duct capex incurred during that deployment.⁸ The cost of pole furniture for NBI fibre is also considered an incremental cost, but is not included in the capital cost base.⁹ Regarding incremental costs for Eircom, ComReg identified specific cost items that relate solely to the maintenance of the Eircom copper network, and excluded these from both the forward-looking capex and the RAB for existing CEI assets. These costs include the cost of pole furniture for Eircom copper cabling and unstructured duct. The remaining capital costs are then considered as “shared costs”.

A summary of the capital cost items considered as shared and incremental are summarised in Figure 2 below.

Figure 2 Capital cost items considered as shared, incremental to NBI, and incremental to Eircom copper

Cost category	Poles	Ducts
Shared costs	<ul style="list-style-type: none"> ■ RAB for reusable pole assets ■ “BAU” replacement of poles 	-
Incremental to NBI	<ul style="list-style-type: none"> ■ “Brought forward” pole replacement during NBI fibre deployment ■ Pole furniture for NBI fibre cabling (recovered through separate one-off charge) 	Duct capex during NBI fibre deployment
Incremental to Eircom copper	<ul style="list-style-type: none"> ■ Pole furniture for Eircom copper cabling. 	<ul style="list-style-type: none"> ■ Unstructured duct

Source: Frontier Economics based on ComReg 20/81

5. **Finally, annualised capital costs are calculated.** ComReg uses a straight-line depreciation approach for both reusable and non-reusable assets, based on an assumed pole and duct asset lifetime of 30 years. The resulting capital charges are then calculated as the HCA depreciation plus a return calculated as the net book value multiplied by the determined cost of capital.

Operating costs

In addition to capital costs, ComReg includes network operating costs (opex) and “wholesaling costs” in the cost base.

- For network opex, ComReg estimates Eircom’s historical CEI opex (at a national level) from its HCA accounts, and forecasts these forward based on

⁸ In practice, the incremental cost for poles in each year is calculated as the difference between capex under the accelerated pole replacement and the BAU replacement capex. This results in a positive incremental cost during the NBI fibre deployment period, and “negative” incremental cost in the subsequent years.

⁹ ComReg propose for these costs to be recovered through “one-off charges” to NBI, as and when these costs are incurred.

the total number of copper and fibre customers served using Eircom's CEI.¹⁰ These costs are then allocated between the IA and commercial areas based on the proportion of Eircom's poles / length of ducting in each of the footprints.¹¹ ComReg does not conduct an analysis of incremental cost to NBI or Eircom copper, and therefore considers all network opex as a "shared cost".

- The "wholesaling costs" represent any incremental on-going wholesale costs that Eircom incur as a result of providing CEI access to NBI, such as additional product management, billing or account management costs.¹² These costs are included as an annual cost per customer.

Our assessment of ComReg's approach is set out in the remainder of this section.

3.2 Frontier assessment

3.2.1 ComReg's decision to implement a replacement cost approach only for future assets is appropriate

We consider an approach which does not attempt to revalue sunk assets to replacement costs is appropriate.

Regulators typically revalue assets to replacement cost in order to proxy competitive prices, to send potential new entrants appropriate build or buy signals. As highlighted in Section 2, the market in the IA is by definition not contestable, meaning the need to inform appropriate build-or-buy decisions is not relevant when setting the price of CEI services in the IA. ComReg's primary objective in respect of CEI services provided in the IA is therefore to ensure that Eircom can recover its future incurred CEI costs and a reasonable value for sunk assets.

The "mixed" historic cost and bottom up approach ensures this.

- Using historic costs for existing re-usable assets ensures that, for CEI assets that do not need to be replaced or remediated for NBI roll out, Eircom recovers only the remaining value.
- Forecasting forward-looking investments on a bottom-up basis then allows Eircom to recover investments to ensure its CEI in the IA is "NBI ready", and to ensure over the long run that Eircom can recover future expenditure on maintaining the network. Absent NBI roll out it would be economically rational for Eircom to 'sweat' its assets i.e., to limit its investment to replacing only those CEI assets that have been damaged or that require immediate replacement to facilitate compliance with its USO obligations. However in order to provide CEI access to NBI, Eircom will need to make additional investments, including "accelerating" its pole replacement and remediating duct during the NBI

¹⁰ For example, if the total number of NBI and Eircom copper customers in 5 years' time is 20% larger than today, then opex in that year is assumed to be 20% larger than the current value.

¹¹ The considered opex includes reactive and preventative maintenance of CEI, pole testing, and tree trimming. Tree trimming costs only include trimming conducted as part of Eircom's preventative maintenance, as trimming conducted as part of the replacement of poles and deployment of new cabling is captured within the capital costs. Pole testing opex in the IA is also excluded for the first 12 years, which reflects the length of Eir's pole testing cycle – this accounts for the fact that all poles will be tested as part of NBI's fibre deployment, meaning the usual pole testing process can be suspended in the IA for the next testing cycle.

¹² ComReg 20/81, para. 427.

deployment. By using a bottom-up approach to estimate the investments needed to serve the combined copper and NBI network, ComReg ensures that Eircom can recover efficiently incurred future costs under NBI deployment.

This approach is also consistent with the European Commission's 2013 Recommendation on non-discrimination and costing methodologies¹³, which states that *"NRAs should value all assets constituting the RAB of the modelled network on the basis of replacement costs, except for reusable legacy civil engineering assets."*¹⁴

One issue that will require further assessment by ComReg is the degree to which the BU-LRAIC forecast of future expenditure should be replaced by actual expenditure data when it becomes available, or whether the forecasts should be used to set prices on a forward looking basis (with prices only reset periodically to take account of the latest available information). The optimal approach depends on a combination of the following:

- The degree to which the expenditure can be forecast accurately, or is subject to a high degree of inherent unpredictability.
- Any benefits that could result in having forward visibility of prices, even if outturn costs are different from the forecast used to determine prices. These benefits could apply to both predictability for NBI as the purchaser, and Eircom as the supplier. Setting prices against forecast costs can also provide incentives for the regulated entity to make efficiency gains, if they can retain a part of the reduced expenditure.
- The degree to which information asymmetry between Eircom and other stakeholders including ComReg, would mean that any forecasts will inevitably be biased in Eircom's favour.

3.2.2 The opening asset value should reflect Eircom's expected CEI cost recovery in the IA absent NBP deployment

The approach previously used for CEI does not provide strong precedent in the IA

ComReg estimates the opening value of the asset base in the IA by estimating the opening carrying value (net book value) for CEI assets across Eircom's whole network footprint, and allocating a share of this to the IA proportional to the number of poles. NBV was used as the cost base for the existing CEI decision. However, the generic CEI access that was enabled by this decision was only feasible in commercial areas. As such there is no established regulatory valuation for the CEI assets in the IA.

¹³ European Commission's Recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU), of 11 September 2013

¹⁴ 2013/466/EU, para. 33.

ComReg should consider a potential 'impairment' adjustment to CEI assets in the IA

While a reasonable fall back is an accounting valuation of the CEI assets in the IA, this would not necessarily be HCA with straight-line depreciation, even if this is the approach adopted at a national level. The accounting value of the assets should be the lower of the carrying value of the assets (e.g. HCA applied with straight-line depreciation) and the realisable value of the assets either through a sale of the assets or the present value of future cash flows.¹⁵

As outlined above, the opening RAB in the IA should reflect the cost that Eircom would expect to recover from that area in the “counterfactual scenario”, absent NBP deployment. Prior to the NBP tender (the counterfactual described above) the value of Eircom’s future cash flows could be considered the future cash flows from continuing to operate its copper network in the IA.

Given this, if the discounted future cash flows generated by operating in the IA was less than the net book value of the CEI assets calculated by applying straight-line depreciation, then it would be appropriate to apply an impairment adjustment. To our knowledge Eircom have not applied any impairment adjustment to duct and poles. However, we would expect any review of the valuation of assets would have taken place at a national level, which could disguise differences in expected cash flows between geographic areas.

The value of the CEI assets in the IA would be expected to be proportionately lower than assets in commercial areas

Prices are currently nationally averaged with the price of current generation wholesale access (CGA) services set on a national basis, and are set on the basis of average costs across the whole of Eircom’s network. More specifically, the prices reflect Eircom’s actual national (TD-HCA) costs adjusted for efficiencies, with BU-LRAIC+ costs applied to the active equipment.¹⁶

This means that at a national level, Eircom’s forward looking cash flows from operating CEI assets in large part reflects regulated wholesale and retail pricing, which has been set in a way which captures the NBV of the CEI assets. As such it is reasonable to assume that Eircom may expect to fully recover at least the carrying value of the CEI assets nationally.

However, there are a number of reasons why the value (discounted future cash flows) generated by CEI in the IA would be expected to be proportionately less than in commercial areas:

- Proportionately more infrastructure is required to pass each addressable premise in the IA, than in commercial areas due to lower population density;
- The penetration of homes connected as a proportion of addressable premises is relatively low and falling, due to the absence of good quality broadband services;

¹⁵ See for example IAS 36 <https://www.ifrs.org/issued-standards/list-of-standards/ias-36-impairment-of-assets/>

¹⁶ See ComReg Decision D03/16.

- The revenue per home connected is relatively low, due to the low take up of broadband services in the IA and prices being set at a national level; and
- The other forward looking costs of serving homes in the IA are also relatively high, reflecting factors such as smaller exchange sizes.

As such, whilst Eircom may expect to recover its CEI costs overall, it would expect to recover a disproportionate share of those costs from commercial areas i.e. “over-recovering” costs from services in commercial areas, and “under-recovering” costs in the IA. This is supported by evidence from Eircom’s USO funding applications, which indicates that for least some premises in the IA, Eircom was not able to fully recover HCA costs in rural areas in the past. These submissions set out that for a material number of customers, presumably with a significant overlap with the IA, the avoidable costs of serving these customers was greater than the revenues generated, i.e. they generated negative margins.¹⁷

Not applying an impairment adjustment could result in an unearned holding gain

If the value that Eircom could have recovered absent the NBP from operating the CEI in the IA was less than the result of allocating the NBV based on the proportion of poles in the IA, this allocation would result in a unearned holding gain for Eircom’s investors.

As such, ComReg should consider whether its approach provides a reasonable opening valuation for the CEI assets in the IA, or whether it would be more appropriate to apply an impairment adjustment to reflect the expected value that Eircom would have generated absent the NBP, from continuing to operate a copper network.

Even if ComReg determines that there is insufficient evidence to apply an impairment adjustment, it is unlikely that the forward looking cash flows from operating the CEI were sufficient to recover any costs.

3.2.3 The approach to calculating annual capital charges is not well justified

ComReg is proposing to use straight-line depreciation to calculate capital charges on a forward looking basis. However, this choice has not been well justified and ComReg does not appear to have fully assessed other alternatives.

While there are practical advantages to using the same approach as used in Eircom’s statutory accounts, there are a number of disadvantages with an accounting-based approach:

- Asset lives used in the statutory accounts may not align with the economic life of assets; and
- Capital charges for a single asset will vary over time due to the declining ‘return on capital employed’ component of the charge.

¹⁷ For example, Eircom’s USO funding application for the financial year 2014/15 identified a “net cost” from the USO of €12.43M in that year. See ComReg 18/36, paragraph 22.

These issues can lead to the profile of capital charges varying over time in a way which is an artefact of the accounting approach, and are not reflective of underlying usage of the assets or other economic drivers.

This is likely to be the case for CEI in the IA due to a combination of factors:

- The network is not in a steady state, with the roll out of the NBP leading to an acceleration of replacement of assets; and
- The accounting lives used for poles are inconsistent with the assumed steady state replacement rate for poles.

These issues are described below.

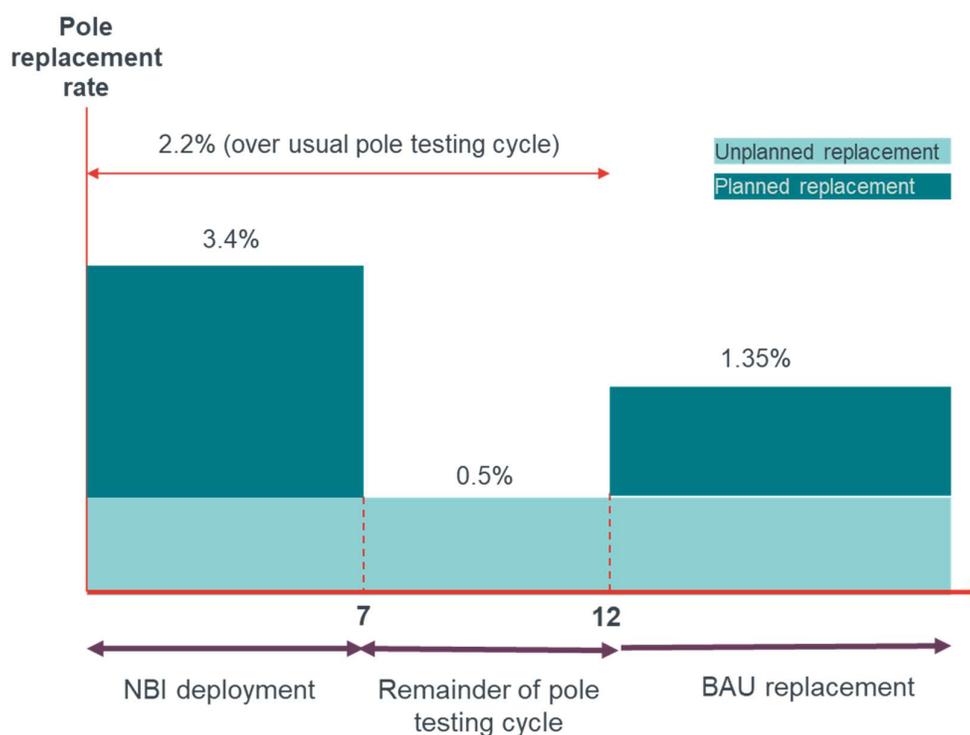
ComReg forecasts that capital expenditure will be concentrated during the period of NBI's roll out

To estimate the future pole-related capex in the IA, ComReg estimates the relevant pole replacement rate in each year and applies that to the number of poles in the IA.

In the model, ComReg assumes a pole replacement rate of 2.2% per year during NBI's roll out, and 1.35% in subsequent pole testing cycles.

- The pole replacement rate is made up of a "planned replacement" rate, which reflects replacement during NBI's network deployment and Eircom's pole testing programme, and a "unplanned replacement" rate, which reflects replacement during unplanned events such as storms.
- ComReg uses an unplanned replacement rate of 0.52% in all years. For planned replacement, ComReg assumes a pole testing failure rate of 10% for "BAU" replacement once the NBI network has been deployed, and a larger 20% rate during NBI roll out.¹⁸ As Eircom has a pole testing cycle of 12 years, these translate to planned replacement rates of 1.67% for the pole testing cycle containing NBI's deployment, and 0.83% for "BAU" replacement.

¹⁸ This reflects the pole replacement rate incurred by Eircom during its fibre roll out in the Rural Commercial Area, which is a reasonable proxy for the rate for NBI roll out in the IA. The larger rate reflects that more stringent criteria must be applied for testing during network roll out, as the installation of cabling requires engineers to climb the pole.

Figure 3 Assumed pole replacement rate in the IA

Source: Frontier based on ComReg 20/81

The calculation of pole replacement costs is inconsistent with the assumed pole asset lifetime in the PAM

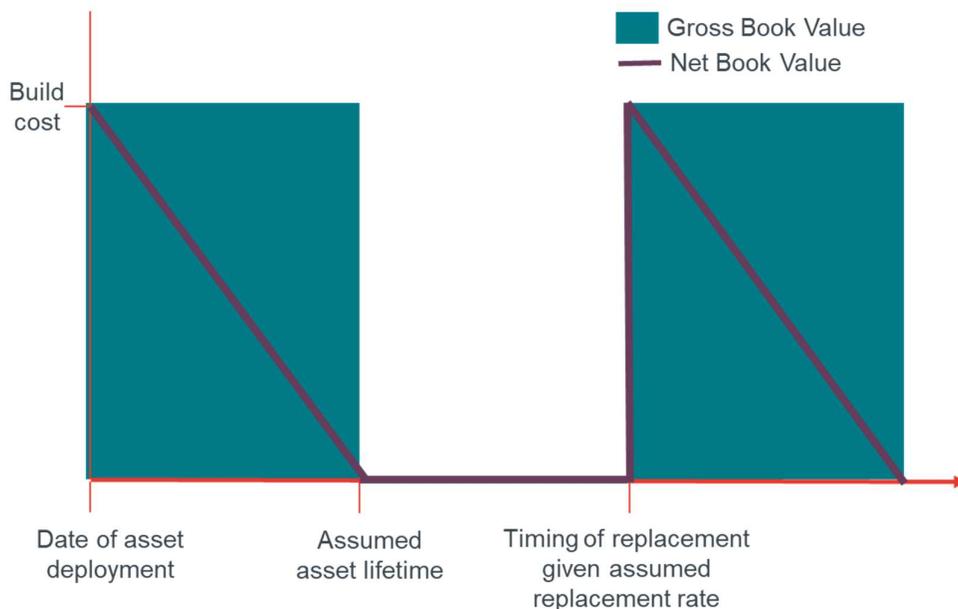
Based on these replacement rates, the estimated forward-looking capex for poles translates to an average pole lifetime of approximately 75 years once the NBI network has been deployed. However, the asset lifetime used by ComReg to calculate annualised pole costs is only 30 years.

The combination of these two factors will cause artificial fluctuations in capital charges

This results in two main discrepancies in the estimation of the cost base.

- First, it inflates the annualised cost for poles in the early years after the pole is deployed. This is because it “accelerates” the recovery of the costs, by inflating the annual depreciation charge.
- In addition, it creates a unrealistic profile of Gross Book Value (GBV) and Net Book Value (NBV) for the assets. In particular, it will result in a “discontinuity” in the NBV and GBV, as these will fall to zero once the asset is fully depreciated, but then not increase again until the asset is replaced at a much later date. This is illustrated in the diagram below.

Figure 4 Profile of GBV and NBV when asset replacement rates and lifetimes are not aligned



Source: Frontier

Alternative approaches to calculating capital charges

Given the disadvantages of using Eircom's accounting approach to determine capital charges, there are a number of potential alternative approaches that ComReg might usefully consider:

- Continue to use straight-line depreciation but align forward looking asset lives to be consistent with the assumed replacement rate;
- Apply an annuity approach to estimate capital charges; or
- Apply infrastructure renewals charging (IRC). This approach holds the RAB at broadly current levels and sets annual depreciation at the forecast level of steady state capex each year. In effect, assets are funded on a "pay-as-you-go" basis, assuming that they are always maintained at a constant level.

While an annuity approach or IRC have some theoretical benefits, applying a more realistic asset life on a forward looking basis would appear to be more appropriate. For the opening regulatory assets, which has been recovered to date based on the 30 year asset life, this would involve setting a depreciation charge at 1/75 of the gross book value from 2020 onwards until the opening asset value was fully depreciated.

3.3 Conclusion on the relevant cost base

Overall, we find that the overarching costing methodology and principles used to determine the cost base are appropriate, including the "hybrid" historic asset base and BU-LRAIC approach, and the use of straight-line depreciation to annualise costs. However, we have identified some appropriate adjustments to ComReg's

approach, which would result in a more suitable estimation of the relevant cost base in the IA. In particular:

- The opening value of the asset base in the IA should reflect the value that Eircom would have expected to earn from operating these assets if the NBP tender had not taken place. Given the proportionately higher costs and lower revenues in the IA, it would be reasonable to assume that the valuation of the CEI assets in the IA would be less than that calculated by allocating the total Eircom NBV based on the volume of infrastructure.
- The assumed pole asset lifetime should be made consistent with the calculation of pole replacement costs. The asset life implied by the calculation of replacement costs is larger than the lifetime used to depreciate the assets, which results in a discrepancy in the calculation of annualised costs, and an unrealistic profile of Gross Book Value (GBV) and Net Book Value (NBV) for these assets.

We also recommend that ComReg determines whether an impairment adjustment is required for the opening value of the assets and updates its calculations to be internally consistent.

4 APPROPRIATE COST OF CAPITAL FOR NBI CEI PRICING

4.1 ComReg's proposed approach

ComReg in Draft Decision D20/81 proposes to use a specific WACC of 4.03% for CEI access to NBI in the context of the NBP. This compares to the nominal pre-tax WACC for fixed line telecoms services of 5.61%, as per ComReg's Notified 2020 WACC Decision.¹⁹ ComReg's proposal is supported by a report by Europe Economics.

