



Commission for
Communications Regulation

Market Review

Wholesale High Quality Access

Document No 20/06d

Annex 11 of ComReg Document 20/06

Non-Confidential Submissions to Consultation 18/08

Reference ComReg 20/06d

Version: FINAL

Date: 24 January 2020

An Coimisiún um Rialáil Cumarsáide

Commission for Communications Regulation

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Index of NON-CONFIDENTIAL Responses to Consultation

1. Alto.....	page 3
2. BT Ireland	
a. Part 1.....	page 31
b. Part 1 Annex.....	page 52
c. Part 2.....	page 99
d. Part 3.....	page 129
e. Part 4.....	page 138
3. Eircom.....	page 152
4. Enet.....	page 202
5. Verizon.....	page 225
6. Vodafone.....	page 232
7. Zayo.....	page 256

alto

alternative operators in the communications market

Further Consultation: Market Review: Wholesale High Quality Access (WHQA) - Ref: 18/08 & 18/25

Submission By ALTO

Date: April 27th 2018

ALTO is pleased to ComReg's Further Consultation and Market Review concerning Wholesale High Quality Access – WHQA, - Ref: 18/08 & 18/25.

ALTO welcomes this opportunity to comment on this important consultation.

ALTO has noted that the Consultation and supporting documentation is extremely complex and we thank ComReg for considering our request for further time to respond given the nature of the issues at stake, and the fact of potential EU Infringement Proceedings connected with this Market Review.

Preliminary Remarks

ALTO supports continued regulation of up to and including 2mb TDM technology nationally.

ALTO submits that the average cost of digging to install network, to provide on-net services versus buying off-net access aligns closer to 20 metres radial than 100 metres radial as ComReg suggests. This is a barrier to entry and will be a substantial issue for the market if it is not reviewed and revised downwards by ComReg.

ALTO submits that ComReg appears to ignore the market realities of lead-in problem of reaching customers. This is a significant and expensive issue for industry and one that should not be ignored by ComReg.

ALTO disagrees with the deployed underlying treatment of eNet in the analysis as a matter of economic principle and consequentially how it comes into play within the key algorithm reflecting network presence of operators. This is apparent from Appendix 1 the Tera Report. If it is the case that ComReg has accounted for eNet as effectively two operators, then this is a significant error and will lead to erroneous deregulation in the market.

ALTO submits that ComReg proposal to deregulate High Bandwidth TDM Interfaces (TI) completely with very short sunset clauses to be incorrect and out of line with market expectations. ALTO considers that ComReg's proposals should align precisely with Zones A and B. Generally, the market expects a minimum of 12 months and a maximum of 36 months in order to retire Current Generation Access – CGA, offerings.

ALTO does not support the use of old regulatory EOO remedies for 2mb ComReg circuits.

ALTO does not support ComReg proposed use of EOO for Zone B ComReg must move to an EOI Standard. Industry cannot support EOO at all.

ALTO submits that ComReg should link any and all deregulation sunsets to the demonstrable opening of the duct and pole market by Eir in a fit for purpose 2018 manner. In January 2017, Eir removed access restrictions, but ComReg is not aware of any Access Seeker currently using Eir's ducts and poles for their access network extension on a significant scale. ComReg also notes that in its WLA/WCA Consultation 544 (which followed the 2016 Consultation), ComReg set out a set of proposals in relation to the access remedies in the WLA and WCA markets and in particular, enhanced Civil Engineering Infrastructure ('CEI') 545 access remedies in the WLA market. These remedies simply must be carried over and considered in this Market.

ALTO notes that ComReg appears to have not analysed 2mb voice circuits adequately. This is a matter that should be noted and reviewed by ComReg.

Response to Consultation Questions:

Q. 1. Do you have any further observations on ComReg's Retail Market Assessment?

A. 1. ALTO is of the view that a number of the conclusions reached by ComReg are a copy of the 2016 decisions. ALTO surmises that ComReg appears to not have applied sufficient diligence this assessment or the previous assessment.

Further, it is imperative that the lessons learnt from RGM are implemented here, where relevant e.g. SLAs (more on that later).

Q. 2. Do you agree with ComReg's further preliminary conclusions on the definition of the Relevant WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

A. 2. ALTO does not agree with ComReg's preliminary conclusions on the definition of the Relevant WHQA Markets. See comments on counting of eNet.

Q. 3. Do you agree with ComReg's further preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, including the proposed designation of Eircom as having SMP, as appropriate? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your view.

A. 3. ALTO submits that ComReg must be aware of the economic realities faced by new entrant operators. It is simply uneconomical to building out infrastructure to

many areas of the country where incentives are not apparent.

ALTO is concerned that ComReg analysis omits certain forms of E1 voice circuits and seems to double count the eNet network, a matter that becomes apparent on review of the data furnished to the industry by ComReg. This effectively distorts the calculations in the ComReg papers and leads to erroneous and unjustified deregulation.

ALTO is of the view that Eir should be designated with SMP as proposed.

Q. 4. Do you have any further observations on this Section 6 concerning competition problems in the LB TI WHQA Market?

A. 4. ALTO agrees with the ComReg assessment of the LB TI WHQA market and the continued need to apply SMP Regulation.

ALTO notes that the Eir repair performance for this market has deteriorated significantly suggesting that a strengthening of regulation is required, transparency is essential in implementing such proposals.

ALTO agrees with the ComReg preliminary position that competition problems are likely to arise in the LB TI WHQA market absent regulation and one of these issues as identified is the potential offering of poorer quality service performance.

Q. 5. Do you have any further observations on this Section 7 concerning obligations in the LB TI WHQA Market?

A. 5. ALTO notes the comments made by ComReg in Section 7 of the Consultation and makes the following points.

Proposed Access Obligations

ALTO agrees with the access obligations proposed and considers all the proposed regulatory remedies should be the most up to date and to the modern regulatory standards. The regulation sought by industry must be fit for purpose.

Eir's Regulatory Governance Model – RGM, has highlighted serious weaknesses in the existing remedies for non-discrimination and transparency concerning Eir's wholesale offerings. Industry awaits the next round of disclosures from Eir to gage whether any real change has been effective.

ComReg has applied more modern remedies in other markets and this market is no different.

Analogue Lines

ALTO supports the removal of regulation for analogue leased lines.

Channelized E1 (2Mb/s) Access Services

ALTO does not agree with the proposed removal of this market as industry still uses these services regularly. ALTO submits that the data made available to ComReg in this area appears to be incorrect or underreported, as operators appear to have been asked to omit E1 voice circuits.