To justify the use of a different, lower WACC, ComReg argues that both the demand and cost risk for CEI access to NBI is significantly lower than for Eircom's other regulated activities. ComReg considers that Eircom's position as a long-term provider of CEI is similar to that of a monopoly network utility such as an electricity network or a water utility, with a significantly different risk profile relative to its other regulated activities. In particular:

- Demand side risk is limited by the specific conditions of the NBP contract: the NBI is required to pass all premises in the IA and operate a fibre network for a minimum of 25 years. "Step-in-rights" provided to the Irish State also mean that in the event that NBI should fail and that no alternative provider would replace it, the Irish State would cover any CEI access charge payments to Eircom.
- Cost risk should be lower-than-typical since at least part of the CEI to be deployed in the IA would likely become obsolete at an earlier date relative to equivalent CEI in the commercial areas. As a result, in a usual commercial setting, the CEI assets would not have received an income stream throughout their technical life.

ComReg proposes to keep the "generic" parameters of the WACC the same as those in the Notified 2020 WACC Decision, as these are independent of the activities being regulated. However, ComReg proposes specific estimates for the parameters which reflect specific risks:

- **Cost of debt:** ComReg considers that the cost of debt should be close to that of a risk-free investment. In accordance to the Commission's Communication on the appropriate approach for legacy infrastructure²⁰, ComReg proposes an estimate of 1.44% for the nominal cost of debt.²¹
- **Asset beta:** ComReg considers that the asset beta for CEI access should be close to that of a network utility. ComReg proposes an asset beta of 0.34, reflecting the mid-point of an asset beta range constituted by:

¹⁹ ComReg draft document "Review of Weighted Average Cost of Capital (WACC) – response to ComReg Document 19/54", dated 10/06/2020.

²⁰ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC1106\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC1106(01)&from=EN)

²¹ The 1.44% is the sum of the nominal risk-free rate value of 0.824 per cent and the debt premium value of 0.62 per cent, based on a 5-year average spread of European telecom operators' bonds.

- As a low end, the bottom end of the range proposed by the Commission for Regulation of Utilities (CRU) in its Irish Water Revenue Control 3 (RC3) price control for water utilities (proposed range of 0.28-0.36); and
- As a high end, the asset beta determined by CRU in its PR4 Decision on TSO and TAO Transmission Revenue, of 0.4.
- **Gearing:** Given the high predictability of streams of future revenue flows, ComReg considers the gearing should reflect that of a utility firm (usually in the order of 0.5 to 0.6). ComReg proposes a value of 0.55 based on the gearing used by for electricity networks in CRU’s PR4 Decision.

The table below summarizes the proposed changes to the WACC parameters.

Figure 5 2020 WACC decision vs proposed WACC

Parameter	2020 WACC decision for other Eircom activities	WACC proposal for NBI use of CEI
Nominal risk-free rate		0.824%
Nominal ERP		7.21%
Tax		12.50%
Asset beta	0.425-0.48	0.34
Equity beta	0.71-0.80	0.76
Nominal cost of equity	6.67%	6.30%
Nominal pre-tax cost of equity	7.62%	7.20%
Nominal cost of debt	2.60%	1.44%
Gearing	40%	55%
Nominal pre-tax WACC	5.61%	4.03%

Source: Frontier Economics based on ComReg Draft Decision D20/81

4.2 Frontier assessment

4.2.1 It is reasonable to set a separate WACC for the CEI assets in the IA

Every activity in theory has a specific risk and hence cost of capital

It would be appropriate to consider a different WACC for CEI access to NBI if there are clear differences in the ‘systematic risk’ associated with providing this access relative to that of Eircom’s other fixed telecoms activities.

These systematic risks relate to risks affecting all firms in the economy, such as changes in interest rates or macro-economic shocks.²² The estimated cost of capital should only reflect compensation for systematic risks, as an efficient capital market investor should be able to reduce non-systematic risks by holding a diversified investment portfolio.

²² This differs from non-systematic risks, which relate to risks specific to an individual firm or sector, which can be eliminated by diversification.

Consistent with ComReg's approach, differences in the systematic risk for CEI access by NBI would result in differences in key elements of the WACC:

- **Asset beta:** implicit in the CAPM model framework, the asset beta is a measure of systematic risk of an asset relative to the market as a whole, and would therefore be altered if the level of systematic risk is different.
- **Cost of debt:** the cost of debt represents interest rates paid by the company on its debt, and is often measured as the sum of the risk-free rate and a debt premium. The debt premium depends on the perceived credit risk, and naturally, the perceived credit risk depends on the systematic risk of the business.
- **Gearing:** the gearing is a measure of a company's financial leverage. The optimal gearing of a company is reached through balancing the trade-offs associated with holding debt and equity. This trade-off is directly associated with the degree of predictability of returns of the business, and therefore to its underlying systematic risk.
 - Debt is usually cheaper than equity due to the lower risk faced by debt investors, who are entitled to payments ahead of any dividend payments to shareholders. There is also a 'tax shield' on interest payments which are deductible expenses for corporate taxation.
 - On the other hand, companies with a higher leverage are seen as riskier, as the obligation to provide interest payments on debt might increase the likelihood of default or bankruptcy, increasing equity financing costs. This effect is highest for firms with more volatile and pro-cyclical business models.
 - As a result, companies with highly predictable revenue streams and low probability of default, are able to safely operate with higher levels of (cheaper) debt.

The use of a single cost of capital for a range of regulated activities reflects practical considerations

The European Commission's Notice of November 2019 sets out a proposed approach for the calculation of the cost of capital for "legacy infrastructure". This results in a single cost of capital to be applied across all legacy infrastructure.

The use of a uniform cost of capital across a number of regulated activities delivered by telecommunications operators reflects two practical issues:

- The significant economies of scope and scale across activities delivered from infrastructure and network investments with a high degree of commonality; and
- The difficulty of finding appropriate disaggregated comparators for cost of capital parameters.

Fixed telecommunications exhibit high economies of scale and scope. In this respect it may be challenging to fully separate assets by activity as many assets support a range of downstream activities. However, there may be some assets with, ex ante, different risk profiles which can be clearly separated from other assets. For example Ofcom in the UK applies a different (lower) cost of capital to those assets operated by the Openreach subsidiary of BT Group from other

regulated activities. Similarly, some EU regulators have applied a different (higher) cost of capital for prospective next generation access (NGA) activities.

The second issue is establishing appropriate comparators in order to estimate the relevant cost of capital parameters. where there is good reason ex ante to consider that certain assets may have a different cost of capital. As the comparators used for regulated telecommunications operators typically deliver a wide range of activities due to the same economies of scope, it is challenging to identify appropriate comparators for subsets of regulated services.

However as we set out below, these practical considerations do not apply in the case of CEI access to NBI:

- The assets required to deliver the CEI to NBI are clearly identifiable; and
- There are appropriate comparators that can be used to determine a separate cost of capital for these assets.

The assets relating to CEI access by NBI in the Intervention area can be clearly identified

It is reasonable in practice to determine a different WACC for Eircom's CEI assets used to serve NBI than from its other regulated services. This is because the underlying assets, i.e. ducts and poles in the IA, will in the long run be primarily used to support the NBI network, and could, in theory, be operated independently from Eircom's other activities. This activity can therefore be considered as a "standalone" business when considering the appropriate cost of capital.

More generally, telecom operators such as Eircom have the possibility of divesting their CEI assets and leasing them back from the purchaser for their own use. This is supported by a range of transactions across Europe, where fixed and mobile operators, including Eircom, have taken this approach:

Figure 6 Examples of divestment of CEI assets by telecoms operators

Company	Description
Singtel	Divestment of ducted passive fibre network infrastructure from a 100% stake to less than 25%. ²³
Eircom	Separated its mobile telecoms infrastructure under a separate management company (Emerald Towers). Its share in Emerald Towers was then sold in May 2020. ²⁴
Vodafone	Partial divestment of mobile towers by Vodafone ²⁵
Iliad	Partial divestment of fibre assets by Iliad ²⁶
Telefonica	Transfer of Telefonica's tower infrastructure to Telxius ²⁷

Source: Frontier Economics

²³ <https://www.singtel.com/about-us/news-releases/singtel-to-divest-majority-stake-in-netlink-trust-to-249-percent>

²⁴ <https://www.independent.ie/business/irish/eir-sells-its-towers-for-300m-39231378.html>

²⁵ <https://www.vodafone.com/news-and-media/vodafone-group-releases/news/vantage-towers>

²⁶ <https://www.globenewswire.com/news-release/2020/02/28/1992852/0/en/Iliad-Press-Release-Closing-of-the-partnership-deal-with-InfraVia-for-fiber-in-France.html>

²⁷ <https://mobileeurope.co.uk/press-wire/14849-telefonica-acts-on-strategic-plan-selling-towers-to-telxius>

This separation of passive infrastructure assets appears, in large part, to reflect the fact that these assets have lower risk and can be more efficiently financed separately from the downstream activities of vertically integrated operators.²⁸

Utilities provide a reasonable set of comparators

As outlined in Section 4.1, ComReg considers Eircom's position as a long-term provider of CEI to NBI to be similar to that of a network utility such as an electricity network or a water utility, and it estimates the relevant WACC parameters on that basis.

4.2.2 The WACC should be significantly lower than for Eircom's other regulated activities

The systematic risk associated with renting CEI assets to NBI is significantly lower than that of Eircom's other regulated activities

The operation of CEI assets rented by NBI has a significantly lower systematic risk profile relative to Eircom's other regulated activities.

Systematic risk reflects variability in expected returns to investors from the assets. Variability in returns could be considered to be driven by two factors:

- Demand risks, for example changes to the revenues from price and volume effects due to competition, economic cycles or technology changes; and
- Cost risks, for example changes in the expenditure required to operate and maintain the network.

While some risk is inherent, for regulated assets the form of regulation will determine the degree to which systematic demand and costs risks are passed through to investors or which are borne by customers. As set out in the rest of this paper, the regulatory regime for CEI access for NBI proposed by ComReg minimises the risks to Eircom's investors both because the supply of CEI to NBI has inherently low risk, but also because the downstream wholesale market in the IA is not contestable.

As we show below:

- The nature of demand from NBI is such that there is little inherent risk of NBI diverting to other suppliers, and infrastructure access demand is largely unaffected by cyclical effects in downstream demand or technology evolution; and
- The regulation proposed is such that NBI and ultimately the Government bears a high proportion of the remaining risk.

Demand from NBI for access to CEI is inherently stable

There is a sub-contractor agreement in place between NBI and Eircom for the use of Eircom's CEI infrastructure to serve the IA over the length of the NBP contract period of 25 years. As a result, demand for Eircom's CEI in the IA is almost

²⁸ See for example https://ewia.org/wp-content/uploads/2017/10/EU-Tower-Sector_EY-White-Paper.pdf

guaranteed over the duration of the NBP contract. Whilst the sub-contractor agreement does not represent a commitment to Eircom for NBI's use of CEI, there is still no material risk of NBI substituting its demand from Eircom, whether that be to alternative CEI providers (such as ESB) or through NBI deploying its own poles and ducts.

- The evolution of CEI prices for NBI under ComReg's proposed cost sharing approach incentivises NBI to use Eircom's CEI infrastructure. As explained in Section 5, NBI's CEI price reflects only a small share of the cost of Eircom's CEI in early years, meaning the CEI costs incurred by NBI will be relatively small during the NBI fibre deployment phase, and much smaller than the cost of deploying parallel CEI infrastructure.
- The cost of switching CEI provider is likely to be prohibitively costly and time-consuming. Switching would require significant labour time (for example to transfer cables from Eircom to the alternative provider's poles and ducts), and significant ancillary costs such as pathway / carriageway digging (in the case of ducts). ESB's overhead routes in rural areas also largely cross privately-owned fields and other rural property, rather than following the public road routes followed by the Eircom CEI²⁹, meaning NBI would need to re-route its cable network to use ESB's infrastructure.

Demand from NBI is also highly predictable even in the NBI network deployment phase, and Eircom bears no technology risk.

- As part of the NBP process, NBI is developing network roll out plans. These include aspects such as technology used, network routing, and scheduling of roll out in different areas. As a result, Eircom is able to identify in advance the total amount of CEI assets that will be used by NBI over time.
- The NBP contract also includes NBI's "technology road map", which sets out how it plans to upgrade the network over the NBP contract period.
- In addition, the NBP contract includes a penalty regime in case NBI does not meet its contractual agreements, including roll out targets. It therefore provides strong incentives for the actual outcomes such as NBI's network deployment profile to match NBI's plan.

Similarly, neither demand from NBI (nor CEI prices) are affected by economic cycles. Demand is driven by the network roll out plans of NBI, which is "fixed" in the NBP contract, meaning demand will not change even if economic cycles reduce the downstream usage of the NBI network.

Finally, there is negligible risk of reduced demand or bad debt, even if NBI falls into financial difficulties. The Irish State is provided with "step-in rights" within the NBP contract, which aims to ensure the continuity of the NBP network in the event that NBI falls into financial difficulties.

Regulation can insulate Eircom from other risks

In other regulated communications markets, ComReg's objective to encourage sustainable competition means that it sets regulated prices to proxy competitive

²⁹ ComReg 20/81, paragraph 616.

prices through 'bottom up' LRIC cost modelling. This leads to increased risk for Eircom as changes to input costs or to technology can lead to unexpected holding gains or losses for eircom's investors, increasing variability in returns.³⁰ While this increases the cost of capital and hence costs for downstream users, this increase in cost is offset by the significant benefits that competition brings.

In the case of CEI for NBI, as we set out elsewhere in this report, the regulatory regime implicitly de-risks Eircom's investors. In particular, the proposed prices closely reflect actually incurred expenditure in the cost base through a Regulated Asset Base approach. (e.g. ensuring the full recovery of historical CEI investments it would expect to make in the IA absent the NBP tender), and also includes an adjustment mechanism if future CEI costs differ from that forecast by ComReg. Such an approach allows ComReg to determine a lower cost of capital than for Eircom's other regulated activities.

A value towards the lower end of the range of comparators is appropriate

We consider that the systematic risks associated with CEI access to NBI is more akin to a water utility, which has a lower risk profile than an electricity network provider.

First, as noted above, the demand associated with CEI access by NBI is not affected by economic cycles. Water utilities are less pro-cyclical than energy utilities. For example, the global energy demand is set to fall by 5% in 2020 according to the IEA World Energy Outlook 2020³¹ as a result of the COVID-19 pandemic, whilst there is no such evidence of water usage being affected.

In addition, water utilities also bear no material technology risk, as there is no real prospect of significant structural changes in the water sector. Energy utilities however face uncertainty associated with reaching a Net Zero economy:

- The future demand for gas is highly uncertain. There are future scenarios where the existing networks continue to deliver low/no carbon sources of gas. In other scenarios, gas demand would fall markedly.
- Electricity networks are facing significant challenges, with high investment programmes needed to adapt to the penetration of renewables and electrification of sectors. For example, uncertainty over the level (and location) of electricity demand from new technologies (such as electric vehicles), and of new electricity generation sites (such as wind farms), means there is significant uncertainty around the required capacity on electricity distribution networks in different areas.

Finally, water companies such as Ireland's water utility (Irish Water) are mainly government-funded, which can be considered comparable to the provision of CEI to NBI which is in effect backed by the Irish State through the provision of the NBP subsidy and associated step-in rights. Energy utilities however do not typically operate with the same degree of government funding.

³⁰ Such holding gains and losses are a feature of competitive markets and as such these risks are similar to those faced by non-regulated companies.

³¹ <https://www.iea.org/reports/world-energy-outlook-2020>

4.3 Conclusion on the appropriate cost of capital

We support ComReg's approach for considering a lower WACC relative to CEI access for NBI in the context of the NBP, and that the WACC parameters that are subject to change are the cost of debt, the asset beta and the gearing.

The WACC used should give high weight to water utilities as comparators, which have a low asset beta and the ability to be highly-leveraged.

5 APPROPRIATE COST SHARING MECHANISM IN THE IA

5.1 ComReg's proposed approach

ComReg proposes to categorise the total CEI costs determined for the IA into two pools:

- An 'incremental pool' of costs, which are costs incremental to a specific access seeker (NBI or generic access) or to Eircom's own use of the CEI;³² and
- A 'shared' pool of costs which are common between all users of the CEI.

The incremental costs considered for NBI are the capital charges associated with accelerated pole replacement during FTTH roll out and capital costs related to the deployment of sub-duct for FTTH roll out. These costs would be recovered entirely through regulated charges for NBI.

For shared costs, ComReg considered three options:

- A per operator approach, where costs are shared equally between the operators using the infrastructure. i.e. during the period where Eircom and NBI both use infrastructure, the charges for NBI would recover half of the shared costs.
- A primary/secondary approach, where all of the shared costs would be recovered from a designated 'primary' user. Eircom would be designated as the primary user and NBI the secondary users during the period where both were using the infrastructure, with NBI being the primary user when Eircom decommissions its copper network (or at some other point when NBI is deemed the primary user).
- A per customer approach, where the allocation of costs changes over time to reflect the number of downstream wholesale customers. ComReg suggests that the proportion of shared costs recovered from CEI prices to NBI is equal to NBI's share of active users in the IA. Dotecon suggests an 'augmented' version where CEI costs for a certain proportion of customers is not included in the CEI prices for NBI until the Eircom network is decommissioned.³³

The per operator approach has been used for generic access.

ComReg suggests that, subject to implementation issues being overcome, a per customer approach may provide an appropriate approach:

- It will provide a smoother profile of costs over time, but with an overall cost recovery which could be similar to that of a per operator approach; and
- The approach will provide Eircom with incentives to migrate customers to the NBI network, but compared to a per operator or primary/secondary user approach, ComReg considers it has weaker incentives for copper switch off.

³² Para 420

³³ This would effectively be a hybrid between a per operator approach and a per customer approach,

5.2 Frontier assessment

5.2.1 The recovery of NBI incremental costs from NBI charges is reasonable

Causality

In general where causality can be established, this provides the most appropriate economic signals to purchasers (i.e. build or buy decisions) and downstream users (i.e. allocative efficiency).

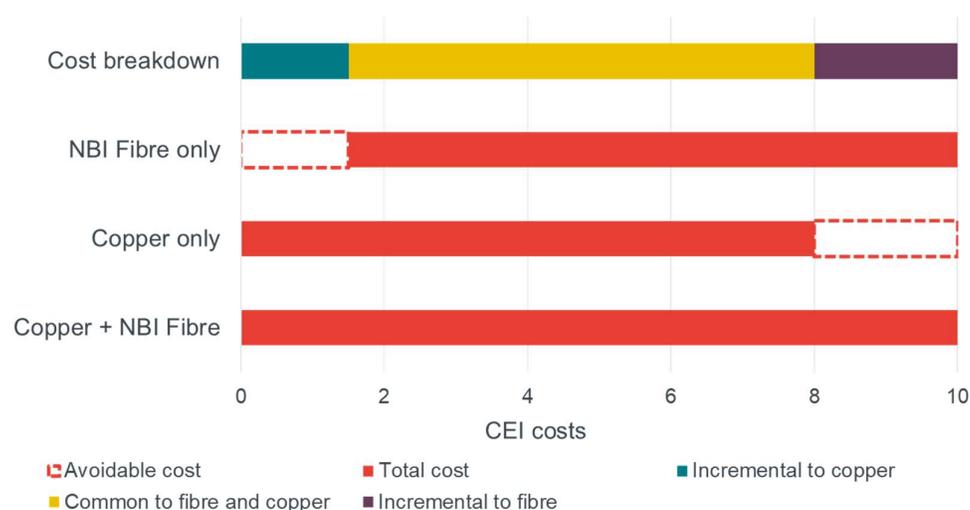
It is reasonable for ComReg to assess the incremental costs that will be incurred by Eircom which would not have been in a counterfactual where the NBP tender had not occurred, and to recover all of these costs through charges to NBI.

ComReg does not appear to exclude all costs that are incremental to Eircom copper

In order to correctly identify the incremental costs to NBI and to Eircom copper in the IA, CEI costs need to be estimated in the “factual” scenario, where CEI needs to support both the Eircom copper and NBI networks, and in an appropriate “counterfactual”. The costs that can be avoided in that counterfactual scenario are then the relevant incremental costs.

- To determine the incremental cost to NBI, the relevant counterfactual is the maintenance of the existing Eircom copper network in the IA.
- For the incremental cost to the Eircom copper network, it is appropriate to consider the CEI costs needed only to serve the NBI network i.e. in the absence of the need to maintain Eircom copper-based services.

Figure 7 Illustration of the appropriate incremental cost structure



Source: Frontier

ComReg follows this approach in estimating the incremental capital cost of NBI, as it explicitly compares the CEI capex for the combined Eircom copper and NBI fibre network with the capex needed to support a copper only network.