SLA's Clause 7.36

ALTO welcomes ComReg's approach to SLAs. ALTO has two areas of disagreement with ComReg set out below:

1. Regulation such as for the proposed MI Zone B needs to be linked to and linked with temporal limitations in order to conclude negotiations i.e., 6 months maximum. Absent this, ALTO submits that SLAs can take years to

negotiate.

2. Clause 7.43, ALTO welcomes that ComReg recognises the need to bring SLA obligations more into line with current regulatory practice. And therefore proposals to improve matters are welcomed.
3. . ALTO submits that the proposed updates are not fit for purpose. ALTO submits that ComReg should adopt terms similar to the NGA SLA remedy. Such a remedy will have little impact on Eir at all. It is unclear why ComReg propose to add a new SLA category “project” and how this impacts standard and non-standard offerings. Further, clear definitions are required to avoid services being classified as “non-standard” which is what our experience of requests normally fall into (although they are common requests).

Negotiation In Good Faith (Clause 7.44)

Eir’s various RGM disclosures have completely discredited this remedy. It is disappointing that ComReg see it fit to include it for the LB TI.

ALTO submits that the Negotiation in Good Faith must be more onerous a remedy that it has previously been. It is inadequate for ComReg to simply proffer a section of the Access Regulations in order to satisfy this area of required regulation.

Interconnect Regulation (Clause 7.45)

ALTO submits that ComReg’s proposals in this area are vague. The mere maintenance of price control is inadequate for the market.

ALTO submits that it requires a more modern suite of regulations applicable to WEILs. Those more modern remedies drafted into the Decision Instrument at a later time.

Non-Discrimination Regulation – Clause 7.72

ALTO notes that ComReg's claims that it is too expensive in a declining market to impose stronger regulation. RGM disclosures run contrary to this ComReg position. ComReg must adopt as a basic standard Equivalence of Inputs – EOI, and only then should ComReg augment the existing rules.

ALTO as a voice of industry simply cannot accept the application of known to be failed remedies in this market.

Cost Model (Clause 7.121)

ALTO agrees with the ComReg view that it is correct to continue cost orientated modelling. The recover of Eir's investments in this market should be well recovered and costs should be falling, despite the market's experience.

ALTO disagree with Eir's view that cost orientation will stimulate demand, but given the cost orientation regulation already exists and the market is declining this is simply not evident.

ALTO submits that ComReg's comments on the WACC at clause 7.120 are concerning. The fact that ComReg appears happy for Eir to continuously over-recover regulatory margin is unacceptable. The continued transfer of capital to Eir over the industry is incorrect and requires remediation.

ALTO deems that ComReg approach to Clause 7.120 to be incorrect and quite obviously detrimental to competition.

Accounting Separation Remedies (Clause 7.139)

ALTO agrees that accounting separation must continue. ALTO remains concerned as to the lack of transparency of process that ComReg is deploying with regarding Additional Financial Statement (AFS) and Additional Financial Information (AFI).

ALTO requests that ComReg should consult on the publication of more detail concerning discussions with Eir and what inputs are involved (not including confidential figures). There remains a lack of transparency between ComReg and

Eir on accounting separation remedies.

Q. 6. Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

A. 6. ALTO agrees with ComReg's analysis of the issues identified in the Zone B MI WHQA market and the impacts on competition including exploitative practices such as excessive pricing, exclusionary practices, non-price based vertical Leveraging Behaviour, information asymmetries, price based vertical leveraging behaviour, horizontal leveraging.

Eir's RGM admissions concerning downstream access to upstream wholesale systems within the organisation remain concerning.

ALTO is also concerned as to the protection of confidential wholesale information being available to downstream within Eir. ComReg must ensure that no confidential wholesale information is passed in any form of downstream areas within Eir.

ALTO is also concerned at the lack of progress in the RGM and how the serious Governance problems within Eir are being resolved.

In the absence of clear action from ComReg on RGM, ALTO submits that it has little confidence in ComReg's proposals until definitive action has been taken.

Q. 7. Do you agree with ComReg's approach to imposing access, non-discrimination, transparency, price control and cost accounting and accounting separation remedies in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant

paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

A. 7. ALTO submits the following comments related to Zone B MI WHAQA

Zone B with nearest interconnect from Zone A.

ALTO submits that Eir should provide regulated connectivity from Zone B to the operators Zone A WEIL location. We note from Appendix 9 however this is so complex it needs to be presented to industry in a forum where questions can be asked to check understanding. It is unclear how the practical implications of the ComReg proposals will actually work in practice.

SLAs

ALTO submits that in terms of SLAs, that agreeing SLAs with Eir is a difficult and protracted process, which requires intervention from ComReg or others. Strong and unambiguous regulation for the operation and conclusion SLAs is clearly required in the WHQA market and disputes are highly likely.

ALTO comments on the Proposed Remedies

Application of the full suite of regulatory obligations

ALTO agrees with ComReg in the introduction to Section 9 that its preliminary view is to apply the full suite of regulatory remedies into the Zone B MI market and consider all should be to the modern standard particularly concerning EOI as this concept was long established in the regulatory environment when Eir proposed NGN Wholesale Ethernet services between 2010 and 2012.

Access Remedies

ALTO agrees with list of access remedies provided but ComReg. ComReg omits a key issue concerning access to information. RGM has taught industry the hard way regarding transparency and data access. ALTO demands an Access Request Obligation be placed on Eir to provide accurate and correct information pertaining to and supporting all forms of access requests.

Duct and Pole Access

ComReg need to add to the access remedies an obligation for full and unfettered access to the Eir Duct and Pole Network. ComReg must include a full suite of Duct and Pole access regulation within this market or it should formally and actively link to such. This is a glaring omission from this Consultation and Market Review.

ALTO submits that current Eir Duct and Pole offer is not fit for purpose, linkage of the two areas is important to ensure fair behaviour and incentives.

ALTO submits that ComReg should link the deregulation of this market to the availability of reasonable access of fully viable duct and pole services. Active regulation that allows market 4 competition as the market 3a Duct and Pole services becomes proven and achieves critical mass for leased lines.

ALTO submits that the ComReg 100 metre proposal is invalid due to building costs. However, a fit for purpose Duct and Pole offering could be considered a workable substitute if it were proven to work. There are a significant number of example countries in which duct access has been adopted very successfully

ALTO strongly suggests that ComReg pays heed to RGM, and the fact that it has exposed various simple truths about the Irish Market. One key truth is that paper-based regulation and offers are simply inadequate for the Irish market.

Interconnection Services

ALTO is aware that Eir provides Interconnect Services to the roofs of their buildings and exchanges for MNOs.

ALTO members would also like to be able to avail of this type on Roof Interconnect Services to support our interconnectivity requirements with MNOs.