However, ComReg does not appear to have followed this approach in estimating the incremental capital cost of Eircom copper, as it does not explicitly estimate the capex in the scenario where CEI in the IA only needs to serve the NBI network. There may therefore be a number of costs that are incremental to Eircom copper that remain in the estimated cost base. These include the following:

- The cost of migrating Eircom copper cabling when replacing poles. We understand that the unit capital costs for pole replacement in the PAM reflect the costs incurred during Eircom's fibre roll out in the Rural Commercial Area, which we understand includes the cost of migrating the copper cabling.
- The replacement of poles before they are needed for the NBI fibre network. These will include unplanned pole replacements (for example due to storm damage) that occur before NBI rolls out in a given part of the IA. These costs could be significant, given that NBI will take up to seven years to complete its fibre roll out in the IA.

In addition, ComReg does not estimate incremental costs for operating costs, and therefore may also include operating costs that are incremental to the Eircom copper network within the cost base. For example:

- Underground preventative maintenance. ComReg's consultation states that these costs relate mainly to the "retrieval of redundant copper cables to free up duct space"³⁴, and therefore can be assumed to be largely copper network-driven costs.
- Any cost savings associated with "accelerated" pole replacement due to NBI deployment. Replacing faulty poles quicker increases the robustness of Eircom's pole network in the IA, which may therefore reduce the required maintenance of the pole network. For example, a newer pole maybe more resilient to storm damage, which reduces the likelihood of remediation or unplanned replacement of the pole during storm events.

ComReg may overestimate the incremental duct-related costs to NBI

In estimating the duct capex during the NBI deployment, ComReg assumes that a new sub-duct would need to be installed in all ducts used by NBI. Based on the DAM, this results in estimated capex of approximately €5.5m on sub-ducts during NBI deployment.

ComReg's approach assumes that Eircom do not have sufficient capacity in any of its existing sub-ducts on the underground route used by NBI in the IA. In particular, ComReg states that "*it is uncertain whether Eircom may in all cases have sufficient capacity, so ComReg has assumed that any duct access request would require a new sub-duct to be installed in all requests.*"³⁵

³⁴ ComReg 20/81, para. 415.

³⁵ ComReg 20/81. Para. 425.

However in reality, there could be spare capacity in at least some of Eircom's sub-duct. Where spare capacity exists, it would be reasonable to include no additional sub-ducts costs for these routes.³⁶ In principle, it would be reasonable to include some costs on these routes to reflect the opportunity cost of using the spare capacity. However, that opportunity cost is zero within the IA, given that absent the NBP tender there is no reasonable prospect of an alternative operator using that spare capacity to deploy a parallel network.

Given this and also the materiality of the sub-duct costs, it appears proportionate for ComReg to further assess the extent of spare capacity in Eircom's sub-ducts in the IA, and adjust the estimated sub-duct capex accordingly.

5.2.2 The treatment of shared costs

Appropriate objectives

By definition causality cannot be used to determine the most appropriate allocation of 'shared' costs, which are effectively fixed (i.e. they do not vary with respect to the volume of demand, even in the long run) and common (in that they would be incurred whether copper or fibre services were delivered) in the period where both networks are operating. As such, causality does not provide any indication of the appropriate choice of allocation mechanism, and by extension, there no reason to prefer allocation methods which intuitively appear to be more causal, such as loading (i.e. per operator or per cable approach) or a primary/secondary user approach.

Even after the point of copper switch off, some of the capital charges will be for CEI that will have carried Eircom copper cabling in the counterfactual had the NBP tender not taken place.³⁷ As such, while from a practical perspective charges will allow Eircom to recover 100% of costs from NBI, with no implicit allocation of costs to the copper network or copper subscribers after this point, this treatment will provide Eircom with some upside compared to the counterfactual.

As causality cannot be used to decide between the potential allocation methodologies during the period of co-existence of the Eircom copper and NBI networks, we need to consider ComReg's other objectives. We consider that the key objectives with respect to the cost sharing mechanism should be:

- Ensuring that Eircom can recover the appropriate opening value of re-usable assets and future expenditure on CEI assets in the IA from NBI and its own use. As noted above, for re-usable assets these costs are those that Eircom would expect to recover in the IA in the counterfactual where the NBP process did not take place;
- Providing Eircom with appropriate incentives to migrate customers from its copper network to the NBI network;

³⁶ We understand from NBI that in revised CEI prices presented to NBI as of 1st July this year, different pricing was provided for newly-installed sub-duct and for in-situ duct. This would support the view that NBI would be using some spare duct during its fibre deployment.

³⁷ This is under the reasonable assumption that Eircom would not switch-off its copper network in the IA if the NBP tender did not take place, or at least switch it off at a later date.

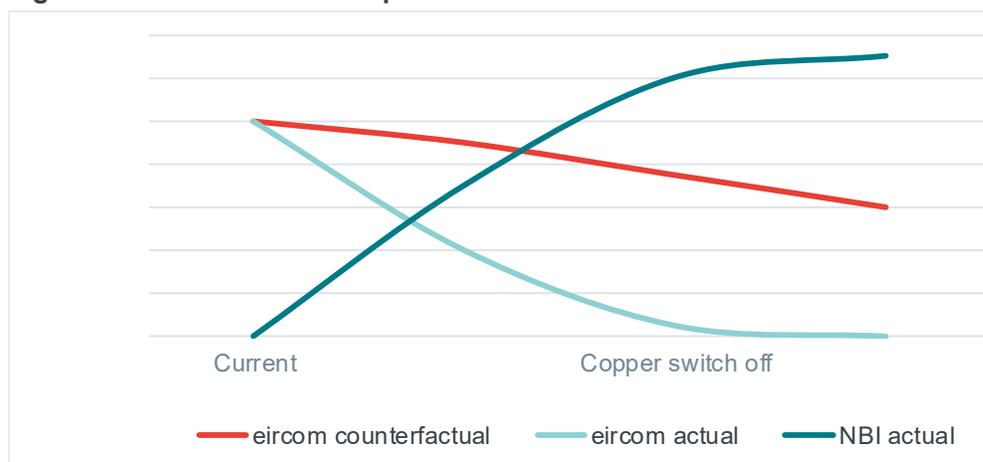
- Providing NBI with the appropriate incentives, including the incentive to use existing CEI infrastructure rather than duplicate CEI assets;
- Practicality of implementing the sharing mechanism; and
- Predictability of the resulting CEI prices and cost recovery.

Ensuring Eircom can fully recover costs

For the first element, it is helpful to compare the actual situation with the counterfactual if the NBP tender process had not taken place. The key difference is that the number of copper subscribers over which Eircom can recover costs will be lower in the NBI scenario than under the counterfactual, with this 'deficit' increasing over time as the NBI network rolls out and customers migrate to this network.

The difference between the number of subscribers under the two scenarios is shown below. Note that there is an expectation that the overall number of customers under the actual scenario will be higher, as the greater capability of the subsidised NBI network should increase demand compared to the counterfactual where Eircom would continue to operate its existing copper network in the medium term.

Figure 8 Illustrative example of NBI and Eircom subscriber numbers



Source: Frontier Economics

Note: Purely illustrative

This means that the foregone Eircom subscribers on which Eircom is unable to generate margins (the difference between the red and light blue lines) are less than the gain in NBI subscribers. However, the profile of NBI customers and foregone Eircom subscribers is similar.

This indicates that a pricing approach where the costs recovered from NBI is proportional to the number of NBI customers (e.g. per customer pricing) is appropriate. However, the share of the costs to be recovered from NBI needs to take account of the fact that NBI will increase the size of the market compared to the counterfactual, rather than simply migrating customers from Eircom.

As such, the denominator used to assess the share of costs that should be allocated to NBI should not be the total number of active customers in the IA at any

given time, but instead the expected number of customers of NBI at the time of copper switch off. This approach would ensure that the NBI share is 100% at the point of copper switch-off, as this takes account of the expected growth in subscriber numbers.

The other potential approaches do not provide the same degree of assurance that Eircom will recover costs broadly equivalent to those that would have been recovered under the counterfactual.

- A per operator approach would lead to a significant increase in Eircom's cost recovery in the initial part of NBI's roll out. This is not appropriate, as Eircom would recover 50% of its CEI costs from NBI, despite having a similar level of customers on its network as it would in the counterfactual (NBI take-up during that period would be low, as reflected in the NBI customer forecasts provided to ComReg). Similarly, closer to copper switch off, when Eircom's subscriber numbers from which it could recover costs would be negligible, Eircom would only recover 50% of the costs of the infrastructure. While these two effects would to a degree offset, there would be no reassurance that overall Eircom would neither under- nor over-recover costs.
- The approach to try and identify a primary and secondary user does not in any way compensate Eircom for the lost margin on its own customers following NBI's roll out.

Taken together, a per customer pricing approach using a denominator equal to the number of NBI active customers at copper switch-off would result in the appropriate recovery of CEI costs by Eircom.

Providing appropriate incentives to Eircom

Eircom's incentives with respect to migration of customers will be primarily driven by the wholesale margins it can generate from providing services to a customer on its own network, compared to the payments received from NBI if the customer migrates.

There may also be some differences in retail margins between serving customers on its own network versus serving customers on the NBI network, and Eircom could in theory act as a wholesale aggregator, generating further margins from NBI. However, the difference in cash flows between providing services 'on-net' and migrating customers to the NBI network may be second order.

As noted above, it is important to take into account the fact that migration to NBI is not a 'zero sum game', with Eircom having a degree of influence on customers potentially leaving the network, for example relying on fixed wireless or mobile services, or acquiring retail customers for the NBI network who are not currently served by the Eircom copper network.

The per customer mechanism set out above, where the denominator is based on the expected number of NBI customers at copper switch off, means that Eircom would receive a fixed per customer revenue for every customer it placed on the NBI network, whether or not they were previously on the Eircom network.

The use of a stable denominator gives certainty to both Eircom and NBI on the trajectory of the sharing, as it is directly proportional to the growth in the NBI base.

This contrasts with the situation where the cost share is based on the number of active customers as the denominator, as proposed by ComReg. Under this approach Eircom would see variable increases in revenues if:

- a customer migrated from the Eircom network to the NBI network;
- a lower increase in revenues if it acquired a previously unconnected customer for the NBI network, as both the numerator and denominator would increase; and
- an increase in revenue if a customer was disconnected from the Eircom network but did not connect to the NBI network, as this would reduce the denominator.

Under this approach Eircom's incentives would also change over time:

- Initially when NBI's penetration is relatively low, Eircom would have a strong incentive to maximise NBI's penetration to increase NBI's share of active users;
- Later, when NBI's penetration was high, Eircom would have a much lower incentive to acquire new customers with incremental revenues being largely driven by the rate at which it could get customers to leave the Eircom network, independently of whether these customers migrate to the NBI network. While migrating customers to the NBI network is one method of reducing customers on the Eircom copper network, Eircom could also migrate customers to mobile-based services or simply not actively retain customers. This results in a situation where Eircom has incentives to "game" the process by downward migrating existing copper customers onto solutions such as fixed cellular, delaying or avoiding the upward migration onto fibre based services.

This would mean that a share based on active users would not provide Eircom with appropriate incentives to migrate customers to the NBI network over the full migration period.

The perverse incentive for Eircom to downward-migrate or disconnect existing customers is also created under the per operator charge and primary/secondary user approach. These approaches would provide strong incentives for Eircom to switch off the copper network (as this would allow Eircom to fully recover costs from NBI), but would be driven by the need to get customers to exit the copper network, rather than migrating to the NBI network.³⁸

Overall, a per customer pricing proposal would appear to provide more appropriate pricing incentives for Eircom.

Providing NBI with appropriate incentives

As noted above, NBI's ability to act on any pricing signals from CEI charging is highly constrained by the NBP contract, which means that this is not a key consideration for ComReg.

However, there may be some limited flexibility for NBI to influence market outcomes within the confines of the contract, and as such ComReg may give some weight to the impact of different pricing proposals on NBI's incentives.

³⁸ While Eircom would have a strong incentive to decommission the copper network, the ability to decommission could be affected by regulation including the universal service obligation.

- A per customer pricing approach will dampen NBI's incentives to attract customers to a degree, by reducing the expected margins on these customers during the co-existence period. However, as long as the margin per customer is positive overall, including the expected customer lifetime after copper switch off, NBI will continue to have a strong incentive to acquire and retain customers.
- However under a per operator approach, NBI faces a 'cliff edge' increase in costs at copper switch off.³⁹ At this point the margin for the last customer that migrates from the Eircom copper network to the NBI network is likely to be highly negative, which provides a strong disincentive for NBI to acquire these final customers.⁴⁰

In addition, CEI pricing impacts NBI's incentives to take CEI access from Eircom, versus alternatives which include the deployment of its own pole and duct infrastructure. The per customer approach provides greater incentives for NBI to use CEI access from Eircom, as it results in lower CEI prices during NBI's fibre deployment.

Taking the above together, a per customer pricing proposal would appear to provide more appropriate pricing incentives for NBI.

Practical considerations

ComReg has expressed concerns about the practicality of a per customer approach.

A per customer approach could be implemented at an IA level. There would appear to be little benefit to applying this approach at a more disaggregated level, as the NBI share at a IA level is effectively the aggregation of the share at a more disaggregated level.

This would mean that the two parameters required to implement the approach would be:

- The number of NBI subscribers in each period; and
- The denominator which could be either:
 - The expected number of NBI subscribers at copper switch off; or
 - The total number of active customers in the IA.

The number of NBI subscribers will be readily available and will be externally validated as part of the NBP contract.

The expected number of NBI customers at copper switch off is by definition a forecast. There is a currently agreed and validated forecast as part of the NBI business plan which could be used initially. Over time as information becomes available on the rate of migration to NBI and the timing of potential Eircom copper switch off, this forecast could be updated in a mechanistic fashion.

An approach based on the number of active customers would mean that in addition to the number of NBI customers in each period, Eircom would need to produce a

³⁹ We note that this cliff edge would be smaller if the approach is implemented at a disaggregated level i.e. by considering copper switch-off in separate geographical area of the IA rather than for the IA as a whole.

⁴⁰ In practice, NBI would have limited scope to "refuse" these final customers, as NBI is required to provide access to a customer if this is requested by a retailer or wholesale aggregator.

validated number of customers in the IA. While this is presumably not a parameter that Eircom routinely produces, it would be possible for Eircom to put in place a process to calculate and externally validate this.

A per operator or primary/secondary approach would presumably be applied at a disaggregated level, as applying at an IA level would result in a 'cliff edge' with NBI only paying half of the shared cost of the network, or none at all, until the entire copper network has been decommissioned across the IA. This would require defining the level of disaggregation required, the point at which the Eircom network was considered decommissioned, and then collecting and validating data on a period by period basis as the network is decommissioned in different areas over time. This may be complicated by the fact that the boundary between the IA and commercial areas does not necessarily map easily onto the Eircom network topology, with individual exchanges and even individual cables serving combinations of premises in the IA and in commercial areas.

In conclusion, per customer approaches would be the simplest to implement in that it would not require geographical disaggregation. Using the expected NBI active customer numbers at copper switch off would require the least ongoing data collection, but would require this denominator to be reviewed and potentially updated on a periodic basis. A per customer approach based on using the total number of active lines as a denominator would require additional data collection by Eircom, but would not require any forecasting to be carried out if the prices were adjusted retrospectively, or limited forecasting if prices were reviewed on a periodic basis.

Predictability

If prices and hence cost recovery is unpredictable in the co-existence period, this will increase the risk and hence the cost of capital for Eircom. We can consider predictability from the perspective of both Eircom and NBI.

The payments Eircom receives under per customer pricing is dependent on the rate of migration to the NBI network, which can be considered uncertain. However, the impact of this uncertainty on Eircom is mitigated to a large degree by the ability of Eircom to recover costs from its existing customer base, so a slower migration to NBI and hence lower payments from NBI will be offset by greater margins from its own customers. As the number of customers on the Eircom network falls toward zero and Eircom, via CEI charges paid by NBI, recovers the majority of the costs, then the variability will reduce toward zero. There is a similar "off-setting" effect for NBI under this approach – as CEI prices and therefore payments to Eircom increase over time as customer migrate to the NBI network, this is offset by the wholesale access margins NBI makes on those customers.

With per operator or primary/secondary user pricing, pricing is dependent on the speed at which Eircom switches off its copper network. It is not clear whether this can be predicted to a high degree of accuracy at this point, so also results in pricing being unpredictable. However unlike the per customer approach, there is minimal offsetting/mitigation through variations in other cash flows generated by wholesale/retail customers, as cost sharing is not directly linked to the migration of customers.

In conclusion, in terms of predictability of cash flows, a per customer approach may reduce variability, as while the level of CEI charges by NBI / cost recovery by Eircom in a given year is uncertain, for both parties variability is offset by opposite movements in margins from wholesale customers.

5.3 Conclusion on the appropriate cost sharing mechanism

A per customer approach appears to best meet ComReg's overall objectives by appropriately compensating Eircom for lost wholesale margins due to the NBP roll out, providing appropriate incentives for Eircom and NBI, and reducing variability in CEI payments. This approach also appears to be the most practical to implement.

The incentive mechanism of the per customer approach can be improved by setting the denominator as the expected number of NBI subscribers at copper switch off, rather than using the actual number of active NBI and Eircom subscribers. This will result in more appropriate recovery of cost by Eircom, prevent Eircom being incentivised to disconnect subscribers from the copper network to increase CEI payments from NBI, and also minimise the data required to implement the approach.

6 CEI PRICING FOR NBI IN THE COMMERCIAL AREAS

6.1 ComReg’s proposed approach

ComReg proposes that the CEI pricing paid by NBI for ‘transit’ services in the “commercial areas” should be based on the incremental costs of providing access to NBI. This would exclude “shared costs” of CEI in the commercial areas and any contribution to eircom’s common corporate costs.

ComReg’s justification reflects the fact that NBI is not competing in the commercial areas, and so does not reduce the margin Eircom can generate in those areas by competing for customers. As the shared and joint/common costs will already be recovered by Eircom and other CEI users in the commercial areas, allocating some of these costs to NBI could lead to over-recovery of costs

Charging NBI a CEI price based on LRIC does not distort competition in the commercial areas, as NBI will not be competing in downstream markets in those areas.

However, if the CEI price charged to NBI was set above LRIC, the additional cost recovery risks distorting competition in the commercial areas by dampening infrastructure-based competition, through two potential impacts:

- *“Lowering the cost of wholesale services provided by eir such as VDSL VUA, particularly where prices are cost oriented; and*
- *Making the use of CEI access more attractive for other providers relative to building their own infrastructure.”⁴¹*

6.2 Frontier assessment

Eircom cost recovery

When considering the ability of Eircom to recover costs, the key difference between the CEI assets in the IA and those in the commercial areas is that in the long term, Eircom is expected to continue to use these assets to serve its own customers in a way which is unaffected by the roll out by NBI.

When considering charging for the use of the fixed and common costs of the CEI in commercial areas, it is again helpful to consider the counterfactual where the NBP tender had not taken place. Other than the incremental costs of installing and maintaining NBI’s infrastructure on its CEI, the main impact on Eircom would be the potential loss of any contribution that customers in the IA would have been expected to make to the CEI absent the NBP.

However, as set out in Section 3, it is reasonable to assume that, in such a counterfactual, Eircom’s customers in the IA would not generate sufficient future margin even to cover the NBV and ongoing operation and maintenance of the CEI in the IA. As such, customers in the IA would not have made any contribution to

⁴¹ ComReg 20/81, paragraph 240

the costs of the CEI in the commercial areas. In light of this there is no justification for NBI to make a contribution to the fixed and common costs in the commercial area to compensate for foregone contributions from these customers.

Similarly there is no evidence that Eircom will not be able to fully recover its costs in the commercial areas in the absence of a contribution from NBI:

- The IA is defined as those areas where operators, including Eircom, were not able to roll out superfast broadband in the absence of the NBP. This implies that it was commercially viable to operate a superfast broadband network in commercial areas in the absence of the NBP, i.e. that Eircom considered it could make a return on these assets on a self-standing basis, without any subsidy from Government. This is supported by public statements made by Eircom regarding its fibre rollout in the Rural Commercial Area, as well as its Commitment Contract with the Government regarding this roll out.⁴²
- In particular, Eircom chose to roll out fibre to the 300K homes in the rural commercial area before the NBP contract was awarded and with no certainty that it would be awarded.

In any case, there is no risk of Eircom not making continued investments in CEI assets in the commercial areas absent a contribution from NBI, as Eircom will continue to invest to support the services it will continue to deliver in those areas using its CEI.

Competitive distortions

In addition to the lack of need for costs in the commercial areas to be partially recovered from NBI, allowing Eircom to do so could lead to potential distortions:

- The payment from NBI would distort Eircom's incentives. For example if Eircom had the expectation that they would be able to recover investment costs in the commercial areas partially from NBI, they would have a greater incentive to make marginal investments.
- To the extent that Eircom did not change its behaviour in commercial areas, the additional payment would result in a transfer to Eircom's shareholders from NBI and ultimately the Irish State, which could disincentivise the Government from any future interventions aimed at increasing NGA network penetration.

In view of this, allowing Eircom to set prices for NBI access to partially recover fixed and common costs in the commercial area could be considered illegal state aid.

6.3 Conclusion on costing of transit services

ComReg's proposals to set prices based on LRIC for NBI's use of CEI in commercial areas appears appropriate.

⁴² For example, in its submission to the Public Accounts Committee on 14th February 2019, Eircom stated that its roll out aim to "provide the greatest number of premises [with fibre] which were commercially viable", and that "our rural FTTH investment is 100% private capital and by June of this year more than 335,000 homes and businesses that originally required a subsidy under the NBP will be able to avail of high-speed broadband without any taxpayer subsidy". See https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/committee_of_public_accounts/submissions/2019/2019-02-14_opening-statement-carolan-lennon-ceo-eir-32r001962-pac_en.pdf

7 CONCLUSION AND RECOMMENDATIONS

Overall, we conclude that ComReg's proposals for CEI pricing for NBI are appropriate, given ComReg's relevant objectives and the specific circumstances of NBI's use of CEI infrastructure:

- The overarching costing methodology and principles used to determine the cost base in the IA are appropriate, including the hybrid historic asset base and BU-LRAIC approach. This approach allows Eircom to recover the remaining value of its historically incurred CEI investments, as well as the (efficient) future investments needed to support the NBI fibre network.
- We support ComReg's approach for considering a separate WACC for CEI access for NBI in the context of the NBP, and agree that the WACC parameters that are subject to change are the cost of debt, the asset beta and the gearing. This is because Eircom face significantly lower systematic risk in relation to the provision of CEI access to NBI, relative to its other downstream regulated services.
- The overarching approach to sharing costs between NBI and Eircom in the IA is also appropriate. Recovering incremental costs to NBI solely from NBI, and "shared costs" from both NBI and Eircom, is consistent with cost causality. Allocating shared costs using a per customer approach also appears more appropriate than the alternative approaches considered by ComReg, as it appears to best meet ComReg's overall objectives by appropriately compensating Eircom for lost wholesale margins due to the NBP roll out, providing appropriate incentives for Eircom and NBI, and reducing variability in CEI payments. This approach also appears to be the most practical to implement.
- ComReg's proposals to set prices based on LRIC for NBI's use of CEI in commercial areas also appears appropriate. Eircom will already recover the fixed and common CEI costs in commercial areas from its own customers and other CEI users in the IA in the counterfactual where the NBP did not take place, so recovering some of these costs from NBI would lead to over-recovery of costs by Eircom. This over-recovery could lead to distortions in Eircom's investment incentives in the commercial areas, and could be considered as illegal state aid.

However, we have identified some appropriate adjustments to ComReg's approach, which would result in a more appropriate CEI prices for NBI in the IA. In particular, we make the following recommendations.

1. Re-assess the opening value of the asset base in the IA, to ensure it reflects the value that Eircom would have expected to earn from operating these assets if the NBP tender had not taken place. As part of this, we recommend that ComReg considers whether an impairment adjustment is required for the opening value of the assets.
2. Adjust the pole asset lifetime used to calculate depreciation charges for poles to make this consistent with the calculation of future pole replacement costs.

3. Adjust the per customer approach used to allocate shared costs in the IA, by setting the denominator in the sharing formula to the expected number of NBI subscribers at copper switch off, rather than the combined number of active NBI and Eircom copper subscribers. This will result in more appropriate recovery of costs by Eircom, prevent Eircom being incentivised to disconnect subscribers from the copper network, and also minimise the data required to implement the approach.



5 Siro Limited

**SIRO RESPONSE
TO
COMREG CONSULTATION 20/81**

**PRICING OF EIRCOM'S CIVIL ENGINEERING INFRASTRUCTURE
(‘CEI’) CEI ACCESS IN THE CONTEXT OF THE NATIONAL
BROADBAND PLAN (‘NBP’)**

1. Summary

SIRO welcomes ComReg's consultation and is supportive of the direction taken in the Draft Decision and in particular the proposal to reduce the cost associated with the use of eir duct and pole infrastructure for the use of rolling out high speed fibre broadband network.

2. Response to ComReg's Questions

Question 1

Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

Response 1

SIRO agrees with the matters considered in Section 3 and ComReg's regulatory objectives as set out in the Draft Decision

Question 2

Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

Response 2

SIRO agrees with ComReg's preliminary views on the general costing methodology principles. No comment

Question 3

Do you agree with ComReg's preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI's MIP access to CEI in the NBP IA and for NBI's transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

Response 3

In general SIRO is supportive of the costing methodology that should be applied in the case of generic Access to CEI and for NBI's MIP access to CEI in the IA and transit through the Commercial areas. However, SIRO would have a concern that the common costs are to be spread across 'Various Wholesale Access Products' and that this may lead to an increase in the cost of these products in the future.

In addition, paragraph 229 references the capacity of 6 cables on an 8.5m pole, the assertion here is that poles are used for feeder routes and what is not consider is where the pole is used as a

distribution point to serve end users. In general where there are poles in commercial areas these poles are fed underground with the service drops being fed overhead.

Question 4

Do you agree with ComReg's preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response.

Response 4

No comment.

Question 5

Do you agree with ComReg's preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI's MIP access in the NBP IA and (iii) the CEI costs for NBI's transit access in the Commercial Areas? Please provide reasons for your response.

Response 5

No comment

Question 6

Do you agree with ComReg's preliminary view that the existing regulatory asset lives for Eircom's poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

Response 6

SIRO would be of the view that the life of a pole should be 40 years, in line with other utilities that deploy poles and ducts of 50 years. eir does not have an obligation to replace poles or to unblock ducts with the exception of H&S grounds or requirements to access the asset, thus they have the ability to extend the life of the assets.

Question 7

Do you agree with ComReg's preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI's MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

Response 7

SIRO agrees with the ongoing process charges.

Question 8

Do you agree with ComReg's proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

Response 8

No comment

Question 9

Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to poles and for NBI's MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

Response 9

No comment

Question 10

Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI's MIP access to duct in the in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

Response 10

No comment.

Question 11

Do you agree with ComReg's preliminary view on the use of number of customer lines and in particular the use of the number of each operator's active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI's MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI's transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response.

ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator's active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI's transit access in the Commercial Areas.

Response 11

No Comment.

Question 12

Do you agree with ComReg's preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or under-charging by Eircom? Please provide reasons for your response.

Response 12

No Comment.

Question 13

Do you agree with ComReg's preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

Response 13

SIRO agrees with Comreg Position on the costing per surface type.

Question 14

Do you agree with ComReg's preliminary view on a differentiated WACC rate of 4.03% for Eircom's CEI in the context of access by NBI's MIP NBP IA and for NBI's transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

Response 14

No comment.

Question 15

Do you agree with ComReg's preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

Response 15

SIRO agrees with ComReg's view on the cost of removing pole furniture for pole replacements. However, SIRO is of the opinion that the cost of removing pole furniture is an operational cost.

Question 16

Do you agree with ComReg's preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg's proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

Response 16

SIRO agrees with ComReg's position that tree trimming for pole replacement should be included in pole rental charge. However it is eir's responsibility to maintain the pole route and that no additional cost should be imposed on renting operator seeking access to a pole route.

Question 17

Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI's MIP as an upfront fee levied on NBI's MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

Response 17

No Comment

Question 18

Do you agree with ComReg's preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

Response 18

SIRO agrees with ComReg's view.

Question 19

Do you agree with ComReg's preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg's proposal that Eircom should publish it on its website? Please provide reasons for your response.

Response 19

SIRO agrees with ComReg's view.

Question 20

Do you agree with ComReg's preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

Response 20

SIRO agrees with ComReg's view.

Question 21

Do you agree with ComReg's preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI's MIP? Please provide reasons for your response.

Response 21

No comment.

Question 22

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.

Response 21

No comment.

Question 23

Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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

Response 23

No comment.

6 Sky Ireland Limited



Response to Pricing of Civil Engineering Infrastructure – Consultation 20/81

1. Sky welcomes the opportunity to respond to the Pricing of Eircom’s Civil Engineering Infrastructure (“CEI”) consultation 20/81 (“P+D Consultation”)¹. At the outset, we note that we are perplexed that CEI pricing has not formed part of the Regulated Wholesale Fixed Access Charges consultation 20/101, when their appropriate costing methodologies are inextricably linked. The manner in which CEI access is costed materially impacts the output prices of other access services from SB-WLR to SLU, LLU and FTTC.
2. Consequently, and in the interest of practicalities and the efficient use of resources, Sky will be submitting a single expert report covering responses to the P+D Consultation and the Access Network Review 20/101 (“ANR”) and the associated redacted cost models as part of its response to the ANR Consultation.
3. Notwithstanding this, Sky would at this juncture make a number of important observations in relation to the CEI consultation organised under the following sub-categories:
 - i. ComReg’s consultants Dotecon appear to have either prejudged or failed to properly consider the critical methodological costing approaches it has recommended, contrary to the requirements of its Terms of Reference (“ToR”). Specifically, it has merely adopted the approach taken by ComReg in relation to the treatment of common costs in an historical ComReg decision without any assessment as to whether the proposed approach remained valid, justified or appropriate in the context of the ANR and P+D Consultations. ComReg in turn, by adopting this recommendation from Dotecon has engaged in a process of “circular logic” that if maintained would be irrational and constitute a serious and significant error in any final decision.
 - ii. If Dotecon had properly considered the basis for the treatment of common costs it would have recognised that ‘lifting and shifting’ the approach taken in D11/18 is not at all appropriate for the ANR or the P+D Consultation.

¹ P+D = Pole and Duct





- iii. ComReg's proposed approach to the treatment of common costs is discriminatory, has been advanced without objective justification and is contrary to the principles enshrined in the 2013 EC Recommendation².
- iv. The proposed approach operates, whether by design or accident, as an effective "back-door" Universal Service charge. In this regard, ComReg is straying into an area of public policy well beyond its remit under the Act by serving to reduce the government subsidy to NBI through an effective "tax" on customers not in the NBP-IA.
- v. The proposed approach entails a cross-subsidisation policy that is anti-competitive and will result in outcomes that are contrary to European law leading to a potential breach of Article 106 of TFEU by Ireland.
- vi. ComReg has not carried out any analysis of Eircom's failure to repair and maintain its pole and duct network in the past despite Dotecon noting that this is something "that will need to be considered" to ensure inadequate investment in the past is not now "rewarded". As such ComReg are potentially erring on the side of rewarding Eircom's strategy of under-investment by not interrogating this issue.
- vii. Other issues.

I. Dotecon has not met the Terms of Reference it was contracted to deliver in making its Recommendations and prejudged the treatment of common costs

- 4. Common costs represents a material block of Eircom's operating costs under consideration in the ANR and P+D Consultation. This is clear from the **static** 18.9% "mark-ups" to capital annuities they account for in the Draft PAM and DAM models as recorded in the "Input Parameters" sheets of those models. It is unclear why the models have been designed with this key input as a static feature.
- 5. The way the model is designed, adding an additional footprint (e.g. the "Intervention Area") to be liable for common costs will only increase the output prices of P+D in that footprint with no off-setting reduction in the other two footprints. This does not reflect what would happen in practice and suggests a significant modelling design flaw. It also raises concerns about the extent to which ComReg is truly considering alternatives to the approach to common costs it has advocated for in the consultation as Sky would consider testing for this sensitivity **to be fundamental to assessing the commerciality or otherwise** of associated pricing outputs. A big picture/full market view is not possible due to this modelling constraint/flaw.

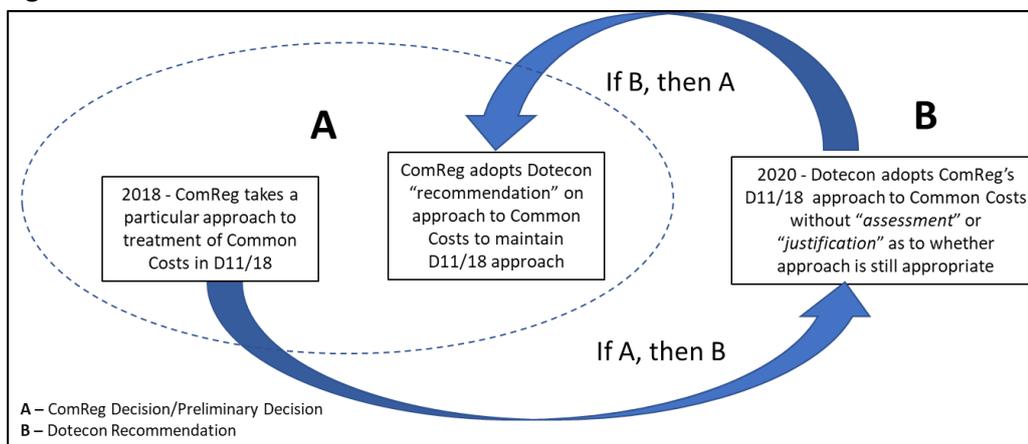
² Commission recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment – 2013





6. Sky concerns in this regard are heightened by the manner in which the current ComReg recommendation on the treatment of common costs was arrived at.
7. In particular, ComReg has presented its position as though it is relying on the recommendations of its external expert, Dotecon. In fact, Dotecon made no assessment as to the “*pros and cons*” of the approach recommended nor has it provided any detail on why “*such an approach is necessary or justified*”. Neither did it “*set out detailed reasoning or justification*” for the approach to treatment of common costs. Rather, through a process of a circular reasoning (see **Figure 1**) ComReg adopt a Dotecon recommendation that was itself merely adopted from previous position taken by ComReg.

Figure 1



8. It is evident that Dotecon has simply repackaged an approach ComReg took historically with little or no further interrogation. This is troubling when recalling the fact that the approach taken by ComReg in D11/18 to shared and common costs **was itself never consulted on** as it formed no part of ComReg’s preliminary views or alternative options in the consultation 17/26 that eventually led to D11/18.
9. Given this is first opportunity stakeholders (other than Eircom³) have had to consider and provide formal feedback on this approach in a consultation process it is highly inappropriate that it is **presented as something of an established methodology** that has already been fairly and transparently consulted on. Even if that had been the case (which Sky would dispute), it would still be necessary to reconsider that approach in

³ Eircom were given opportunity to comment on an amended cost modelling approach in 2019 that was not afforded to other stakeholders who were not even aware that significant amendments were being made to the preliminary model/approach advocated for by ComReg in consultation.





the context of the current review. Dotecon has failed to do so contrary to its ToR and in so doing has failed to take account of material distinctions between D11/18 (on which it relies almost exclusively) and the current ANR and P+D Consultation.

10. ComReg issued a ToR to Dotecon that sought its advice on “*what it considers to be appropriate pricing/costing principles and methodologies for determining CEI access prices*”. In particular Dotecon were asked to “*assess and consider*” pricing options based on a geographic sub-national level with particular reference to the “**NBP Intervention Area**” and “**Commercial (or Excluded) areas**”.
11. In this regard the constraints within which Dotecon were required to consider appropriate pricing/costing methodologies was clearly laid out to account for:
 - i. ComReg’s obligation to “*take utmost account of any Recommendation of the European Commission*”.
 - ii. The relevant elements of the regulatory framework set out in the Specific Regulations and specifically, Section 57 of the Communications Regulations Act 2002 (as amended), Article 3 of Directive 2014/61/EU and EU State Aid Guidelines
 - iii. How any such recommendation meets ComReg’s regulatory objectives and sends the correct investment signals to the market in a practical and proportionate manner.
 - iv. How any such recommendations compared with other European Jurisdictions⁴.
12. As such (and unsurprisingly) no constraints were placed on Dotecon in being required to adopt positions taken by ComReg in historic decisions in formulating its recommendation. In fact, ComReg **explicitly called on Dotecon to consider whether the historical approach taken in D03/16 remained appropriate.**
13. It therefore requires some explanation as to how Dotecon’s recommendation on the treatment of common costs has relied so heavily on a position taken by ComReg in a previous decision i.e. D11/18, that is not even referred to in the ToR.
14. In this regard Dotecon note:

⁴ It should also be noted that Dotecon provided no evidence from other European Countries that the approach taken by ComReg to the treatment of common costs was replicated anywhere else.





“In ComReg decision D11/18, ComReg noted⁵ that there is no margin on revenues earned from longer lines in the non-commercial area to contribute to the recovery of general overheads and common costs. As such ComReg revised its approach in a manner that all common costs contributions are on a cost per service basis and should be recovered from the commercial line base.”⁶ [Emphasis added]

Dotecon make no interrogation as to what was meant by the “non-commercial” and “commercial line base” in the context of D11/18, an issue looked at in greater detail below. In merely recording this statement of fact about an historical ComReg decision, Dotecon **shed no light on the rationale behind ComReg’s conclusion** or examined whether the basis for having reached it remained valid as required by its ToR for CEI pricing.

15. Dotecon then extrapolate from what ComReg had “noted” in D11/18 as follows:

*“...**a consequence of this approach** is that successor services provided in the non-commercial area cannot be expected to make a contribution to common cost and overhead recovery” [emphasis added]*

16. In framing the issue in this manner it is clear that Dotecon has merely not just “taken account” of an historical ComReg decision not referenced in the ToR but **has made that decision consequential/binding on its own recommendations** as to the appropriate costing methodologies for CEI.

17. Further evidence of Dotecon’s approach of deferring to an adopting the historical approach without appropriate interrogation is recorded at page 85:

“According to the assessment in ComReg Decision D11/18.....[there is] no need to include a mark-up for the recovery of central overhead costs on NBI’s CEI access within that area.”

Again, it is clear that Dotecon has made its recommendation of “no need to include a mark-up” contingent on (“according to”) an historical approach (“assessment”) taken

⁵ As discussed below Dotecon’s failure to interrogate the basis for ComReg ‘noting’ this also reflects a serious failing on its part.

⁶ DotEcon Report page 22





by ComReg. It requires some explanation as to how Dotecon came to adopt the D11/18 approach in the manner it has.

18. Had Dotecon proposed that the approaches taken on the 2016 copper access review in D03/16 remained valid **simply because ComReg concluded it was valid in 2016**, there is no question this would rightly be considered irrational and contrary to the specific ask of the ToR. Yet this is precisely what Dotecon has done in relation to the treatment of common costs in its recommendation in relying entirely on ComReg decision D11/18 in an apparent exercise of blind faith.
19. As consequence no weight is added to ComReg's proposed approach on the treatment of common costs in referring back to external expert advice⁷ in the guise of Dotecon's recommendations due the iterative sequence of events as outlined in **Figure 1**.
20. The debatable significance of Dotecon's recommendation on the treatment of common costs as highlighted by what Sky outline above is obvious. When the substance of the recommendation, properly considered in the manner required by the ToR, we consider that it is in fact deeply flawed from a legal, practical and rational perspective.

II. **Material issues not accounted for by Dotecon and/or ComReg**

21. Had Dotecon undertaken the task of interrogating the basis for the approach taken in D11/18 (and there is no evidence to suggest this happened) it would have identified material grounds as to why the treatment of common costs in that decision could not and should not be simply be '*lifted and shifted*' to a pricing methodology recommendation for pole and duct access.
22. Firstly, the physical dimensions of what is defined as the "*commercial*" areas in Dotecon's ToR is not matched by the definition of "*commercial*" areas in D11/18 ("2018 Commercial Areas"). In this regard the ToR "*commercial*" definition is informed by the DECC⁸ map ("DECC Commercial Areas") and excludes all lines (and infrastructure) that is not part of the NBP-IA. By contrast the 2018 Commercial Areas that is identified as having to carry the burden of all common (including corporate overhead) costs is defined by local loops of 3km and less⁹. These definitions clearly do not match up even on an approximate basis.