Requirement to Negotiate in Good Faith

RGM has destroyed any reasonable view industry can have on this subject without evidence of real change arising from Eir.

ALTO notes that at 9.111 ComReg attempts to refine the Negotiate in Good Faith obligation and we agree with the proposals with RGM concerns noted. We await the outcomes of the various cases pending before the High Court at this time.

Requirement not to withdraw facilities already granted.

Network changes lead to some services changing between different price categories during major bids, on a *sui generis* basis appearing to be outside any real regulatory control. ALTO submits that ComReg must consider price change constraints within this regulation.

Requirement to provide open access to technical interfaces and other key technologies.

ALTO agrees with this proposal.

Requirement to provide access to Eircom's OSS.

ALTO submits that ComReg should not be deploying EOO regulations at this time. The standard expected by industry is EOI, and even at that is has its own issues.

OSS System Updates

The industry is highly automated with continuous updates being made by Eir to its order handling system. While we welcome improvements and work to ensure we can align with these continuous updates there is one issue that is a continuous difficulty and a second issue that can cause considerable problems, both of which should be included in the regulation.

ALTO submits that Eir is often late in deploying required changes via Data Contracts. This is problematic for industry and must be set out in the new regulations.

ALTO further submits that OSS changes that are not backwards compatible also create financial and service risks to industry. ComReg must also consider the codification of regulation to handle such issues at this juncture.

Requirement governing fairness, reasonableness and timeliness of access.

ALTO calls on ComReg to place robust regulations into force in the form of SLAs to deal with WHQA market. Updated leased lines SLAs are very long overdue. It is no longer tolerable to expect industry to receive derisory services and limited SLAs at the behest of Eir. If the proposed regulations are robust enough, ComReg can head off future disputes concerning service standards at an early stage.

New product development and changes to existing products (SLAs)

ALTO supports ComReg's proposals including that Eir should discuss and agree SLAs where necessary prior to product launch. This will assist with market and product stability in the medium to long term.

Suspension of an SLA

ALTO cannot agree that Eir be permitted to suspend the application of a contractual SLA without Eir triggering the *Force Majeure* contractual conditions. Eir's approach to declaring Storm Mode is not contractual and is meaningless

within contract. The operation of Storm Mode depends on the good will of the industry for it to work but it does not suspend SLAs.

If there is a need to discuss the operation of *Force Majeure* and the suspension of SLAs, industry would have to consider what rights would be conferred to the operators such as suspending payment for services not available – as is contained in the RIO.

Failure to meet SLA committed services levels

ALTO agrees with ComReg and supports its proposals in this area. Corrections agreed within SLAs for other market SLAs must be simply transposed into the leased lines regulations at this juncture.

Requirement regarding Timeliness of Product Development

ALTO welcomes and supports ComReg's views on this subject.

Timescales for developments

ALTO agrees with the proposed timescales for progressing Access Requests. This aligns with contractual commitments Eir have made.

Summary of Preliminary Conclusions on Access Obligations

ALTO commends ComReg's approach to this subject.

ALTO calls on ComReg to link deregulation with the deployment of fit for purpose duct and pole access offerings. It is clear that the leased lines/WHQA market is dependent on fit for purpose duct and pole access, while being differentiated with markets 3a and 3b concerning access requests.

Practical Application of the Access Remedies in the Market

ALTO agrees with not stranding Zone B CSA from existing interconnect facilities.

Non-Discrimination Remedies

ALTO cannot agree with the deployment of EOO standards in this review at all. We expect at minimum EOI as has been developed and deployed elsewhere by Eir. RGM has displayed that EOO regulation is simply not fit for purpose and we look forward to ComReg revisiting its thinking on this critical subject.

Transparency Remedies to Support Non-Discrimination

ALTO calls on ComReg to review and revise the entire suite of KPIs apparent under this heading. It is overdue a review and will link to ALTO suggested reforms of the regulatory standards that should be deployed.

Transparency Remedies

ALTO agrees with the Transparency Remedies proposed. Industry requires that amendments to existing contracts be made as and when appropriate with Eir.

ComReg's proposals 9.290 and 9.921 around development prioritisation are both desirable and welcome.

Summary of the Transparency discussion and ComReg proposal.

ALTO agrees with the proposals in this area and again calls for updates to and in the areas of KPIs.

Price Control Remedies in the Zone B MI WHQA Market

ALTO agrees with ComReg's Cost Orientation Price Control proposals. This will not be an onerous obligation on Eir.

ALTO demands that a Margin Squeeze Test – MST be built into the price control remedies. Industry has a relatively good degree of confidence in ComReg’s ability to properly regulate and supervise MST and price control based on experience with bundled services.

Cost Model

ALTO agrees that the BU-LRAIC Plus provide an accurate view of modern pricing and a modest margin. ALTO calls on ComReg to deploy this remedy in order that the return is aligned with the Weighted Average Cost of Capital – WACC, and not at the extraordinary high rates currently be taken (12 – 17%).

Accounting Separation and Cost Accounting Remedies

ALTO submits that the use of accounting separation in order to detect Margin Squeeze is inefficient and deeply ineffectively. It is the closest thing to an *ex post facto* remedy that can be suggested and is not something ALTO supports or something ComReg should countenance.

ALTO does agree that Accounting Separation should continue however. ComReg should consider deploying CCA in order to properly view the situation. Accounting Separation is important separately in order to review other forms of potential abuse.

Requirement to provide a Statement of Compliance

ALTO supports the requirements surrounding Statements of Compliance. We have learned through RGM that Statements of Compliance are useless unless there is a high degree of accountability built into the organisations and staff working to display compliance.

ALTO calls on ComReg to simplify Statements of Compliance and to publish same in order to procure greater visibility of Eir’s behaviour and encourage transparent dealings.

Enforcement and Penalty

ALTO calls on ComReg to provide granular details on how is it they intend to enforce, review and penalise compliance breaches and Statements of Compliance that are found to be wanting. ALTO welcomes ComReg's future proposals.

Billing

ALTO submits that in terms of practical implementation of this change in the regulatory regime, we consider there would need to be separate billing elements for these components e.g. physical and virtual elements split out for both the local access and backhaul elements. We would welcome clarification if this is what ComReg intends to happen with the proposed transparency obligation regarding the unbundling of the Leased Lines Reference Offer (LLRO) at Condition 10.3 of the Draft Decision Instrument. If it is not, then we urge ComReg to clarify this in its final statement.

Reference Offer clarity and simplicity

ALTO has some practical concerns around the clarity and ease of use of the LLRO documentation. Given the more segmented nature of the market under the new proposals, the documentation needs to be as accessible and practical as possible in order for it to be most effective and for access seekers to make full use of the benefits of the proposed regulatory regime. For example in the past, Eir has issued extremely long and complex documents which serve only to dissuade or confuse competitors such as its Ethernet Pricing document which was over 160 pages long. We urge ComReg to consider how it can control for this through its proposed SMP conditions (under the transparency or non-discrimination conditions)

Eir's Regulatory Governance Model – RGM

Industry was promised voluntary reform in 2012. During 2013 industry was told that a programme called RGM was being deployed within Eir.

Two years later industry received the first of the Eir Regulatory Governance Model reports published on 28 August 2015 ('Styles 1'); the second on 18 May 2016 ('Styles 2'); and the third on 13 June 2017 ('Styles 3'). These unprecedented reports displayed serious compliance issues and forms of self-confessed compliance breaches that were unheard of in Ireland and arguably anywhere in the European Union.

Six years later in 2018, industry has yet to see the results of ComReg's work and the implementation of the various recommendations from the two consultants retained by ComReg to undertake the RGM reviews at both a Governance (KPMG) and Operational level (Cartesian).

Industry has never been given any real guidance on what true compliance under RGM should resemble, and there is a deep lack of plain language utilised when dealing with the subject of compliance and regulatory governance.

ALTO submits that this market must come under the ambit of RGM and that Statements of Compliance should become commonplace in the operation and general governance of the market not limited to the matters under consideration in this Consultation.

ALTO notes that as part of the 2017 Markets 3a and 3b Review by ComReg, its consultants Cartesian found some 33 problems¹ with the Eir Duct and Pole Offer that remain unresolved. We require a fit for purpose duct and pole offer as an incentive to drive deregulation in this market.

ALTO awaits the outcome of the High Court proceedings later this year concerning

¹ ComReg Document Reference 16/96d clause 5.1 – Cartesian Report on CEI Service Delivery Process Equivalence Options.

RGM.

Q. 8. Do you agree with ComReg's draft Decision Instrument set out in Appendix: 4, in particular, that its wording accurately captures the intentions expressed in this Section 9? Do you agree with ComReg's Definitions and Interpretations as set out in Part I of the Draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers in the Draft Decision Instrument to which your comments refer.

A. 8. ALTO submits the following comments to the Draft Decision Instrument.

Clause 5 of the Draft Decision Instrument

ALTO does not agree with ComReg's Market assessment for High Bandwidth TDM services or removal of the channelized 2mb services from regulation.

With regard to the MI market ALTO agrees with the geographic split but with a different split of CSAs based on our updated analysis.

Clause 6 of the Draft Decision Instrument (2Mbit/s LB Market)

ALTO agrees with the imposition of the SMP obligations on Eir.

ALTO agrees that SMP being imposed on Eir is correct for the 2mb and sub 2mb traditional technology market with the exclusion of analogue circuits from this category.

ALTO does not agree with the exclusion of channelized circuits from this market as industry uses these circuits for voice services.

ComReg advised industry not to submit this data to the ComReg Statutory Data Requests – It appears that ComReg may have misinterpreted the import of these

services to the industry.

ALTO considers ComReg analysis of the 2mb channelized market to be incorrect and simply wrong in conclusions reached.

ALTO is concerned that addresses and identification of relevant Zones, Zone A and B are very granular and may be hard for access seekers to identify whether they will be able to obtain a product on regulated terms. This will also be challenging for ComReg to monitor and enforce compliance with the regulation on such a granular basis. There is also a concern that such detailed data based on Small Areas will become out of date quickly - it would be helpful if ComReg could clarify whether the Zones will be fixed for the duration of the remedies.

Clause 7 of the Draft Decision Instrument (Obligation to Supply Access)

ALTO agrees with this obligation

Clause 8 of the Draft Decision Instrument (SLAs)

ALTO does not agree with ComReg's approach of reapplying legacy regulation for SLAs for the 2mb market.

Clause 9 of the Draft Decision Instrument (Non Discrimination)

ALTO submits that the proposed regulatory remedy is weak. RGM has illustrated the consequences of poor non-discrimination regulation.

ALTO submits that Clause 16 of the Draft Decision must also be applied in full for Clause 9 and the TI LB Market. If Eir are not discriminating then there is negligible extra work for them to comply with the modern form of regulation.

ALTO does not accept ComReg position that such remedies will be onerous – there should actually be no material difference if Eir are compliant.

Clause 10 of the Draft Decision Instrument (Transparency)

We note that ComReg has used the modern approach for the transparency remedy that further begs the question why other modern regulatory remedies as above we also not applied. We agree with the approach for transparency.

Clause 11 of the Draft Decision Instrument (Obligation of Accounting Separation)

ALTO agrees with ComReg's approach.

Clause 12 of the Draft Decision Instrument (Price Control and Cost Accounting)

ALTO agrees with ComReg's approach.

SMP Obligations for MI Zone B

Clause 13 of the Draft Decision Instrument (Price Control and Cost Accounting)

ALTO generally agrees with the regulation proposed for MI Zone B except where we have identified issues such as the lack of modern day regulation such as EOI.

Clause 14 of the Draft Decision Instrument (Obligations to provide Access)

ALTO submits that this clause should include active text at 14.2 (d) for operators to request fit for purpose duct and pole services and facilities for the MI market. Without this ALTO considers there is a risk that a different markets argument will be made and no progress will be made.

Clause 15 of the Draft Decision Instrument (Conditions attached to Access Obligation)

ALTO agrees with ComReg's new approach which we consider aims to prevent a repeat of the unreasonably protracted SLA discussions in other markets (and we are already seeing early signs of same in this market) and the need to ultimately take disputes and for issues to lead to high court intervention.

ALTO submits that re. Clause 15.2 (vi) we request that the methodology should also include details how faults crossing measuring period are treated as its important such are not lost from the SLA.

Clause 16 of the Draft Decision Instrument (Non-Discrimination)

ALTO strongly disagrees with ComReg's view that the Eir network to supply MI is legacy. We submit that it is not. Further ALTO strongly disagrees with EOO regulation being applied.

Clause 17 of the Draft Decision Instrument (Non-Discrimination)

ALTO agrees with ComReg's approach but notes the RGM issues with this remedy that must be remediated.

Clause 18 of the Draft Decision Instrument (Accounting Separation)

ALTO agrees with ComReg's approach.

Clause 19 of the Draft Decision Instrument (Price Control and Cost Accounting)

ALTO agrees with the price control, on condition that Eir's low interconnection costs are factored into the costs to their downstream business units.

ALTO does not agree with ComReg decision to not apply an MST. ComReg are expert in MSTs where regulated and non-regulated components are combined and the Zone A to Zone B split is ideal for leverage from Zone A into Zone B.