⁷ E.g. see paragraph 281 of the P+D Consultation

⁸ Department of Environment, Climate and Communications

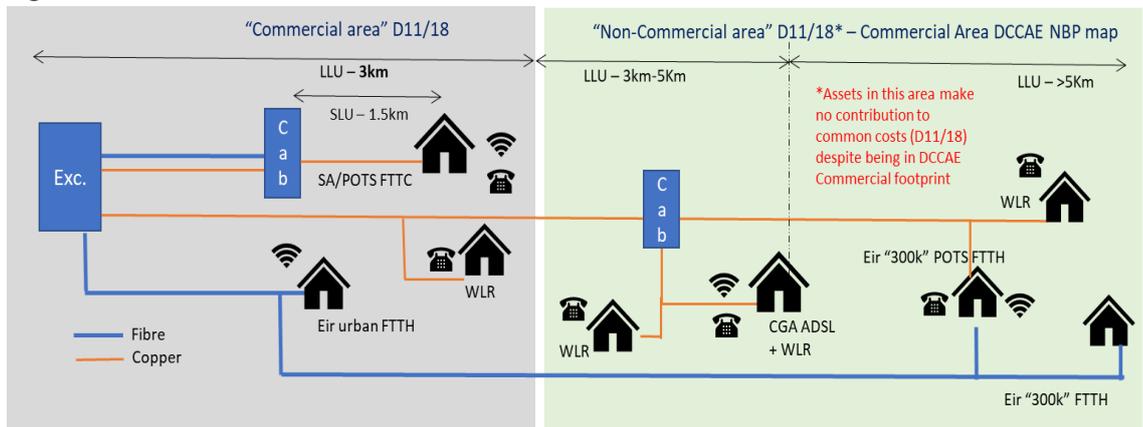
⁹ D11/18 – para 6.223-6.226





23. While ComReg included Eircom’s “300k footprint” in its subscriber “scaling” calculation¹⁰ in D11/18 this is an entirely separate exercise to restricting the 2018 Commercial Areas to 3km local loops for the purposes of cost allocations. All local loops/lines beyond 3km in the DECC’s map not included in NBP are by definition “commercial” given their exclusion from the NBP-IA. **Figure 2** highlights the overlap of what is effectively defined by ComReg as being “non-commercial” (i.e. lines >3km¹¹) in D11/18 and defined by the DECC (and now adopted by ComReg) as being “commercial” (i.e. area defined by service availability not line lengths) in the P+D Consultation.

Figure 2



24. We can see from the chart the contrast between the 2018 and DECC Commercial Areas to the extent that it is obvious that we are dealing with two entirely different concepts. Services ranging from WLR, to CGA broadband to FTTH (including POTS FTTH) in the green area of the chart are all deemed to be “non-commercial” for cost allocation purposes of D11/18 but are all deemed to be “commercial” based on the DECC definition.

25. Dotecon in simply adopting ComReg’s D11/18 decision and has failed to take account of this critical difference between the 2018 and DECC Commercial Area definitions and without any interrogation as to what criteria informed the concept of commerciality in either case. It mapped a concept from D11/18 on to a

¹⁰ D11/18 – para 6.217-6.281

¹¹ As noted above while the FTTH lines were considered for the scaling exercise undertaken in D11/18, the assets beyond 3km were effectively deemed to reside in non-commercial areas. So by reference to Figure 2 above the blue FTTH line would straddle both the “commercial” and “non-commercial” footprint by D11/18 logic.





recommendation for the P+D Consultation based on an incorrect assumption that there is a geographical overlap between the footprints considered in both cases. The error is clearly attributable to the false presumption that the definition of “commercial” in both cases is the same. While it is possible Dotecon may not be aware of this, as it is apparent from their report that they have not examined this aspect of D11/18, ComReg ought to be and should have guided Dotecon accordingly.

26. Secondly and **more importantly**, when Dotecon adopted ComReg’s historical approach recording what ComReg “noted” in D11/18 it failed to assess or consider the basis for the position taken by ComReg in that decision and whether those grounds still applied in the context of the current CEI pricing review.
27. As a justification for requiring the 2018 Commercial Areas to bear the full burden of Eircom’s common costs in the copper access network, ComReg addressed a concern raised by Eircom that the prices set for SB-WLR in D03/16 would no longer be sufficient for it to recover all of its costs as customers moved from CGA to NGA services. This is because Eircom required the, **then fixed**, nationally averaged SB-WLR price to be recovered through a combination of lower cost shorter lines in NGA areas to offset higher cost longer line in CGA areas. As customers switched to NGA, Eircom argued the volume of shorter lines would be less than forecasted when the 2016 SB-WLR price was set and so Eircom risked not recovering its costs from the service¹².
28. ComReg addressed the concern raised by Eircom by spreading all of the common costs across 80% of lines that made up the 2018 Commercial Area¹³. ComReg appeared to take the view that it was constrained in terms of its ability to increase the SB-WLR average line price set in D03/16 as part of the D11/18 decision. Clearly if a price was or could be increased the shape/scope of any geographic footprint’s commerciality can be altered accordingly. A SB-WLR service/line can only be classified as “commercial” or “non-commercial” by **reference to the price** that is or can be charged for that line.
29. In D11/18 ComReg treated nationally averaged **existing SB-WLR prices** as fixed and determined that at that fixed price “*non-commercial*” lines fell into a notional geographic footprint beyond 3Km local loops.

¹² For further detail on this see paragraph 9 of Sky’s response to ComReg FACO consultation – Document 20/46

¹³ ComReg never consulted on this aspect of the options available to it as part of ComReg consultation 17/26. This is the first time stakeholders have an opportunity to comment on this approach through a formal consultation process.





30. The current ANR and P+D Consultation has been initiated precisely **to set new prices** for all the relevant services including SB-WLR. The SB-WLR price should therefore no longer¹⁴ be assumed to be fixed in any consideration of a fresh (and long overdue) look at cost allocations. ComReg are not constrained in anyway in setting new prices for SB-WLR that recovers a fair share of common costs at a commercial price level¹⁵. In fact, the 2013 EC Recommendation strongly supports this principle¹⁶. To suggest that an area is “non-commercial” when the regulator has the power and freedom to set prices at a commercial level is a serious and significant error that needs to be corrected in any final decision¹⁷.
31. Nowhere in the P+D Consultation or the ANR Consultation has ComReg shed light on what has informed its view on classifying what it deems to be and not to be “commercial”. As we have already seen, the geographic definition of what constitutes “commercial” is a moveable feast from one review to the next yet there is no clarity on what criteria informed the shift or a clear definition of what “commercial” entails in either scenario. In D11/18 it would appear that the notion of commerciality was to some extent informed by reference to the prevailing SB-WLR price enshrined in D03/16. In terms of the current consultations, there is no such pricing reference points.
32. In the context of an extensive price review, in which ComReg is setting the prices by reference to some undefined notion of commerciality, clarity on the criteria (and justification for the same) that informs that concept is self-evidently **of fundamental importance if ComReg is to comply with its obligations under Regulation 16**.
33. With this in mind, we return to Dotecon’s blind adoption of ComReg’s approach to common allocation in setting prices in D11/18.

¹⁴ Sky would argue that as a consequence of cost orientation those SB-WLR prices were not fixed even during the D11/18 consultation process. Evidence from Eircom’s regulatory accounts was that this service was vastly over-recovering costs at the time which made the reallocation of common costs to “commercial” areas while maintaining prices in “non-commercial” areas all the more inexplicable.

¹⁵ Sky will go into considerably more detail in our response to the ANR consultation.

¹⁶ ComReg note at 4.50 of the ANR Consultation that while the 2013 EC Recommendation is not specifically relevant to FACO, ComReg considers that its objectives remain important in the context of PSTN WLR.

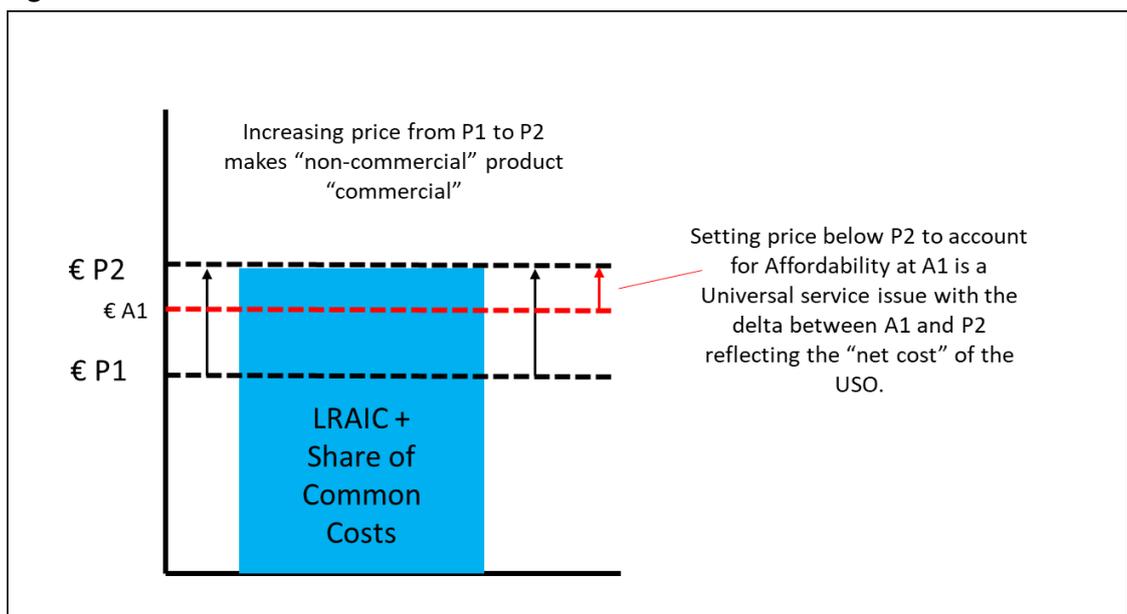
¹⁷ Indeed given that ComReg are proposing to deregulate the Urban Low-Level WLR market, Eircom itself is free to set prices at a commercial level for its national WLR footprint by raising the prices in the deregulated market even if services in the Rural Low-Level WLR have to be set below the commercial level due to Universal Service considerations.





34. By reference to **Figure 3**, when Dotecon recall ComReg’s decision in D11/18 whereby ComReg “*noted there is no margin on revenues earned from longer lines in the non-commercial area to contribute to the recovery of general overheads and common costs*”, it has pre-supposed that some ‘constant’ notion of commerciality as conceived of in D11/18 ought to be carried forward to future decisions (notwithstanding as noted above the 2018 and DECC Commercial Areas do not even match). In simple terms Dotecon has presupposed a price change from **P1** to **P2** for service in the NBP-IA can never occur **but offers no explanation as to why this is the case**.

Figure 3



35. However, there is nothing in D11/18 (or any other decision for that matter) or indeed the ToR that should have led to Dotecon’s considerations being constrained in this way. The fact that the proposed SB-WLR pricing in the ANR Consultation is lower than the price of the service today only compounds the error of not properly considering and assessing the relevance of D11/18 to the current review.

III. Proposed approach to common costs is discriminatory

36. The upshot of Dotecon’s “*recommendation*” and ComReg’s adoption of the same as outlined above, is to advocate for a discriminatory pricing regime that is highly





favourable to NBI¹⁸ by reducing the scale of the subsidy it requires from the Irish state.¹⁹ Sky consider the current proposal, if implemented, would constitute a breach of Regulation 16 of Framework Regulations. Furthermore, the proposal does not “*promote competition*” or the “*interests of end-users*” or “*contribute to the development of the internal market*”.

37. Given ComReg’s is effectively an agent of the state (notwithstanding its independent status) this outcome will rightly come under greater scrutiny by effected stakeholders including the European Commission. Those stakeholders include OAOs, like Sky²⁰, that purchase WLA/WCA products from Eircom and whose end-users, under the proposals, will have to bear a greater and undue burden in covering Eircom’s common costs. They also include Wireless Service Providers (“WISPS”) who are forced to compete with effectively a subsidised SMP provider on CGA broadband and mobile voice providers active in the Low-Level FACO market NBP-IA footprint.
38. In reality for NBI the NBP-IA footprint is a “**commercial**” proposition²¹. It offers it an opportunity to not just earn normal profits but to share excess profits with the government depending on market outcomes²².
39. It should be further noted that when NBI bid for the NBP tender, the pole and duct prices that underpinned its costing assumptions assumed no special treatment on pricing (save for a marginal volume discount) in order to make the bid commercially attractive to it. NBI’s bid as such **did not assume it would not have to make a contribution to Eircom’s common costs** for access to WLA products (just as other providers like Sky do), including for pole and duct access.
40. On the contrary, it was confirmed at an Oireachtas Committee hearing by the DECC in July 2019 that NBI’s bid incorporated pole prices that were “*slightly lower* [than €20]” than what everyone else paid and that slight reduction was as a consequence of a volume discount – not a hiatus on making a contribution to shared/common costs²³.

¹⁸ It should be further noted that D11/18 gave little more than cursory consideration to the eventual winner of the NBP in D11/18 (something acknowledged by ComReg in the current consultation and a further reason why simply adopting that approach now is inappropriate.

¹⁹ By extension ComReg’s proposal will see significant benefit accrue to the Irish state at the expense mainly of OAOs.

²⁰ In Sky’s case WLA FTTC VUA and WCA FTTC Bitstream are purchased via BT.

²¹ It should be noted the DECC itself do not define the NBP-IA as “non-commercial” and it awarded the NBP tender to NBI through a process that sought commercial bids.

²² See paragraph 64 of P+D consultation.

²³ See response by Mr. Fergal Mulligan of DECC to Deputy Brian Stanley at Oireachtas hearing on 3 July, 2019





ComReg's current proposal would make NBI's pole prices materially lower (and effectively free in the transit MIP Commercial area) and as already noted would substantially reduce the Government subsidy to NBI²⁴.

41. While Dotecon note that *"the level of subsidies paid...under the NBP scheme....is not a relevant consideration for ComReg in setting CEI access prices"* if it and ComReg were faithfully observing that principle then its assessment of NBI in the NBP-IA would be to view its entry as entirely a commercial proposition – which it is. The fact that the commerciality of the proposition is driven by state subsidy should be treated as purely incidental for the purposes of regulation.
42. As such Dotecon's assessment that there is *"no need"* to include a *"mark-up"* for common costs in relying on an historical ComReg decision provides no explanation as to why such an approach would be justified where ComReg are free to set prices at a commercial level that allows for the recovery of such common costs. What is at issue here is not whether there is a *"need"* to include a *"mark-up"* **but an objective and coherent reason for why such a "mark-up" should not be applied to all services in this area when (re)setting prices.**
43. Dotecon characterisation of the consideration as *"no need"* to include a *"mark-up"* wrongly gives the impression that including such a mark-up would constitute an exception rather than the rule. This is a false narrative and directly contradicts the 2013 EC Recommendation wherein **including a mark-up for common costs is the rule** rather than the exception²⁵. In this regard the advice (or more accurately the adoption of a previous ComReg decision without enquiry) is entirely misconceived and were ComReg to rely on it, it would represent a serious and significant error on its part.
44. The *"mark-up"* that Dotecon and ComReg conclude is not required of the commercial operator NBI, is therefore recovered from retail customers in the DECC Commercial Area, in particular FTTC customers. In this regard a Sky FTTC customer will be contributing to NBP on two fronts:
 - i. They will be covering the cost of the *"mark-up"* NBI is being relieved of contributing to if the current proposal is implemented.

²⁴ Sky would note that it was and remains a vocal advocate for the NBP process but the project should not come with an additional burden on its customers due to excessive FTTC prices and with a disproportionate benefit to Eircom retail particularly in the pricing of Rural Low-Level FACO pricing.

²⁵ See paragraph 30 of the 2013 ND Recommendation

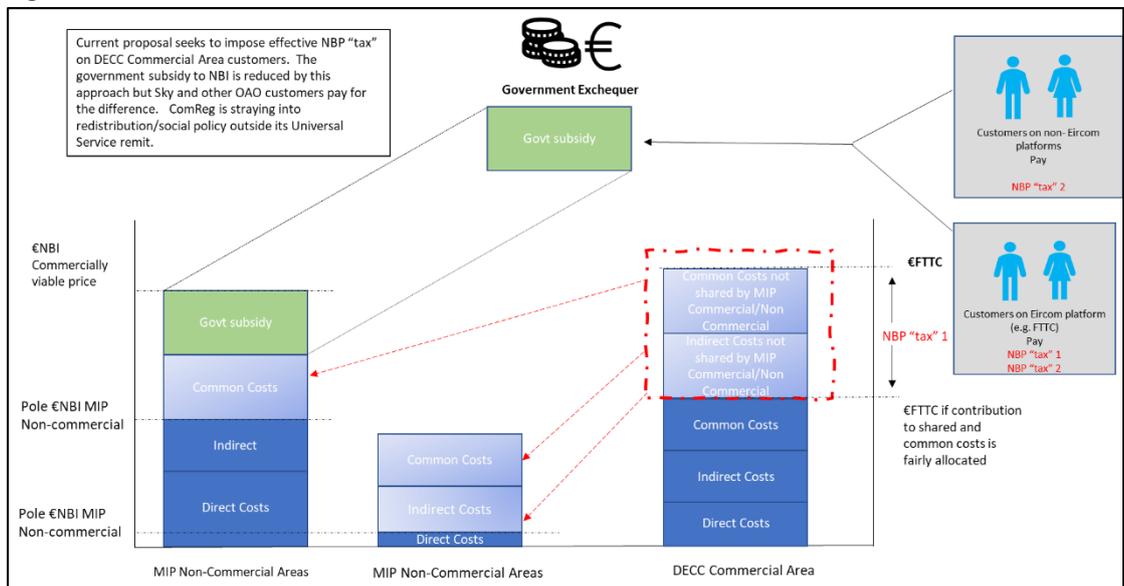




- ii. They (like all citizens of the state) will be contributing to Government exchequer through taxes that will cover the subsidy required to make NBI's investment viable.

45. It should be noted that it is only customers on the Eircom platform in the DECC Commercial Areas that will be contributing to both these NBP subsidy pots. Customers on other platforms e.g. Virgin/SIRO/FWA etc will not make any contribution to the first category of subsidy. In this regard ComReg is straying beyond its remit into the realms of more general public policy because it appears to be proposing an approach that would fund a significant portion of the subsidy the government would otherwise be required to foot to ensure NBI's commercial viability, through an effective "tax" on mainly FTTC customers on the Eircom platform (see Figure 4).

Figure 4



46. ComReg will fall into error if it refuses to acknowledge that NBI's investment in the NBP-IA, when looked through NBI's own lens, is an attractive commercial enterprise. Furthermore, NBI is competing for Eircom's customers in the NBP-IA. ComReg acknowledge that were NBI to compete for Eircom customers in the Commercial MIP then a LRAIC+ approach to costing assets in that footprint would be appropriate²⁶ **yet it has failed to consider the corollary of this argument in the NBP-IA.** As such there is no objective basis, that does not rely on the apparently mistaken assumption that the NBI investment is somehow "non-commercial", that can justify NBI making no

²⁶ See fn 77 of P+D consultation





contribution to common costs where it is competing for Eircom's existing base in the NBP-IA.

47. The effect of ComReg's maintaining a generic approach to common costs as originally conceived of in D11/18 is to push FTTC prices higher than would otherwise be the case. However, the D11/18 approach relied solely on (an even then questionable) presumption that SB-WLR prices could not be increased as part of that decision and so FTTC was identified as the service that should pick up the shortfall in common costs contributions. However, that argument falls entirely away as part of the current reviews.
48. The fact of the matter is, ComReg **are free to set new SB-WLR²⁷ prices** (and underlying pole and duct prices) as part of a new decision that recovers "*margin...from longer lines...to contribute to the recovery of general overheads and common costs*". If it is not minded to set prices at a commercially viable level it needs to provide an **objective justification** for this that is consistent with EC Recommendations and its own objectives under the Act and in a manner that does not unduly discriminate against current market participants as the current proposal does.
49. No such justification has been offered however for departing from the 2013 EC Recommendation either by Dotecon or ComReg. **The only conceivable basis on which ComReg may seek to keep SB-WLR prices below a commercially viable price** under its remit is on the basis of an "affordability" argument through the Universal Service Regulations.

IV. The proposed approach will operate as a 'backdoor' Universal Service Fund

50. Referring to **Figure 2** again, in the event that *P2*, the commercial price, is considered to be too high a price from an affordability perspective, then the issue has moved entirely from the sphere of price setting based on cost orientation principles to that of a **Universal Service consideration**. In this regard if *A1* is deemed to be the affordable, but non-commercial price, then ComReg should set the price **at least up**

²⁷ While ComReg purport that SB-WLR prices are set by reference to LRAIC+ pricing methodology at 4.32 of the ANR consultation, in reality the approach taken extracts all of the common costs particular to the NBP-IA from that would otherwise be attributable to Rural Low-Level SB-WLR service under a fair and proportionate allocation of common costs. Sky will expand on this point in response to the ANR.





to that level²⁸. In this way *A1* may well make some contribution to common costs even if it does not contribute to the full recovery of a fair allocation of the same.