Clause 20 of the Draft Decision Instrument (Statements of Compliance)

ALTO welcomes further Statements of Compliance however, if the format is retained as experienced in the RGM revelations as presented to industry then ALTO considers that they do not offer any clear or consistent view of compliance.

ALTO submits that in the absence of EOI and/or functional separation, then Statements of Compliance must be clear and transparent and made available to industry.

Maintenance of Obligations, Withdrawal of Obligation, Operations and Effective Date.

Clause 21 of the Draft Decision Instrument (Statutory Powers Not Affected)

ALTO agrees with ComReg's approach.

Clause 22 of the Draft Decision Instrument (Sunset provision in High Bandwidth TI WHAQ)

ALTO disagrees with ComReg with its view of the TI WHAQ market.

ALTO considers that this market should also be subject to Zone A and Zone B.

Clause 23 of the Draft Decision Instrument (Sunset provision in High Bandwidth TI WHAQ)

ALTO submits that ComReg should consider a dynamic approach that incentivises the correct behaviour.

ALTO submits that sunset should be linked to the actual deployment of fit for purpose deployed duct and pole services. Should ComReg fail to incentivise the provision of duct and pole basically sinks ComReg's 100 Metre rule, as it is too expensive to dig such distances for most individual customers unless they are large business.

Clause 24 of the Draft Decision Instrument (Maintenance of Obligations)

ALTO agrees with ComReg's approach.

Q. 9. Do you agree with ComReg's approach on the withdrawal of all existing obligations in the HB TI WHQA Market and the Zone A MI WHQA Market and withdrawal of the obligation to provide WLLs in the LB TI WHQA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

A. 9. ALTO submits the following comments.

Clauses 10.4 – WEILS

ALTO submits that price control on WEILS alone is not enough. ComReg must ensure the all the regulation around the supply and continuance of the WEIL is triggered.

Clause 10.5, 10.6 and 10/16 (LB TI)

Clause 10.5

ALTO agrees to the deregulation of the Analogue Leased Line but not the Digital Leased Lines as it's not addressed in the consultation and not the Channelized E1 (2MB) Access as industry was instructed not to supply data on these by ComReg

hence the data is wrong and these are used for voice services.

Clause 10.6

ALTO agrees with the removal of analogue KPIs but not the removal of other KPIs.

Clause 10.16

ALTO disagrees with the ComReg view for the reasons above.

Clause 10.3.1 HB TI

ALTO considers ComReg's decision to change the MI market has an impact on the HB TI market as its now possible to use TI to circumvent Zone B as ComReg regulation.

ALTO submits that HB TI should be treated the same as MI Zone A and Zone B to the revised WE Zone A to Zone B split.

ALTO accepts that the supply of HB TI is now very low, however it is the maintenance of existing services where the issues remain and ComReg are creating considerable uncertainty to existing customers.

ALTO submits again that a scheme to link the progressive offer of deployed fit for purpose duct and pole solutions is required to allow for an incremental approach of deregulation.

ALTO acknowledges that the regulatory environment is changing, it is proportionate and reasonable for HB TI to be managed out in a reasonable way such as giving reasonable time for existing contracts to expire and a two year period is manageable. This presents a pragmatic approach and two years is a relatively short period of time.

Clause 10.3.3 MI Zone A WHQA

ALTO submits that ComReg must endeavour to further understand the timescales

involved trading in the business multi-site market. The timescales set out in the ComReg proposals are unrealistic and will lead to unnecessary disruption and ultimately possibly enabling Eir to engage in exploitative behaviour.

Clause 10.21 ComReg’s Preliminary Position in relation to the withdrawal of obligations.

(a) HB TI WHQA Market

Within a revised Zone A (deregulated area) ALTO agrees to no new supply, but we require an incremental sunset clause linked to the deployment with volume of proven fit for purpose duct and pole services.

This would provide substitute access to minimise the risk of undermining existing contracts. ALTO submits that the ComReg six-month proposal is unreasonable and disproportionate approach and will permit Eir to behave unreasonably/irrationally concerning 100 metre dig and build out costs.

(b) (i) ALTO agrees with this proposal.

(ii) ALTO submits that that deregulation is inappropriate.

(iii) ALTO submits that deregulation is inappropriate as ComReg appears to have been misinformed. Industry did not submit voice based circuit data (which is a big issue) and these are used for voice.

(c) Please see our response for (a).

Q. 10. Do you agree with ComReg’s preliminary conclusions on the Regulatory Impact Assessment for the MI WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

A. 10. ALTO makes the following comments relating to the Regulatory Impact Assessment.

a) General

ALTO notes the concept of self-regulation and co-regulation had proposed by one respondent previously. Given the revelations made by Eir in the RGM context, ComReg's intervention and regulation is required in the most formal of senses until such time as real and tangible behavioural change takes place in the market.

b) TI LB Market

ALTO supports ComReg's proposals for regulating this market. They are correct in the circumstances. ALTO demands fit for purpose regulation from ComReg given the backdrop of this consultation and the various RGM disclosures intermingling in the issues in this response.

c) TI HB Market

ALTO submits that ComReg appears to have failed to analyse the market in the light of the geographic changes to the MI market.

ALTO notes the potential of the HB TI Market to circumvent MI Zone B regulation.

ALTO submits that ComReg has obviously and simply not considered the nature of very large multisite contracts that usually take a minimum of six months to negotiate and often require considerable investment to operate. Opening these contracts mid-term creates huge risk to operators and forced changes could potentially trigger the User Rights obligations for customers them to walk away without penalty.

ALTO submits that ComReg must consider linking deregulation to the introduction of proven and fit for purpose deployed duct and pole services for leased lines is the way forward.

d) MI Zone A

Based on a revised geographical split for Zone A to Zone B we consider our comments relating to the provision and linking of deregulation to fit for purpose passive infrastructure services set out above should also apply.

e) MI Zone B

ALTO submits that based on a revised WE geographical split for Zone A to Zone B we generally agree with the RIA.

The RIA assumes that EOO is applicable in the circumstances. This is simply anachronistic and inapplicable. ComReg must reform its thinking in relation and standards to EOI such as is applicable in the NGA markets.

ALTO

27th April 2018

BT Communications Ireland Ltd [“BT”] Response to ComReg's Market Review on Wholesale High Quality Access at a Fixed Location Response to Consultation, Further Consultation and Draft Decision

25 April 2018

1.0 Introduction

We consider this to be a most critical consultation which will set the competitive environment for operators to compete in the Irish Leased Lines / Wholesale Ethernet market for the foreseeable future. It is imperative that ComReg takes a genuine forward look most especially for Ethernet and uses market information which is up to date and relevant and techniques of analysis which are transparent and appropriate to capture the real nature of the extent of current and foreseeable competition.

Whilst we consider the analysis of the country into 18,641 Census Small Areas (SAs) has considerable merit and ComReg and its consultants have applied considerable effort to map the physical network infrastructure into those areas and against customer buildings, we consider the supporting economic analyses of competition fails to provide a realistic picture of the actual operation of the market leading to the scale of de-regulation being significantly overstated.

There are a number of important assumptions made which we consider have not been addressed properly including:

- Counting E-Net C-MANs as equivalent to two downstream competitive networks.
- The economic dig distance of 100 metres of new duct out to customers.
- Assessing fairly the problems and timescale of getting licences to dig.
- Ignoring the lead-in problem of reaching customers.
- Incorrectly assuming all operators are offering services to all customer types whereas in practice many are only addressing specific groups such as financial services and/or 'b' ends of international circuits of services or Layer 3 services all of which in fact fall outside the definition of the relevant economic market anyway.
- Assuming that ANs can re-sell to each other when often technical and economic factors preclude this.
- That the Eircom Duct and Pole offer is fit for purpose and a source of competitive constraint
- Wider first mover advantages that accrue to Eircom including delivery lead time.

Whilst one of ComReg's aims in this Consultation was to support multi-site solutions we are concerned ComReg has made a number of assumptions which are not appropriate including but not limited to the following:

1. The assumption that 100 metres is an appropriate benchmark of a dig distance to connect a site to an existing network and be a real competitive constraint to Eircom. This is simply untenable and we refer to the detailed analysis on this in Annex A.

2. Access to upstream physical infrastructure such as ducts and dark fibre are a source of competitive constraint in access. In practice neither the products (where available) from Eircom and E-Net are remotely fit for purpose. There is also a considerable problem of lead-in where first mover advantages are considerable.
3. The extent to which network operators will provide wholesale services. For most retail bids it is highly likely that the wholesaler will be vertically integrated and also bidding for the same retail customer (Ireland is a small market and large tenders are limited). Hence with a view to winning the bid the wholesaler could refuse or constructively refuse to offer a wholesale solution. [REDACTED]
4. ComReg assumes that all ANs are providing services which are directly relevant to the domestic MI market and this is not correct. We discuss the scope of operators networks and portfolio in our response in Annex A and suggest that ComReg excludes many of these from its economic assessment of competition.

To support our concerns we have provided a detailed economic analysis in Annex A of the ComReg proposals leading to the Zone A - vs Zone B split of deregulated and regulated SAs. We address the Product and Geographic markets and also provided commentary on the SMP analysis and particularly on barriers to entry and expansion.

In conclusion, we cannot agree with the ratio of the split of SAs into Zones which do not pass a test of basic knowledge of competitive conditions in the marketplace. We are not in possession of the information to provide an alternative definitive proposal of the correct breakdown but we have indicated how we believe ComReg should do this and the sort of economic assessments that need to be done. We offer specific suggestions in this regard with proposals on: which ANs should be excluded from the analysis; alternative benchmarks for dig distance; effective competition thresholds; and other relevant parameters.

ComReg's Proposed Regulatory Remedies for Zone B

Once ComReg decides to regulate we consider the onus is thus to ensure the regulatory remedies are sufficient and effective, otherwise the object to regulate has failed. We are aware ComReg has proposed modern regulatory remedies for the Broadband 3a and 3b market (ComReg doc 16/96) and thus it is disappointing that ComReg has failed to carry through with some of those key improvements into the remedies in this market.

For the Low Bandwidth (Sub 2Mbits) ComReg appear to apply some legacy remedies that have been shown by the Eircom Regulatory Governance Model (RGM) to have failed.

Separately, the Consultation appears to overlook the considerable work of ComReg, the Industry and Eircom in specifying this NGN remedy in 2008 in the NGN Industry Steering Group (NISG). We cannot see why EOI Regulation cannot be in scope for what is also a Next Generation Network (NGN). This proposal is also inconsistent with the NGA market that uses the NGN and is EOI regulated. We need to move on from the RGM but this will not happen if the available regulatory remedies are insufficient and ineffective.

2.0 Response to Detailed Questions

Question 1: Do you have any further observations on ComReg's Retail Market Assessment?

Response 1

We would like to offer the following comments to the Retail Analysis.

We note the current Retail Market in Ireland is heavily dependent on a small number of wholesale suppliers (mainly two) who largely own the network infrastructure. Other operators own skeletal networks depending on others for infill. We are concerned absent regulation and stronger State management for the supply of State Assets that there is a risk the existing Retail market will contract to the two primary owners of infrastructure.

Multi-Site Customers

We acknowledge ComReg's revised analysis concerning multi-sites and the ability for retail providers to offer nationwide multi-site solutions to retail customers. However we consider ComReg's proposals do not actually resolve the issue as the MI Zone A solution is where most customers already exist or potentially exist and ComReg has not undertaken a full and adequate assessment of conditions of competition here. The existence of physical infrastructure under State Aid rules or extant sector regulation is no guarantee it will be made available on economic terms. We are clear that relaxing even the current regulation in Zone A will have a very serious impact on operators such as BT in Ireland as we and others will have no alternative suppliers to turn to.

Traditional Technology Low Bandwidth Retail Services

There continues to be a substantial market for these services which can only viably be supplied by the Eircom copper access network. We therefore agree with ComReg that the Eircom infrastructure for supplying ≤ 2 Mbit is not easily substitutable and no other operator could economically provide these services. We note that at the end of 2016 Eircom had over 50%¹ of this market and we agree (other than for specific projects) with ComReg that the decline is likely to be steady during the period of this market review. Thus, we believe the SMP status on Eircom should continue for this duration.

Traditional Technology High Bandwidth Retail Services

We agree that the retail use of these services is declining and new supply is minimal given most operators now supply Ethernet Services. However there are complications with ComReg's proposals that need to be considered.

- Traditional Technology High Bandwidth Services are high quality with bolted up dedicated capacity (unlike Ethernet Products). The TDM network is also excellent and highly reliable.
- Significant investment in HB TI means that business customer contracts tend to have a term of several years to allow the provider to recover its investment and make a reasonable return. We are concerned that ComReg's proposals create uncertainty of supply to re-sellers. We, as a provider, who has invested in purchasing existing regulated products with the potential consequence of having to break retail contracts (under User Rights Legislation), are also concerned. We are not alone. Therefore ComReg proposal to de-regulate provides infrastructure suppliers an opportunity to game downstream providers. We therefore consider a substantial sunset of two years should be applied to keeping regulation for existing TI supply.
- New supply – Whilst we agree with the ComReg's view that there will be very modest new supply of HB TI services, the introduction of the Zone A and Zone B areas creates an opportunity to game the proposed MI regulation. For example it is possible emulate HB TI services with Ethernet – the quality may not be the same but the services will be HB TI in name.