51. The delta between *A1* and *P2* then represents the net cost to Eircom for delivering SB-WLR services at price *A1* and any such delta, if it exists, should properly be considered within the existing parameters of Universal Service assessments e.g. tangible benefits, **unfair burden** etc.
52. Outside of Universal Service regulatory considerations, which have not been raised as a basis for the approach proposed in the consultation, there is simply no basis in economic logic that suggests assets in the NBP-IA cannot contribute to Eircom's common costs in a non-discriminatory manner. On the contrary, the proposed approach not only does not take utmost account of the 2013 EC Recommendation principle by making NBI liable for a fair portion of those costs but is rather proposing something diametrically opposed it.
53. This issue will be discussed further in Sky's response to the ANR Consultation. In the context of Dotecon's recommendations, it has adopted an historical ComReg decision in advancing material recommendations in manner that is contrary to its ToR. It was incumbent on Dotecon to establish precisely what ComReg's definition of a "non-commercial" was in D11/18, whether that classification still applied in the context of the P+D Consultation and what if any pricing constraints were being imposed under the current review (e.g. Universal Service affordability concerns) that might continue to render certain services "uncommercial". It does not appear to have carried out any of these exercises and ComReg in turn has failed to fill in any of these gaps of its own volition. The outcome has resulted in a proposal that would amount to a stealth tax on consumers in the DECC Commercial Area akin to a Universal Service levy. This approach strays well beyond ComReg's regulatory remit, is contrary to the 2013 EC Recommendation and raises legitimate state aid concerns associated with the NBP.

V. Proposed approach is anti-competitive and contrary to European Law

54. In a supplemental submission on ComReg's assessment of Eircom's WACC on 10 July 2020, Sky raised concerns²⁹ about aspects of Decision D11/18 whereby the cost allocation approach taken by ComReg in that Decision was effectively facilitating cross market (WLA to FACO) and cross service (NGA to CGA) subsidisation in a manner that

²⁸ ComReg's proposed price for SB-WLR in the Rural Low-Level FACO market is in the ANR is in fact lower than the price for the service today. This further undermines ComReg's claims around at commerciality of SB-WLR lines and any argument it may ultimately make around affordability.

²⁹ See Section H of Sky 10 July, 2020 submission





is contrary to European law. Sky reiterated those concerns in our response to ComReg consultation 20/46 (“FACO Review”).³⁰

55. ComReg addressed Sky’s concerns on these issues at Annex 9 of D10/20 (“WACC Decision”). In that decision ComReg relied on text from D11/18 to refute Sky’s claims and ultimately concluded that “**none** [ComReg emphasis] *of the incremental costs associated with lines longer than 3Km are recovered in FTTC prices*”.
56. Sky is willing to accept this statement to be true in a narrow sense, notwithstanding the cross-subsidisation concern remains valid and contrary to European law (and dealt with below), but two critical issues arise as a consequence of that unequivocal position taken by ComReg in the WACC Decision that requires attention.
57. Firstly, the lack of clarity on this point goes to the heart of why full access to unredacted cost models (subject to confidentiality requirements) is vitally important in meeting the standards of fairness and transparency ComReg ought to strive for in any consultation process. Sky reserves all its rights in relation to ComReg’s refusal to grant that access subject to strict confidentiality obligations.
58. Secondly, and most importantly, ComReg has failed to reconcile the unequivocal position laid out in Annex 9 of the WACC Decision with the equally unequivocal and apparently contradictory position averred to by its own independent expert, Richard Hern, in legal proceedings in 2019 where he stated:

*“As explained by ComReg in the 2018 Pricing Decision, the incremental cost of serving lines outside the commercial area is higher than the nationally averaged costs used to determine SB-WLR prices in the 2016 Access Pricing Decision...if the incremental cost of a line is higher than the average price charged per line, such line does not contribute to common cost recovery and **indeed its incremental costs have to be subsidised from other (lower cost) lines.**”*

59. Therefore, Sky’s claim that the incremental cost of lines beyond 3km was being subsidised by lines less than 3km was entirely consistent with the testimony of ComReg’s expert’s evidence in the 2019 legal proceedings. ComReg must address the apparent anomaly in ComReg’s expert’s opinion or alternatively clearly reconcile its stated position in the WACC Decision with that apparent contradiction.

³⁰ See paragraph 7 of 19 August, 2020 response to consultation 20/46





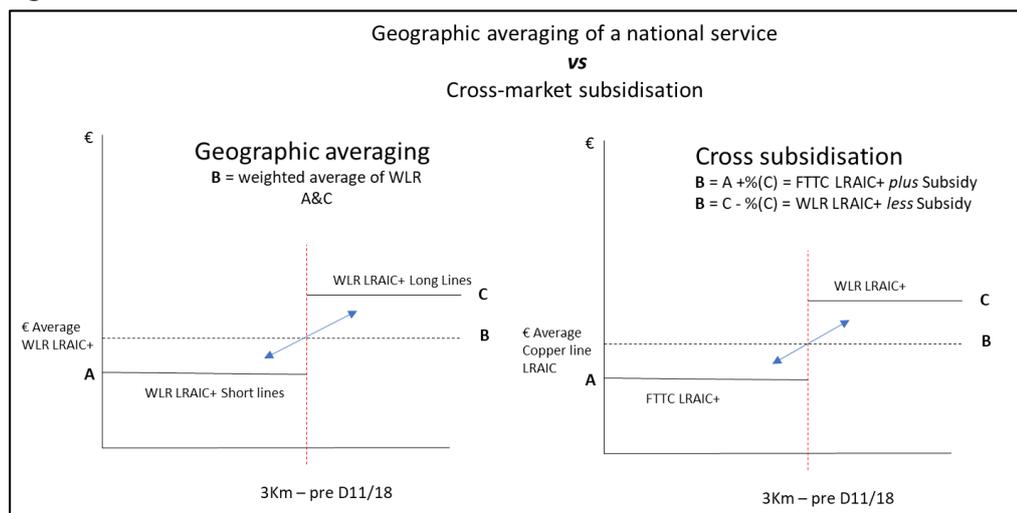
60. It is possible that both positions are simultaneously true depending on the relative starting points of ComReg and its expert. Sky has sought to pick apart both claims in an attempt to reconcile them.
61. Mr. Hern's starting point is to reference the average cost (LRAIC+) of all lines and thereafter to distinguish between the LRAIC+ costs of shorter (<3km) and longer (>3km) lines. From this standpoint, arriving at an average LRAIC+ for all lines, it is clear that shorter lines must make a contribution to the direct, indirect and common costs (LRAIC+) of longer lines. Therefore, shorter lines are, as Mr. Hern averred, covering the incremental costs of longer lines by reference to the average cost of the all lines. Where this occurs **for a single product**, like WLR, what we are really talking is about is merely **geographic price averaging**.
62. However, where the short lines in question are providing a different service in possibly a different market (e.g FTTC) to the service/market of the longer lines (e.g. CGA broadband/WLR), what **we are really talking about is cross-subsidisation** (both cross-market and cross-service). It is in this scenario that ComReg's suggestion that "none" of the incremental costs of longer lines are recovered in FTTC pricing is simply not credible.
63. By ComReg claiming that FTTC is the network "anchor" service and assuming that any services beyond the reach of that product are merely incremental to that product ignores the fundamental fact that Eircom has SMP in the provision of others services (e.g. CGA broadband), including in separate economic markets (WLR in the FACO market) beyond 3kms that have nothing to do with FTTC, yet FTTC prices (the shorter lines) is covering the incremental costs of WLR and CGA services (the longer lines), to use Mr. Hern's description.
64. As such it is a mere sleight of hand for ComReg to presuppose services beyond 3km, like WLR/CGA broadband, make no contribution to common costs or to <3km shared network costs such poles, trenches and exchanges built to support those services, and thereafter claim FTTC prices (which must cover the balance on those elements) does not include a premium to cater for the provision of those other services. In this regard, Mr. Hern's characterisation of shorter lines covering the incremental cost of longer lines is correct and a consequence of this approach he raises serious cross-subsidisation concerns.
65. Sky consider that this explanation goes some way to explaining the apparent anomaly in ComReg's confirmation in the WACC Decision and the averment of Mr. Hern.





66. It now seems clear that in D11/18, lines beyond 3Km are in fact costed on a “pure LRIC” basis notwithstanding nowhere in D11/18 or the WACC Decision is this confirmed for reasons that are not immediately apparent. A “pure LRIC” approach to costing of lines in the 2018 Non-Commercial footprint, as noted, confirms rather than dispels Sky’s concerns about cross-subsidisation (both cross market and cross service) because it effectively amounts to the same conclusion as put forward by Mr. Hern.
67. The incremental cost of longer lines are being subsidised by shorter lines (including via FTTC prices) but not through an average line costing calculation (which would be normal practice) but rather through a ‘subsidy source’ (FTTC) and ‘subsidy recipient’ (longer lines including WLR and CGA broadband) relationship³¹. Adopting this same approach to the NBP-IA vis-à-vis the DECC Commercial footprint would maintain the cross-subsidy regime initiated under D11/18.
68. A national average cost approach is of course permissible for the pricing of a service like WLR which is available nationally³², including in the NBP-IA. When a national average cost approach however is being deployed on copper lines across multiple products (e.g. FTTC/ADSL/WLR) all of which do not necessarily have a national footprint e.g. FTTC (and to a lesser extent ADSL) then this approach will result in cross market and cross service subsidies that distorts markets in a way that is contrary to European law (see Figure 5).

Figure 5



³¹ See Heald (1996), Contrasting approaches to the ‘problem’ of cross-subsidy.

³² See ComReg 6.212 of D11/18





69. It is clear that Eircom face competition by non-SMP providers (broadband and voice) in both the 2018 Non-Commercial footprint and the NBI-IA as newly defined by ComReg. These so-called “non-commercial” services³³ in the NBP-IA has effectively been designated as ‘subsidy recipients’ (in the FACO market and for CGA services), with the ‘subsidy source’ coming from the “commercial” footprint (the WLA market and NGA services).
70. WISPs who compete with CGA broadband and mobile operators who compete with fixed voice (FACO market), **none of which hold Eircom’s SMP designation** and thus face Eircom’s market power in these geographic footprints, should be required to compete against a service that is effectively subsidised in this manner.
71. If a WISP has rolled out access to broadband services beyond 3Kms, **which in fact is the epicentre of Fixed Wireless Access (“FWA”) activity**, then those services must make a contribution to shared and common costs if these providers are to remain viable. In fact given they are not multi-product providers in many instances (unlike Eircom), their own “pure LRIC” price includes many of the categories of costs deemed not to form part of the Eircom’s “pure LRIC” costs for these services in these areas e.g. corporate overheads.
72. It is apparent that the current and proposed pricing regime imposed by ComReg “*impairs genuine competition in the market*”³⁴ provided by the WISPs. The fact that the contribution (subsidy) for shared and common costs is entirely recovered currently from 2018 Commercial Areas, or prospectively from DECC Commercial Areas, mainly from FTTC in both cases, where Eircom also has SMP exacerbates concerns around competitive distortion and detriment to end-users (because FTTC customers are paying excessive prices, something a cost orientation remedy is supposed to protect against).
73. It is important to note the provision of CGA Broadband is **not a Universal Service obligation** on Eircom and to be reminded of the fact it has SMP in the WLA and WCA markets for the provision of CGA broadband. Given ComReg’s objective of promoting competition and efficient investment it is difficult to see how that objective is in any way being advanced by determining that Eircom’s services in the DECC Non-Commercial footprint does not have to make any contribution to shared/common costs when non-incumbent operators investing in and competing in this footprint simply cannot replicate that approach and stay viable.

³³ Simply because a broadband service is below 30Mbps – the threshold used by the Government to determine the NBP-IA – does not make it “non-commercial”.

³⁴ Michelin I, case 322/81 ECR 3461 par. 57





Prices below Average Variable Costs (AVC) are abusive under EU law

74. The AZKO and Tetra Pak II cases established tests for assessing predatory pricing. The tests established that:
- i. Prices below Average Variable Costs (“AVC”) must always be considered abusive
 - ii. Prices below Average Total Costs (“ATC”) but above AVC are only considered abusive if the intent is to eliminate competition.
75. ComReg may argue that a (pure) LRIC approach to pricing in the “non-commercial”³⁵ footprint is the equivalent to setting it precisely at the AVC and thus the first test is not applicable to the approach they have taken. However, that argument would **only** be credible if a convincing case could be made that Eircom’s common costs would be no lower, even by small amount, if Eircom did not operate or maintain the NBP-IA. The fact of the matter is that a portion and likely significant portion (*also see paragraphs 100-101 below*) of Eircom’s common costs is driven by Eircom’s presence in the either the 2018 Non-Commercial Area/NBP-IA.
76. Furthermore, ComReg itself concede that “*common costs can vary in response to direct costs*”³⁶ and in doing so effectively acknowledge the proposed approach to pricing in the NBP-IA would put it over the precipice of failing the AKZO/Tetra Pak AVC test.
77. Sky would further submit that it is self-evident that staff related common costs would significantly decline if Eircom operated only in the DECC Commercial Area³⁷. IT, HR, finance, transport management, office accommodation legal, and senior management are all corporate overhead costs one could expect to see material efficiencies accruing to if Eircom did not operate a WLR and CGA broadband network and pole and duct access service (for NBI) in the NBP-IA. Indeed ComReg’s Access Network Model (“ANM”) itself recognises the scalability of common costs which Sky will expand on in response to ANR Consultation.

³⁵ The argument applies equally whether one considers the 2018 Non-Commercial footprint or the current NBP-IA footprint.

³⁶ Paragraph 5.117 of ANR consultation.

³⁷ ComReg note in 5.1117 of ANR that common costs “*would not be expected to change materially in response to changes in direct costs*”. It has made no attempt to qualify or quantify this claim. It is because such quantifying such claims is difficult that the 2013 ND Recommendations proposes including a mark up for common costs across all services. Diverging from this norm places on onus on ComReg support these claims with evidence.





Repair and Maintenance costs not fairly allocated

78. If ComReg take a fair and reasonable approach to the allocation of Repair and Maintenance (“R+M”) costs the AKZO test will fail by an even greater margin. In this regard it is inexplicable that notwithstanding ComReg devote so much attention to arguments as to why the Rural/Urban Commercial footprints differs materially from the NBP-IA footprint, it completely ignores that distinction when it comes to the allocation of direct costs for R+M to these footprints. This is because R+M costs are allocated on a per line basis rather than a geographic footprint basis with shorter lines in Commercial Areas treated as though they incur the same level of faults (and costs) as lines in the NBP-IA. Again Sky will expand on this point in response to the ANR Consultation but it is worth noting that this is yet another example of a general trend of ComReg advocating for pushing costs caused or relevant to the NBP-IA on to customers in Commercial footprints (in particular FTTC).
79. If Eircom were pursuing a pricing strategy as described above ComReg would be expected to intervene. Rather than intervening to prevent such abuse under its competition law remit, however, ComReg is responsible for putting what appears to be an anti-competitive regime in place (through D11/18) and it is proposing to maintain that regime under its current proposals. Consequently, Sky consider that if ComReg do not unwind those current proposals and properly addresses cross-subsidisation concerns in particular, Ireland will risk being **in breach of Article 106 of TFEU**.

VI. Rewarding historical under-investment

80. One page 36 of the Dotecon report it notes:

*“One issue that **will need to be considered** by ComReg as part of its cost modelling is whether actual costs incurred by Eircom in upgrading CEI assets for use by sharers represents a genuine new cost, or whether this is the result of maintenance and repair activities not being carried to an adequate level by Eircom previously. **To the extent that past levels of investment and/or maintenance have been inadequate, this should not be rewarded.**”*
[Emphasis added]

81. Given the scale of over recovery of costs by Eircom in recent years, as clearly evidenced in its statutory and regulatory accounts, this point is very well made by Dotecon. Eircom has been permitted to charge wholesale prices based on assumptions in models that assumed its network was being adequately maintained. However, it is very clear that in the NBP-IA in particular (and until recently in the Rural





Commercial Area) the level of on-going investment was not commensurate with prices Eircom were charging for services in these footprints. All investment since Eircom came out of receivership in 2013 has been through free cash-flow underwritten by excessive wholesale charges – Sky has provided ample evidence to ComReg to support these claims on several occasions. Last year Eircom paid its shareholders an €80m dividend against a backdrop of an extraordinary 52% fixed line EBITDA margin.

82. It would not be difficult for ComReg to assess Eircom’s actual investment in the NBP-IA against assumptions in relevant cost models (e.g. the Revised CAM) about the expected level of investment assumed for that footprint in recent years. As noted the regulatory accounts points to years of systemic over-recovery of costs although it is unclear to observers outside ComReg and Eircom how much of that is down to under investment (asset sweating) and how much of it is down to other factors (e.g. higher than expected volumes, lower opex etc.). Either way, those figures are quantifiable and ComReg can make an assessment around historic under-investment.
83. However, ComReg appear to have ignored Dotecon’s advice on this issue as the consultation makes no reference to this pertinent recommendation. In failing to assess historical under-investment³⁸ and account for it, it is clear that contrary to Dotecon’s recommendation that Eircom “*should not be rewarded*” for this behaviour, ComReg’s approach is likely to do just that. This is contrary to ComReg’s objectives to promote efficient investment and the interests of end-users.

VII. Other issues

ComReg has ignored important real world market dynamics

84. At paragraph 122 of the consultation ComReg note “*the proposals set out in this Consultation regarding the appropriate costing/pricing approach for CEI does not take account of any actual or potential impacts arising from Eircom’s USO obligations*”. However, no objective reason has been put forward for why this is the case. The upshot of taking that approach means ComReg lends far too much weight to assessing

³⁸ At paragraph 357-359 of the consultation ComReg acknowledge that the average life of a pole, **when replaced**, is **slightly** longer than 30 years based on an incomplete data set. It is unclear what ComReg mean by “incomplete data set”. The Revised CAM would have assumed a level of pole replacement over the last number of years. This information coupled with up to date information on pole replacement in the Rural Commercial Areas ought to inform a level of expected pole replacement in the NBP-IA that should have occurred in recent years. If that level of replacement falls short then it is fair to conclude that Eircom is sweating assets and has already been paid (through wholesale charges) for such asset replacement and it should be not be rewarded for such historical under-investment.





outcomes whereby Eircom's incentive to switch-off copper is deemed to be high/too high in finessing the eventual costing approach proposed.

85. However, those outcomes are purely hypothetical where voice services are concerned because of ComReg's remit in relation to Universal Service. If the provision of copper voices services (Access at a Fixed Location under Universal Service Regulations – AFL) is deemed no longer necessary as part of a USO assessment, then the higher the incentive to switch off copper the better. If on the other hand CEI pricing is accelerating copper switch off at a faster rate than USO considerations deem to be ideal, ComReg has the ability to intervene to protect customers through the Universal Service regulations.
86. This approach to assessing pricings options in a vacuum that ignores reality is irrational and may be a contributory factor to the already discussed issue of the treatment of shared and common costs.
87. Associated with this concern is the fact that ComReg appear to have given no consideration to the actual levels of revenue earned by Eircom (retail and wholesale) on its copper network in the NBP-IA today. This is the most relevant metric that will inform Eircom's incentive if and when to switch off its copper network. Eircom currently have the vast majority of retail PSTN WLR customers in the NBP-IA (nearly 80% according to ComReg's FACO consultation) and is therefore earning retail revenues on those lines that is significantly higher than the one for one trade off (with fibre) implied in ComReg's assessment of copper switch-off incentives. There is no evidence that ComReg has considered these relative revenue trade-offs in a detailed way and this would appear to be a serious omission in the analysis.

Existing 'Pole Route' pricing already allocates common costs

88. Another example of ComReg's failure to take account of prevailing market dynamics is reflected in the fact that throughout the entire P+D Consultation no mention has been made of the fact that a mechanism is already in place for Eircom's pole access service that shares local authority rates on a Pole Route basis with access seekers.³⁹ ComReg, has instead automatically assumed that Network Rates are a category of common costs that should only be recovered from the Rural/Urban Commercial footprints with no discussion around the existing mechanism that reflects cost causality principles. It is possible that ComReg was not aware of this approach to Pole Route access pricing but it is useful to understand this option if a more appropriate

³⁹ See clause 3.8 of [Pole Access Licencing Agreement](#)





treatment of common costs across all footprints is to be catered for in the final decision.

MIP Commercial (transit) footprint

89. ComReg notes at paragraph 261 that it “*has not identified any capital costs for poles that would be considered incremental to NBI’s transit in the Commercial Areas*”. This statement is completely at odds with evidence given by Eircom CEO Carolan Lennon to an Oireachtas Committee on 25 June, 2019:

*“When we designed the 300,000 roll-out, we were in the NBP process and hoping to win. We designed our 300,000 roll-out with **extra fibres and more expensive connection points** so that, if we or someone else was successful, we could use them to continue into the intervention area and extend the footprint. We offered a passive product to the remaining bidder so that it could do that instead of overbuilding in the NBP. However, it decided to overbuild rather than use that product.”*

90. ComReg should seek a clear and quantifiable explanation from Eircom as to Ms Lennon’s representations at this hearing. It is now apparent that NBI do not plan to overbuild Eircom, as alluded to in this passage but rather to use the passive infrastructure referred to. If Eircom has rolled out “*extra fibres*” and/or “*more expensive connection points*” in order to facilitate NBI then such costs should rightly fall on NBI and not on other operators with a corresponding and demonstrable reduction in the proposed regulated charges outlined in any final decision.
91. If there is no evidence to support Eircom’s claim before the Oireachtas Committee then this ought to weigh against any claims Eircom makes in this consultation process that is not fully supported by verifiable evidence and in particular when it comes to costs which leads us into the next item for consideration.

Eircom’s claims about pole replacement in Urban Commercial footprint taken at face value

92. At paragraph 289 ComReg note that they it has assumed in the Draft PAM a level of pole replacement of circa 25% “*based on Eircom’s information*” over a five year roll-out period for FTTH (2020-2024) in Commercial Areas. In D11/18 ComReg were unwilling to speculate about roll-out of NBP even though the tendering process on that project, underwritten by the Irish government, was at an advanced stage. Yet for the P+D Consultation, ComReg is willing to take Eircom’s claims about extensive roll-out of FTTH in urban areas at face value. These are not consistent approaches.





93. It is clear that a pole replacement programme of this scale, if undertaken (of which there is no guarantee) is an incremental cost entirely caused by Eircom's investment in FTTH. As such all these costs ought to be allocated directly to FTTH services and in particular given the speculative nature of such costs. There is no cost-orientation obligation on Eircom's FTTH rental charges so concerns about the under recovery of costs does not arise as Eircom has levers (and SMP) to ensure cost recovery. The risk of significant over-recovery of costs however is very real if ComReg is proposing to spread such replacement costs across all services.
94. Again, it is notable that no assessment of the scale of historical under-investment has been carried out on the Urban Commercial Area notwithstanding that for this aggressive level of pole replacement historical under-investment seems an obvious *prima facie* explanation.

NBI free-riding Commercial MIP

95. ComReg suggests at paragraph 460 that only allowing Eircom to recover "*incremental costs*" by pole/duct access seekers (Generic Access) would allow rival operators to "*free ride*" Eircom's network to compete for its customers. Yet ComReg raises no such concerns about the pricing of NBI's access to poles and ducts in the Commercial MIP. The fact that NBI is not competing for customers in the Commercial MIP is effectively a red herring when one considers **the only reason it is transiting the Commercial MIP** is to compete for vast swathes of Eircom's customers in the NBP-IA.
96. NBI's access to Eircom poles and ducts in the Commercial MIP **is not some benign presence that does not pose a competitive threat to Eircom**. In fact, it poses by far the greatest competitive threat to Eircom of other access seeker on Eircom's network. The justification therefore, for treating NBI in a favourably discriminatory manner is irrational. As such there is no reason NBI should not be contributing to shared and common costs in this footprint which in turn ought to put a lesser burden on urban customers who under current proposal face an effective "NBP tax" as outlined in **Figure 4**.

The primary purpose of a cost orientation obligation is to prevent excessive pricing

97. Paragraph 467 encapsulates ComReg general failure to acknowledge the primary purpose of a cost orientation obligation on a SMP provider **is prevent excessive pricing** which is harmful to consumers and promotes inefficient investment through incorrect "build/buy" signals.
98. ComReg acknowledge that one of the implications of NBI making a contribution to costs incurred in the Commercial footprint for transiting this area is that wholesale charges for customers in the Commercial Area will fall. Rather than looking at the





issue through the lens of detriment to end-users⁴⁰ (through excessive prices) if this approach is not taken, it focuses primarily on the fact that lower wholesale charges in the Commercial Area may impact on investment from other operators in that footprint.

99. Firstly, as already discussed NBI may not be competing for customer directly in the Commercial Area but its sole purpose for accessing infrastructure in the Commercial Area is to aggressively pursue Eircom customers in the NBP-IA. As such there is a significant opportunity cost to Eircom in providing access to NBI in the Commercial Area.

100. Secondly, ComReg's must acknowledge that a significant and possibly, disproportionate to line volumes, percentage of common costs are driven by Eircom's activities outside the Commercial Area. To put the issue in context if common costs are essentially fixed (as ComReg seem to argue) then you would expect to see Eircom's competitor in the Commercial Area e.g. SIRO, experience a similar level of common costs.

101. SIRO's network covers a footprint of almost 400k premises and they have in excess of 100k customers. They are as such an established operator of some scale. ComReg's approach however **argues that scale/scope ought to have little impact on the level of common costs**. Sky would submit it is possible to counter this misconception by just comparing one element of SIRO and Eircom's respect statutory accounts.

102. A review of SIRO's most recent statutory accounts reveals that it currently employs 15 administrative staff. By comparison Eircom claims to have 369 administrative staff (see **Figure 6**). To suggest the disparity has nothing to do the scale and scope of Eircom vis-à-vis SIRO is simply not credible. If that remains ComReg's argument it must provide some explanation for the disparity Sky has outlined **that does not rely on observations around Eircom's scale and/or scope**.⁴¹

⁴⁰ End-users in the NBP-IA however will not be impacted as charges are set by reference to NGA services outside the NBP-IA and not actual costs incurred by NBI.

⁴¹ A tangential issue of concerns is the accounting note attached to the significant increase in admin staff in Eircom from 2019 to 2020 which was as a consequence internal "reclassification". Eircom are aware of ComReg's approach to the treatment of common costs from D11/18. It therefore has an incentive to push as much cost as possible into this category to prop up FTTC prices and game the proposed approach to the treatment of common costs adding a further premium to already above cost charges.





Figure 6

SIRO Ltd – December 31 2019		Eircom Holdings Ltd – June 30 2020	
SIRO Limited			
Notes (continued)		As of 30 June	
4 Labour costs (continued)		2019	2020
		(unaudited)	(unaudited)
Average number of employees	2019		
Operations	70	Operational/technical.....	1,730
Sales	9	Sales/customer support.....	1,082
Administration	15	Administration ¹	214
	94	Total fixed line.....	3,026
		Mobile.....	475
		Total fixed line and mobile.....	3,501
			1,639
			955
			369
			2,963
			301
			3,264

Comparing ComReg’s proposal on LRIC pricing for NBI in the Commercial Area with Line share and voice termination costing principles is a false equivalence

103. ComReg’s attempt to draw a corollary between the economic principles that support the adoption of a pure LRIC approach to the pricing of Line Share and voice termination is a false equivalence when considered in the context of NBI in the Commercial MIP for the following reasons:

- The Line Share service is only available to operators who also purchase access to Eircom’s CGA LLU services. The service cannot be purchased in isolation of the LLU and so a contribution is made to common and shared network costs associated with the copper line. This material trade-off would not apply to NBI under ComReg’s proposals.
- Setting mobile termination rates to pure LRIC i.e. a level that makes no contribution to common costs, has no impact on the level of regulatory pricing elsewhere in the mobile market. Not requiring NBI to make a fair contribution to shared and common costs effectively increases the regulatory prices of other wholesale services and those increased prices fall on other OAOs and customers often in different economic markets.
- The shared/common cost contribution shortfall on a pure LRIC mobile termination rate is made up through charges on unregulated services where there is no SMP designation. In the case of NBI, the shortfall is made up for on services where a market failure has been identified and Eircom does have SMP i.e. throughout the Rural/Urban Commercial Areas.
- For voice termination services, due to the nature of network economics, pure LRIC termination rates are largely reciprocal arrangements that gives mutual benefits to all interconnected operators. In the case of NBI, pure LRIC results in no benefit to any other operator and in fact places additional burden on other OAOs. It does however result in a benefit to the government as a





consequence of a reduced subsidy requirement – although ComReg claims that this outcome is purely incidental.

Conclusion

104. ComReg’s current proposals on CEI pricing are discriminatory in manner this is contrary to Regulation 16 of the Framework Regulations. ComReg has adopted an approach to the treatment of common costs that was first conceived of (but never consulted on) in D11/18. The basis for that approach in D11/18 is no longer valid in the context of the current review and is underpinned by an arbitrary/undefined concept of “commerciality”. The currently proposed approach will also result in a *de facto* anti-competitive cross-subsidy pricing regime (cross-market and cross-service) underwritten by an Irish regulator and as such risks falling foul of European law.

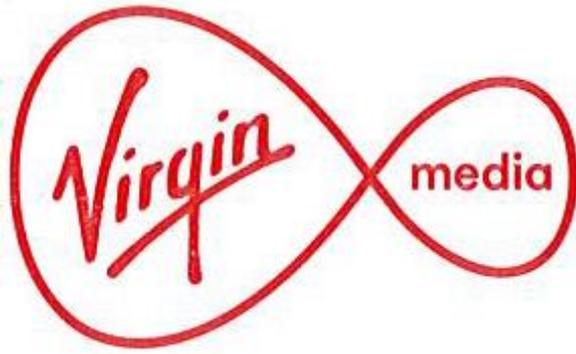
Sky, 18 November 2020.



Sky Ireland Limited, private company limited by shares, registered in Ireland under No. 547787.

Registered address: Fifth Floor, One Burlington Plaza, Burlington Road, Dublin 4, D04RH96. Directors: J.D. Buckley, N. O'Rourke

7 Virgin Media Ireland Limited



Virgin Media response to:

Consultation: Pricing of Eircom's Civil Engineering Infrastructure (CEI)

ComReg 20/81

18th November 2020

Virgin Media Ireland Limited ('Virgin Media') welcomes the opportunity to respond to ComReg's Consultation ('the Consultation') on the Pricing of Eircom's Civil Engineering Infrastructure (CEI) ('ComReg 20/81).

Virgin Media welcomes this consultation as the outcome of this process will help ensure that the correct and fairest prices are being charged for access to Eircom's CEI network. It is clear that a lot of work has been put into drafting a concise consultation document that considers the changing environment. While this is the case there are a range of other pieces of work being undertaken by ComReg that are interdependent and influence the level of CEI prices (e.g. WACC, Draft ANM). Virgin Media believes that ComReg should consider how to consolidate these and perhaps issue one complete consultation broken into separate parts. This would help operators understand more fully what the implications of proposed changes will be on access pricing as a whole.

In general we support the proposals presented for Generic Access. While we understand ComReg's rationale for a different approach for National Broadband Plan (NBP) related access, we would like to ensure that where the duct/pole rental cost for NBP IA access is lower than that for Generic Access that this will be passed through to any charges faced by access seekers to the NBP network.

Response to Consultation Questions

Q. 1 Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

One of ComReg's key objectives is to promote competition, to encourage efficient investment and to promote the interests of users by encouraging access to the internet at a reasonable cost to end-users. The regulated price of access is a key determinant of investment decisions of access seekers. The price of access to the Eircom network has not changed since 2016 and in some cases operators have been paying too much for access. The regulated price of access is a factor that operators consider to evaluate the best approach to ensuring end-users get the best value, whether this is by deploying infrastructure or by requesting access to the Eircom network. In situations where access prices are too high and not reflective of underlying costs, this results in end-users potentially being charged too much. Decisions around regulated access products and processes should be made quickly to ensure the regulated entity is recovering its costs and also to ensure that access seekers are paying fair rates and that regulated products/processes reflect changing demands¹.

In Section 3 ComReg explains that there are a number of reasons why access to Eircom's CEI by NBI in the NBP IA (and for transit purposes) differs to general CEI access sought by other operators. While Virgin Media understand the arguments put forward, any differentiation would need to have a knock on effect on any rates associated with access to the NBP network (i.e. if the CEI access price is lower than for generic access then this should be passed through to any NBP access seekers).

We understand that differentiation might be possible however Virgin Media believes that ComReg must consider all possible implications of differentiation. To permit a differentiated pricing remedy

¹ Delays can be experienced in a range of areas not just in relation to market/price reviews. Virgin Media attends the monthly CEI forum. There are current discussions around a proposed timeline for CRD ID 745 related to the launch of the subduct self-install process. The suggested launch date is July 2021 which is well over a year after a process was requested. We do not understand why such a delay is necessary as it directly affects the decisions of access seekers and their ability to serve customers.

for one type of access for one company would mean that a similar differentiated approach may be needed for any other company that decides to undertake significant investment in the future. It is not possible to foresee the development of the market and competition but if another operator has 'extensive access requirements for Eircom's CEI' then there will inevitably be another instance of differentiated pricing. Furthermore, as far as Virgin Media is aware in other jurisdictions no operator is treated differently in regulated markets. In light of this Virgin Media suggests that 'extensive access requirements' must be carefully defined.

Q. 2 Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

Virgin Media has no comments.

Q. 3 Do you agree with ComReg's preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI's MIP access to CEI in the NBP IA and for NBI's transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

Virgin Media has no comments.

Q. 4 Do you agree with ComReg's preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response.

Virgin Media has no comments.

Q. 5 Do you agree with ComReg's preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI's MIP access in the NBP IA and (iii) the CEI costs for NBI's transit access in the Commercial Areas? Please provide reasons for your response.

Virgin Media has no comments.

Q. 6 Do you agree with ComReg's preliminary view that the existing regulatory asset lives for Eircom's poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

Virgin Media has no comments.

Q. 7 Do you agree with ComReg's preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI's MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

In paragraph 401 ComReg states that the proposed costs and draft prices for duct access include the cost of clearing duct blockages. Virgin Media fully supports this proposal. Currently the clearing of duct blockages is considered an 'excess cost' by Eircom. This results in high unanticipated costs for an access seeker and has the potential to influence their decision around accessing duct in a particular area. It is necessary that any charges associated with regulated access are absolutely certain and transparent. While there are assumptions made by ComReg in order to determine the costs associated

with the clearing of duct blockages, this approach is necessary in the absence of information around whether a blockage exists on each and every route or not.

The inclusion of costs associated with duct blockage removal in the pricing of duct access would also lead to an improvement in the actual process for acquiring access. At present an access seeker must accept blockage removal excess charges before Eircom progresses an application which can lead to delays as access seekers must consider the implications of this additional, unanticipated cost. Furthermore no information on the breakdown of such charges or how they are derived is provided by Eircom so it is not possible for any access seekers to undertake any due diligence in relation to this outgoing. Virgin Media fully supports the inclusion of these costs in the prices as it would result in certainty around costs for an access seeker and would result in a more streamlined access request process.

While this is welcome, Virgin Media would like full clarity around any other potential excess charges that may be applied outside of costs associated with the removal of blockages. It is important that access seekers have certainty around the costs they might face as it can affect their decision to proceed with an access request. In line with the proposal that Eircom should submit any excess blockage removal costs to ComReg for approval in the context of NBP access, Virgin Media suggests that all/any other excess costs faced by Eir in the context of Generic Access (and NBP access) should be subject to review by ComReg if requested by the access seeker. At the moment it can be difficult to get clarity on how excess blockage costs are calculated and if there were to be any other excess costs imposed on access seekers we would like to have transparent information as to how these are calculated.

ComReg states that a consultation on the draft ANM will take place shortly and we note that a consultation was issued recently. This CEI consultation, the consultation on the draft ANM and the WACC consultation process are all related and ultimately feed into the development/updating of regulated wholesale prices. Virgin Media suggests that in the future these related pieces of work should take place at the same time so that potential respondents to interdependent consultations have the full picture before responding.

Q. 8 Do you agree with ComReg's proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

Virgin Media has no comments.

Q. 9 Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for Generic Access to poles and for NBI's MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

Virgin Media has no comments.

Q. 10 Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI's MIP access to duct in the in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

Virgin Media has no comments.

Q. 11 Do you agree with ComReg’s preliminary view on the use of number of customer lines and in particular the use of the number of each operator’s active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI’s MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563-564 for allocating any shared network costs and common corporate costs associated with NBI’s transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator’s active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI’s transit access in the Commercial Areas.

Virgin Media has no comments.

Q. 12 Do you agree with ComReg’s preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or under-charging by Eircom? Please provide reasons for your response.

Virgin Media has no comments.

Q. 13 Do you agree with ComReg’s preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

Virgin Media agrees with ComReg’s preliminary view that the duct access rental price for generic access to ducts should continue to be differentiated by surface type.

Q. 14 Do you agree with ComReg’s preliminary view on a differentiated WACC rate of 4.03% for Eircom’s CEI in the context of access by NBI’s MIP NBP IA and for NBI’s transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

Virgin Media has no comments on ComReg’s preliminary view on a differentiated WACC rate of 4.03% for Eircom’s CEI in the context of access by NBI’s MIP NBP IA and NBI’s transit access in the Commercial Areas. However Virgin Media supports a general principle that *all* WACCs should be subject to regular updates. We do not agree with a differentiated approach to the review or annual updating of factors that influence the price of access to any access seeker.

Q. 15 Do you agree with ComReg’s preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

Virgin Media has no comments.

Q. 16 Do you agree with ComReg’s preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg’s proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

Virgin Media has no comments.

Q. 17 Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI’s MIP as an upfront fee levied on NBI’s MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

Virgin Media has no comments.

Q. 18 Do you agree with ComReg’s preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

If ComReg decides to proceed with the differentiated access pricing approach, Virgin Media agrees with ComReg’s view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent manner. This would ensure transparency and would allow ComReg to more fully understand the breakdown of costs incurred by Eircom.

Q. 19 Do you agree with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg’s proposal that Eircom should publish it on its website? Please provide reasons for your response.

Virgin Media agrees with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in both ducts and poles in the NBP IA and the Commercial Areas. This would provide transparency for ComReg and other parties. This should also include a statement of the investment for all other areas.

Q. 20 Do you agree with ComReg’s preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph 724? Please provide reasons for your response.

Virgin Media believes that prices for generic access to CEI could be set for a period of five years based on existing information, however where market conditions change or further information becomes available, there should be a clear and transparent process in place to ensure that generic access prices are updated as soon as possible when such information becomes available. For example, in 20/96 ComReg states it will undertake an annual review of the WACC for each regulated market. Virgin

Media believes this review should take place at the same time each year and that regulated prices should be updated immediately when a decision is made. This should be the case when any other information related to the underlying costs becomes available to ComReg.

The last decision with regard to duct and pole pricing was published in 2016. While this was only four years ago there have been significant developments in this period. This has resulted in a period of time where access seekers may have been paying much more for access than would have been the case had an earlier review been undertaken. We believe that a more regular review of the prices and underlying costs should be undertaken for Generic access. The timeline for generic access reviews should be aligned with reviews of pricing for NBI's MIP access.

If this is not possible then Virgin Media suggests that Eircom submits and publishes an annual review of how it meets its cost orientation obligation. Any significant deviations of costs over a certain threshold should trigger an update to the price. We note that in paragraph 732 that ComReg proposes that Eircom should undertake an annual review of the [draft] PAM and [draft] DAM and that ComReg will use this to determine Eircom's compliance with its cost orientation obligation in relation to the CEI prices for NBI's MIP. While Virgin Media understands that under the NBI's MIP significant investment will be undertaken, we believe that any review of the PAM and DAM should also include a review of the costs associated with generic access.

Q. 21 Do you agree with ComReg's preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI's MIP? Please provide reasons for your response.

As outlined under Q.20, Virgin Media believes the annual review of the [Draft] DAM/PAM should cover both the expenditure in the context of the NBI's MIP and also in the context of generic access.

Q. 22 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.

Virgin Media would like to see an analysis of the likely impact of the proposed prices on access seekers in the NBI IA. We would expect that a lower access price faced by NBI in the NBP IA in comparison to the generic access price would be passed through to NBP IA access seekers.

Q. 23 Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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.

Virgin Media suggests that the Decision Instrument is clear around which access requests are applicable for the updated price. So for example if the updated prices take effect on 1st July 2021, the updated prices should be applied to uncompleted access requests made prior to this date. The Decision Instrument should be clear in this regard.