¹ ComReg Consultation Wholesale High Quality Access at a Fixed Location - 18/08 page 35 clause 2.51

To prevent gaming ComReg should therefore treat HB TI on the same geographic basis as WHQA (Zone A/Zone B).

P2P Wireless

We agree with ComReg's conclusion that P2P wireless services are not an effective substitute for fibre based leased lines.

Broadband

We agree with ComReg that asymmetric business broadband product display different characteristics to Leased Lines and should not be considered part of this market WHQA market. The deployment of Broadband in Ireland is highly asymmetrical in nature with considerable download bandwidth and relatively small upload bandwidth. Eircom's choice of the DSL band-plan, design of profiles and vectoring now effectively limits copper based broadband to highly asymmetrical services in Ireland. In addition, the normal differentiator between broadband and leased lines is the level of service assurance with leased lines continuing to offer far superior levels of service assurance over broadband i.e. 24/7 repair services. We don't envisage this changing in the foreseeable future or the lifetime of this market review, even for fibre based broadband services.

Dark Fibre

We generally agree with ComReg (Ref. Clause 2.37) that Dark Fibre is not considered an effective substitute in the Retail Market, and generally agree most retail customers do not have the expertise to support such.

Question 2: Do you agree with ComReg's further preliminary conclusions on the definition of the Relevant WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Response 2

We have considerable concerns with the economic analysis that established the split between MI Zone A and MI Zone B. In Annex A to this response we therefore provide a detailed review of the ComReg analysis, based on the information available from the consultations and our knowledge of the market. We further provide detailed SMP evidence to support our concerns. We have structured our response to this question by referencing the key clauses set out by ComReg in Section 4 of the Consultation.

Reference ComReg [4.110] – Above 1Gb/s bandwidth split

ComReg does not really address in any way the points made by BT in 2016 concerning the single chain of substitution ('no bandwidth breaks') but merely asserts that factors other than relative prices were taken into account. Whilst it is quite possible to argue that Ireland is different from the UK here, the fact remains that in 2016 ComReg's consultants relied on aspects of the Ofcom approach and analysis and this should be a cause for concern here.

ComReg [4.112] suggests that MI products above 1Gb/s account for only 15% of all products. However it is likely double that in value terms and will grow. We consider that a bandwidth break likely does exist for services greater than 1G and there is a risk that failure to recognise this is distorting the analyses of the lower bandwidth services such as 10Mb and the assessment of economic dig distance for example.

Reference 4.6.1 (a) – LB TI WHQA Market

We agree with the conclusion of a national 2Mbit/s Low Bandwidth TI WHQA Market consisting of analogue, digital and TDM LLs with bandwidths equal or less than 2Mbit/s. A bandwidth break in the supply of this service clearly exists at the 2Mbit/s bit rate as this aspect of the market is based on the Eircom's unique ubiquitous copper access network which has supported these services for decades and they continue to be important. Entrants don't have ubiquitous copper networks and it's non-viable in economic terms for entrant operators to deploy fibre for 2Mbit/s services. Absent regulation Eircom would completely control the supply of this market on its terms.

Reference 4.6.1 (b) – HB TI WHQA Market

Following the changes to the MI market proposed by ComReg we consider the HB TI market needs to be reconsidered to align with the Zone A vs Zone B approach to MI otherwise it's quite possible for Eircom to circumvent the regulated Zone B MI market, both by using TI technology (some of which may already be sunk investment with little cost) and also TI emulation over an Modern networks. Both situations are unacceptable and undermine the regulation of MI Zone B.

Reference 4.6.1 (c and d) – Zone A and Zone A MI WHQA Market

We agree with the geographic split of the market into Zone A and Zone B, but we consider the split between Zones A to Zone needs to be revised following a deeper review of the assumptions proposed by ComReg. We provide further detail to our concerns in Annex A (Starting Section IV).

Reference 4.267 Wireless Leased Lines

We agree with ComReg that Wireless Leased Lines are not in the market and in our view are declining.

Reference 4.268 Wholesale Business Broadband Services

We agree with ComReg that Wholesale Business Broadband services are not considered a substitute for a WHQA LLs due to differences service characteristics such as service assurance offerings. We also note the choice of Copper Loop Frequency Management Plan (CLFMP) for Ireland effectively excludes the symmetrical operation over copper based DSL (DSL and VDSL).

Reference 4.269 Dark Fibre

We understand Eircom and others offer dark fibre products into the Irish market. Where Dark Fibre is available it is just as easy for operators to use a dark fibre as a lit service.

Reference 4.269 Self-Supply

We agree self-supply should be included in the markets as such account for a substantial part of the market.

Mobile Backhaul

We remain of the view that mobile backhaul and or mobile backhaul networks are in the WHQA market in Ireland as the market is increasingly contestable. [REDACTED]

[REDACTED] It is not clear why ComReg are not addressing this market as we consider it accounts for a considerable portion of the market and Eircom possess SMP in this area given the volume of circuits supplied.

Question 3. Do you agree with ComReg's further preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, including the proposed designation of Eircom as having SMP, as appropriate? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your view.

We agree with the ComReg analysis that there is likely a geographic split of the MI market but the precise methodology applied here is unconventional and results in highly implausible categorisations of SAs. Generally there is a lack of evidence to show that the SAs deregulated are appropriately designated and there is no consistent time series of services shares for example. In fact, such data as are presented would tend to indicate that market power is far more widely entrenched than the proposals suggest.

We believe when ComReg further considers how the market functions in practice such as the costs and obstacles of digging it will find the competitive area to be a lot smaller possibly circa to the C1 area according to the TERA algorithm rather than the sum of C1, C2 and C3.

In Annex A to this response we provide a detailed review of the ComReg analysis, based on the information available from the consultations and our knowledge of the market. We further provide detailed SMP evidence relating to the actual market in practice to support our analysis and concerns.

For our detail views please see Annex A as below:

1. Section I provides an overall summary of why we have material concerns that the deregulation whilst not for the entire country is nevertheless very significant – cannot likely be justified by any coherent underlying assessment.
2. Sections II – IV respectively address the high level substantive issues regarding Product market, Geographic market and SMP assessments respectively. Our main problems are with the Geographic analyses and as the impact of this leads through to the corresponding SMP assessment; the two sets of issues are closely linked in any case.
3. Sections V and VI provide some commentary on certain detailed aspects of Geographic markets and SMP assessment. A number of Appendices supply additional detailed numbers and evidence along with extracts of relevant regulatory documents.