Under the Maintenance of Obligations the Decision Instrument states:

8.1 Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in Decision Notices and Directions made by ComReg applying to Eircom and in force

immediately prior to the Effective Date of this Decision Instrument, including all obligations specified in the WLA Decision Instrument, continue in force and Eircom shall comply with same

Virgin Media agrees that this should be the case. While not directly addressed in the Consultation, the processes Eircom/OpenEir applies in practice to deal with access requests should be the same regardless of the access seeker. The size of the NBP area and possible volume of access requests to the Eircom network from NBI should not have a knock on implications on the experience of operators submitting Generic Access requests. The timelines should remain as is for standard applications. More importantly as non-standard access requests are more common, ComReg must ensure that there must be no delay to any generic non-standard access requests. The SLA's and existing processes must not be affected by any increase in access request activity due to the NBP.

If there is to be a change to existing timelines and processes, Virgin Media would then suggest that a full review of the processes should be undertaken. Improvements can be made. We mentioned earlier that 'non-standard access requests' are more common than standard requests so the threshold for determining what is standard and non-standard could be reviewed.

Virgin Media is familiar with OpenEir's process manuals and specification documents for access seekers. We expect that this documentation will also apply to NBP IA access. At present OpenEir recommends that the diameter of optical fibre cable should not exceed 7.5mm (for 14/10mm sub-duct). This is not a significant capacity and in the UK we understand that the regulated entity offers 25mm. We suggest given the possible increase in demand for space that OpenEir takes this opportunity to refresh its specifications to reflect actual requirements of access seekers.

8 Vodafone Ireland Limited



Vodafone Response to Consultation

Pricing of Eircom's Civil Engineering Infrastructure ('CEI')

Reference: ComReg Doc 20/81

Version: Non-Confidential

Date: 18/11/20

Executive Summary and Introduction

Vodafone welcome the opportunity to respond to ComReg Doc 20/81 regarding Pricing of Eircom's Civil Engineering Infrastructure ('CEI') access in the context of the National Broadband Plan ('NBP')

Efficient network deployment is the prerequisite of any national digital strategy. Networks are the backbone of all other digital initiatives, be those remote working, rural and regional initiatives, AI, IoT, or Smart Cities. As we see across Europe the ability to set ambitious targets for the rollout and coverage of very high-capacity networks including fibre and 5G, the ability of operators to reduce costs of deployment and achieve these targets efficiently becomes paramount.

Vodafone supports regulatory certainty and policies to encourage investment. Investing companies should be permitted to achieve a reasonable rate of return on the capital they employ in SMP markets. Indeed, there is a requirement under Access Regulations that ComReg takes into the account investments made by the operator and allows the operator a reasonable rate of return on adequate capital employed, considering any risks involved specific to a particular new investment network project. Investment is critical to economic and societal recovery and stability.

Efficient cost-based access to national passive infrastructure (including ducts, pole and dark fibre - CEI) owned by Eircom will underpin the national digital strategy. On balance, Vodafone welcomes this publication of revised lower prices for Pole and Duct access that better reflect cost orientation requirements. This has been anticipated for quite some time.

The specific comments to ComReg questions are outlined below. It is worth firstly setting some key concerns and points of principle

The sector requires predictability and certainty on pricing.

It is important that true cost-oriented prices are delivered as soon as possible to the market. Investment decisions are driven by predictability an aspect that is noticeably absent in the Irish fixed market. The two most relevant notifications to the Commission on WLA and WACC reflect the absence of predictability and certainty in the fixed market.

As noted in paragraph 60 of this consultation the EU Commission, in there WLA market Article 7 comments letter, called on ComReg to revisit access prices including CEI by at least updating the revised CAM with more recent data. This EU Commission letter was in July 2018, almost two and a half years ago and this update has yet to occur. It may be argued the unique circumstance of the National Broadband Plan was a key reason for this delay however, the format of the plan has been well known for quite some time culminating in the formal agreement a year ago in November 2019.

Following the review of the WACC this year and notification of the draft decision to the Commission the further comments letter in July 2020 called on ComReg to update fixed pricing without undue delay to reflect the up-to-date WACC. This has also not happened and ComReg's plan is to update these prices as part of the review of the Access Network Model.

The remedies proposed by this decision and associated/related fixed market pricing decisions need to be delivered as a matter of urgency to ensure investment in broadband in Ireland. We note Paragraph

371 refers to the fact inputs from the Draft Access Network Model (ANM) are used in the Draft PAM and DAM. It is not fully clear the interdependencies and staging of decisions required. However, it is important that industry has certainty on all models and associated pricing for CEI and fixed access early in 2021 to ensure the objectives for investment can be achieved.

Common Costs should be allocated across the market

The previous decision that no common cost apply to the Intervention Area was made a time when Eircom essentially had no management focus on rural areas. The basic service was delivered to customers without further investment. The NBP is now a very significant line of business for Eircom and this pricing decision must take that into account.

It is no longer valid to assume that the IA shall not incur significant common costs as there will be very specific demand on the common resource to manage this specific area of the network. It is expected that Eircom will need to allocate significant resource from areas such as finance, legal and HR to manage engagement specific to the IA. It is not appropriate that such common cost is allocated to be recovered solely from wholesale prices on the commercial footprints.

Wholesale customers should not bear cost of historic under-investment

The DotEcon reports highlights an issue to be considered by ComReg as part of its cost modelling is the difference between genuine new cost and costs as a result of inadequate levels of investment in the network. Vodafone agree with the view of DotEcon *“To the extent that past levels of investment and/or maintenance have been inadequate, this should not be rewarded”*. This is a serious concern, based on the eircom data being put forward in Paragraph 389. This suggests 20% of poles require replacement in the NBP IA and 25% of poles in the Urban areas. As per the 300K actual data should inform the assumption as soon as practically available and the high levels of replacement need to be assessed against those that are needed and those that are related to poor investment or maintenance of the network.

RESPONSES TO CONSULTATION QUESTIONS

Section 3: Background

Consultation Question 1: Do you have any comments or views on the matters considered in this Section 3, including in particular the regulatory objectives pursued by ComReg? Please provide reasons for your response.

A primary concern is the slow progress in delivering predictable and fair prices for regulated fixed services, including CEI. As above on balance Vodafone welcome reductions in pricing for CEI, with the caveat that CEI pricing decisions, as well as related decisions around ANM need to be resolved promptly. This is consistent with the position advised by the EU Commission.

In paragraph 60 ComReg refer to the call from the Commission to revisit access prices in July 2018. ComReg are only now consulting on these pricing updates and there is also the complication of a link to the consultation on ANM, which commenced in recent weeks. It is critical that final decisions are in place and pricing is available to industry as soon as practical in 2021.

We refer to paragraph 62 and the principle that all common corporate costs of Eircom's access network should be recovered from services sold in commercial areas and the fact this will be embedded in the recently commenced Access Network Model review. This approach therefore imposes cost into the prices paid for FTTC services. As outlined the common corporate costs relate to general overheads which typically include general IT system costs, office accommodation and transport management as well as corporate costs such as finance, legal, HR and senior management. These costs will change as a result of the activity for NBI. A pool of expertise and software tools will be needed within Eircom to assess and manage this work. This will be a considerable fixed cost, which should not be imposed in non-NBI areas.

It is important the impact of ComReg's proposed approach sets out clearly the impact on all stakeholders. For example, ComReg state in Footnote 44 states that "*changes to the CEI access prices as a result of this review should only impact on the state subsidy (and hence amount to be recovered from taxpayers) but not from end-users of the broadband service*". The proposed costing methodology to be adopted by ComReg on common costs does indeed reduce the amount to be recovered from the taxpayer. However, the passing of recovery of NBP IA derived common costs across to Commercial areas must impact the prices paid for wholesale services and has the potential to impact the prices for end-users of broadband services in commercial areas.

ComReg make assumptions in relation to access in the commercial areas and Vodafone are not aligned with ComReg's view. In paragraph 92 ComReg describe generic access in detail as an access that "*is generally sought by operators that are deploying networks to compete directly with Eircom in downstream markets in the Commercial Areas. These operators tend to avail of Generic Access services to expand their existing networks in order to target customers from other network providers including Eircom in the more densely populated areas.*" The assumption is that a generic access request equates to loss of market share and associated revenues and margins for Eircom.

It is not in fact the case that generic access competes directly with Eircom, and therefore reduces the value of Eircom's existing service. In practice, an alternative operator would use an Eircom Bitstream type service if one was available to provide the level of service that the customer requires. In the cases

where generic access is requested the alternative operator is planning to provide a service that cannot be provided on existing infrastructure, and which may be, for example, due to excessive copper cable length.

In effect the case doesn't arise where the alternative operator is requesting CEI to build a competing copper loop and any new investment made by that operator would have to bear the same costs as NBI investment; this would support infrastructure competition in non-NBI areas. This is necessary as otherwise individual customers may not receive the individual service they require.

With regard to copper switch-off, paragraphs 108 and 109 reference the copper networks switch off and loss of retail for Eircom as customers migrate to the NBI network. We are very concerned that ComReg would overestimate the speed of migration to NBI and subsequent loss of retail revenue by Eircom. The reality is there will be competing infrastructure to NBI in their footprint for the foreseeable future and in any event for the period of this market review. A number of factors require consideration when assessing the efficiently incurred cost and a reasonable rate of return. Firstly, it is highly likely that Eircom will be an active retailer in this footprint. In section 4 of the paper (paragraph 164) it states, *'the costs recovered by Eircom for CEI access through the NBI's MIP may be the only revenues that Eircom receives for the use of CEI in the NBP IA'*. Eircom has the largest proportion of retail customers in the NBI footprint and will as such be well placed to retain a large proportion of customers migrating to the NBI service. Secondly the timing of migration away from traditional voice services should not be overstated. Historically Eircom has over recovered on prices charged for WLR and FTTC services in general which should also be considered.

Section 5: Differentiation of CEI Price Control

Question 2: Do you agree with ComReg's preliminary views on the general costing methodology principles? Please provide reasons for your response.

Paragraph 216 and 217 set out ComReg's preliminary view. ComReg must take a reasonable overview regarding competitive infrastructure. The NBI rollout in the intervention area has dealt with very remote areas. Eircom have then taken a reasoned commercial decision sorting the rest of the country into those areas where infrastructure investment is profitable, and they accelerated roll out in feasible areas (the 300k). Effectively the proposed NBP has already distorted the market as Eircom have invested in the '300k' areas ahead of more populated areas. The result is that this reduced the pool of potential locations where infrastructure investment could be made by a third party. In reaching its decision ComReg must recognise that the NBP has unintentionally distorted the market. The potential pitfall to avoid in establishing costing models with an objective to encourage and maintain infrastructure investment is that they may only serve to prevent competition to Eircom in specific areas. This must be avoided.

Question 3: Do you agree with ComReg's preliminary views on the costing methodology that should apply in the case of Generic Access to CEI and for NBI's MIP access to CEI in the NBP IA and for NBI's transit access in the Commercial Areas? ComReg will consider the alternatives further depending on responses to this Consultation. Please provide reasons for your response.

ComReg's proposal in this regard is predicated on the view that the rollout of NBI's network in the IA is not in direct competition with eircom. ComReg further argues that eircom is likely in time to cease the copper network and will offer retail services to end users using NBI wholesale products.

Consequently, ComReg proposes that common corporate overheads should not be included in the calculation of the CEI price and is a factor in deciding to use a straight-line depreciation methodology

No time scale is given for this shutting down to take place nor is there any evidence given to support the argument that it will occur. Evidence to date in the Irish market (and in other markets) would suggest that the transition by customers from CGA to faster broadband products can move at a slower pace than would be expected – in particular where customers seek connectivity for basic online services as opposed to more data intensive services such as online gaming, iptv and other services. It is not logical to assume that eircom would exchange a revenue stream for current services with the expense of purchasing wholesale inputs from NBI.

It is a reasonable expectation that some level of level of network competition could develop between NBI and Eircom in the NBP IA and the question arises therefore as to whether it is proportionate to pass elements of cost from the IA across to commercial fixed services. At the very least, this needs to be evidenced before imposing a regime that in effect requires operators in commercial areas to cross-subsidise services in the NBP IA.

It is arguable that if eircom upgrade a route in order to carry fibre for NBI they will not need to replace all poles on that route. Reattaching a copper cable to a replacement pole is a simple procedure and much cheaper than replacing a full route. The economics of tearing down copper along a route to replace it with buying in wholesale services would not stack up, except in cases where the copper route was so degraded that eircom could not reasonably meet its USO obligations.

Vodafone contends that eircom will continue to offer services in these areas for a relatively long period of time and, as a result of the rollout of NBI, will gradually lose retail market share but will still compete on their own network and at the retail level on the NBI network. Indeed, it could be argued that the upgrading of the CEI infrastructure for the purposes of NBI prolongs the economic life of the copper network.

NBI wholesale services in the IA will create competition for eircom downstream services and it is not therefore appropriate to exclude common corporate costs from the calculation of CEI in the IA. The corollary approach is what is required. Indeed, as quoted by ComReg in paragraph 227 DotEcon note in section 8.5.2 of its report that

“Where a service is efficiently priced and includes a contribution to common costs, in typical cases it will be efficient for the price of an underlying access service that allows other providers to offer a competing service to include a similar common cost contribution. This approach ensures that the access provider will be efficiently bypassed by another provider whenever it can undertake the activities downstream of the access service more efficiently. If this were not the case, then as customers were lost from the access provider, the contribution to its common costs would be lost as well.”

Vodafone urges ComReg to carefully consider this approach at the very least to continue to charge common cost recovery for CEI in the IA until evidence on the migration from copper emerges in sufficient proportions to warrant a change in approach. Similarly, it is not appropriate to use a straight-

line depreciation. An unintended consequence of the proposed approach may also be to create additional profit for NBI.

Regarding transit, notwithstanding the restricted use of transit through the 300K it is appropriate that some contribution is made for transit services provided.

Question 4: Do you agree with ComReg’s preliminary views on the costing principles that should apply in relation to Reusable CEI Assets and Non-reusable CEI Assets? Please provide reasons for your response

Vodafone agree on the basis that actual data from the 300K experience must inform replacement in the Intervention Area. The replacement rate in the NBP IA should reflect the rate undertaken by Eircom in its own FTTH Rural Network in those areas where NBI require CEI access i.e. only areas that need to be made NGA ready. This would also assume ComReg has assessed that an efficient level of replacement occurred, and cost-effective re-use is prioritised.

Question 5: Do you agree with ComReg’s preliminary views on the proposed depreciation approaches used to determine the annuity associated with (i) the CEI costs relevant to Generic Access to CEI (ii) the CEI costs for NBI’s MIP access in the NBP IA and (iii) the CEI costs for NBI’s transit access in the Commercial Areas? Please provide reasons for your response.

No Comment.

Question 6: Do you agree with ComReg’s preliminary view that the existing regulatory asset lives for Eircom’s poles and ducts should be maintained at 30 years and 40 years respectively? Please provide reasons for your response.

No Comment.

Question 7: Do you agree with ComReg’s preliminary view that CEI process related costs should be recovered as part of the recurring rental prices for Generic Access to CEI while the process related costs could be recovered as a one-off charge in the case of NBI’s MIP access to CEI, which should be pre-notified to ComReg? Please provide reasons for your response.

Paragraph 371 notes the link to the separate ANM model. There is a need to deliver revised CEI pricing taking into account the urgency of NBP and the EU Commission comments regarding delivery of updated CEI and fixed pricing without delay. It is expected that the final decision on both pricing regimes will be issued in early 2021.

Question 8: Do you agree with ComReg’s proposed cost modelling approach in the Draft PAM and in the Draft DAM in order to determine the per unit costs associated with pole and duct access, as described in subsection 5.8? Please provide reasons for your response.

No Comment

Section 6: Cost Sharing and Pricing Methodologies for CEI Access

Question 9: Do you agree with ComReg’s preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the pole access rental price for

Generic Access to poles and for NBI's MIP access to poles in the NBP IA and in the Commercial Areas? Please provide reasons for your response.

No Comment

Question 10: Do you agree with ComReg's preliminary views on the proposed cost sharing methodologies that should be applied as a means to determining the duct access rental price for Generic Access to duct as well as NBI's MIP access to duct in the in the NBP IA and for transit access in the Commercial Areas? Please provide reasons for your response.

As stated above notwithstanding the restricted use of transit through the 300K it is appropriate that some contribution is made for transit services provided.

Question 11: Do you agree with ComReg's preliminary view on the use of number of customer lines and in particular the use of the number of each operator's active connections on their networks (Eircom and NBI) to those designated premises (of circa 537,000 delivery points) in the NBP IA, is an appropriate basis to implement the per customer approach for NBI's MIP in the NBP IA? Do you agree with the various options considered at paragraphs 563 -564 for allocating any shared network costs and common corporate costs associated with NBI's transit access in Commercial Areas in the event that a per customer approach were chosen in this area? Please provide reasons for your response. ComReg would welcome the views of NBI and Eircom on the information that is currently available to them as well the information they could possibly provide so as to satisfy the proposal of using the number of each operator's active connections to those designated premises (of circa 537,000 delivery points) in the NBP IA and information required for NBI's transit access in the Commercial Areas.

No Comment

Question 12: Do you agree with ComReg's preliminary view on the process to monitor and to assess actual outturns of active customer numbers (compared to the forecasts) on their respective networks in the NBP IA at the end of each quarter and to update for the actual active connections in the [Draft] PAM and [Draft] DAM as part of the annual review process in subsection 10.2.2 so as to address any over- or under-charging by Eircom? Please provide reasons for your response.

Vodafone agree with the quarterly and annual approach proposed.

Question 13: Do you agree with ComReg's preliminary view that the duct access rental price for Generic Access to ducts should be differentiated by surface type? Please provide reasons for your response.

No Comment

Section 7: WACC for CEI in the context of NBP

Question 14: Do you agree with ComReg's preliminary view on a differentiated WACC rate of 4.03% for Eircom's CEI in the context of access by NBI's MIP NBP IA and for NBI's transit access in the Commercial Areas? Do you agree that the WACC for CEI should be subject to annual updates? Please provide reasons for your responses.

This should be consistent with the approach adopted to WACC across other regulated products. The inconsistencies between the multiple fixed access models should be removed.

Section 8: Other related/one-off CEI access costs

Question 15: Do you agree with ComReg’s preliminary view that Eircom should recover any additional costs associated with replacing a pole with pole furniture located on it by means of a one-off charge levied at the time the pole is replaced? Do you agree that the cost of pole furniture removal and replacement should be capitalised against the asset that the furniture is associated with, in its cost accounting systems? Please provide reasons for your response.

No Comment

Question 16: Do you agree with ComReg’s preliminary view that tree trimming costs to prepare aerial cable routes in advance of cable deployment should generally be recovered by means of a one-off charge? In the case of tree trimming associated with pole replacement, do you agree with ComReg’s proposal that such costs should be recovered as part of the pole rental charge? Please provide reasons for your response.

No Comment

Section 9: Draft Maximum Rental Prices for Eircom’s CEI

Question 17: Do you have any views on the option of Eircom recovering the incremental CEI (duct and pole) investment associated with NBI’s MIP as an upfront fee levied on NBI’s MIP rather than as a recurring annual rental charge, as outlined at paragraph 699. Please provide reasons for your response.

No Comment

Section 10: Price Control Monitoring and implementation

Question 18: Do you agree with ComReg’s preliminary view that Eircom should develop its cost accounting systems and its HCAs so that CEI costs can be reported in a transparent and meaningful way, the details of which should be determined as part of the annual review process discussed at paragraph 705? Do you agree that Eircom should separately identify the costs associated with pole furniture from other pole related costs in its cost accounting systems? Please provide reasons for your response.

Vodafone agree that costs should be separately identified. An annual review is appropriate, and the outcome of each review should be published.

Question 19: Do you agree with ComReg’s preliminary view that Eircom should provide ComReg with an annual statement of the actual and forecasted investment in ducts and poles for both the NBP IA and the Commercial Areas, in line with the templates contained in Annex 5 and Annex 6 of this Consultation? Do you agree with ComReg’s proposal that Eircom should publish it on its website? Please provide reasons for your response.

Vodafone agree with publication. ComReg should review the forecast and provide a view as part of its own review.

Question 20: Do you agree with ComReg’s preliminary view that prices for Generic Access to CEI should be directed for five years consistent with the proposed approach at paragraph [724](#)? Please provide reasons for your response.

No Comment.

Question 21: Do you agree with ComReg’s preliminary view on the proposed price control application set out in Section 10.2.1 and the annual review process discussed at Section 10.2.2 (paragraphs 726-737), regarding CEI access by NBI’s MIP? Please provide reasons for your response.

No further Comment.

Section 11: Regulatory Impact Assessment

Question 22: 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.

Please refer to general comments a key comments and points of principle at the start of this response.

Annex 1 Comments

Do you believe that the draft text of the proposed Decision Instrument for the Wholesale Local Access market at a fixed location (WLA Market or Market 3a) 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 Comment

ENDS