Please find below our comments on the other non-MI aspects of the market.

- **LB TI Market**
We agree with ComReg's assessment of this aspect of the market and given it is explicitly linked to Eircom's ubiquitous copper access network, and that it cannot be economically replicated, Eircom do control and will continue to control this market. We agree Eircom will continue to have SMP in this aspect of the market for the lifetime of the market review.
- **HB TI Market**
We agree demand for this service has fallen away in the presence of the MI market. We would not normally be concerned with continuing regulation for new supply, however with the proposal to completely deregulate this market and the parallel regulated MI Zone B market provides a loop hole for exploitation to use HB TI to circumvent the regulation in the MI Zone B market for bids etc. We therefore propose this market should align with the modified Zone A to Zone B split that we propose for the MI market – Please see our Annex A analysis.
- **MI 1G Bandwidth Split**
The 1G bearer rate is a fundamental breakpoint in this market as the same physical equipment is now generally deployed for all services up to 1G. After the 1G bearer rate different Network Terminating units and network port cards are required, and the management of greater that

1Gbit services requires greater capacity management. Services greater than 1Gbit/s display different characteristics to services at or below 1Gbit/s. We also have a concern that no break point risks of masking greater eircom dominance at the lower rates. Please also see Annex A Section III.

MI Geographic Split

Please see our analysis and discussion in Annex A.

Question 4: Do you have any further observations on this Section 6 concerning competition problems in the LB TI WHQA Market?

Response

BT continues to support its view given in the 2016 Consultation and agrees with ComReg's assessment of the LB TI WHQA market and the need to apply SMP Regulation. BT has also noticed since the 2016 Consultation that [REDACTED]

[REDACTED] BT agrees with ComReg's preliminary position that competition problems are likely to arise in the LB TI WHQA market absent regulation and one of these is the potential offering of poorer quality service performance.

Question 5: Do you have any further observations on this Section 7 concerning obligations in the LB TI WHQA Market?

Response 5

We would like to address the comments made by ComReg in Section 7 of the Consultation and have generally followed the same order in our response.

Proposed Access Obligations

BT generally agrees with the set of access obligations proposed and considers all the proposed regulatory remedies should be to the modern standard. Once ComReg decide that regulation is required, such regulation should be fit for purpose to meet the objective. Experience such as the issues around the Eircom Regulatory Model (RGM) highlight serious weaknesses in the existing remedies for non-discrimination and transparency. These need to be updated to make them fit for purpose. ComReg has found it necessary to apply modern forms of regulatory remedies in other markets. The same is required for NGN.

Analogue Lines

We agree to the removal of regulation for analogue leased lines given the small volume of services remaining and that the market is not expected to decline to closure.

Channelized E1 (2Mb/s) Access Services

It's not clear to us whether the ComReg data capture worked correctly in this area as we use Channelized E1 for voice services and on the advice of ComReg we did not supply data on these to the Statutory Information Requests. We therefore do not agree to the removal of this market as we still use these services and we believe any data in this area is under reported and incorrect for such a decision.

SLAs Reference Clause 7.36 – BT welcomes ComReg’s approach to modernising SLA remedy text however we have two areas where we disagree with ComReg on the detail:

1. Similar to other ComReg regulation such as for the proposed MI Zone B there needs to be a bounded time to conclude negotiations i.e. 6 months max. Absent this our experience is SLAs take years to negotiate which has been proven by recent experience. This is an unacceptable situation and ComReg need to put in place fit for purpose remedies to address the problem that it’s almost impossible to now agree SLAs with Eircom.
2. With reference to clause 7.43, customers are important whether they are existing customers or new customers. Both are entitled to the same service qualities as a service in the peak of its life cycle. Whilst we welcome ComReg proposal to improve the SLA, the new text is so general as to be ineffective. In our view the proposed updates are not fit for purpose and we can’t understand why the learning gained in developing the ComReg NGA SLA remedy cannot be adopted. Not even a deadline for negotiation is included. This does not impact Eircom development costs – it merely provides a remedy that actually works which is surely the point of having remedies.

Negotiation In Good Faith (reference Clause 7.44)

The Eircom RGM (Commonly known as Styles) has discredited this remedy and it is disappointing and frustrating that ComReg for the LB TI market continues with failed regulatory remedies. Offering a simple reference to a clause in the Access Regulations does not give sufficient weight to the issues. This sends all the wrong signals to industry about ComReg’s engagement to resolve the RGM. Sadly we are not observing any substantial reform by Eircom since the RGM and poor quality regulatory remedies just prolong the problems. It is also inconsistent - as ComReg have provided a considerably revised approach for the MI market in the same consultation and decision.

The “Negotiation In Good Faith” remedy should be no more or less onerous on Eircom if they really do negotiate in good faith. The state of the market has absolutely nothing to do with this obligation. If ComReg consider regulation is required then it should ensure the remedy is fit for purpose otherwise the objective to regulate is not met. We disagree with ComReg’s approach to use a lesser remedy for LB TI.

Other Issues Interconnect Regulation (Reference Clause 7.45)

Regulation of WEILs. The proposals from ComReg are too vague and maintaining just a price control is not enough. For example what good is a price if the service does not work properly? . Unless all parameters are specified in the regulatory remedies then it is open to be circumvented and exploited. RGM and the lack of any perceivable reform has created a market without trust.

Given this, we are seeking either a direct reference to a modern suite of regulation that will apply to WEILs or that the remedies should be coded into this Decision. An example of poor regulation in this market is the 16/20 ‘competitive towns’. These have distorted the whole trunk market. An examples is that an operator can create nodes in all key areas, and then sell itself/yourself a large downstream bandwidth pipe to circumvent the rules. Hence we need well documented modern fit for purpose remedies without loopholes, not more of the same.

Non-Discrimination Regulation

Reference clause 7.72. Whilst we note ComReg’s claim that it is too expensive in a declining market to impose stronger regulation, it is disappointing that a remedy that in our view has had no impact of significance is to be continued with no attempt at improvement. . For example, the introduction of a

compliance statement would cost almost nothing for Eircom to provide if they are compliant, with appropriate remedies for a misleading or incorrect compliance statement)..

As above, there is no benefit in a remedy that does not work and (we believe) negatively impacts the Regulatory Environment in Ireland. Under the ComReg 2002 Communication Act, ComReg has obligations to the Minister to stimulate competition and protect the user. If ComReg is not going to adopt the now basic standard of EoI then it should augment the existing rules. Using remedies that are not impactful is simply not acceptable and does not meet the objective of applying regulation. We strongly disagree with ComReg's approach.

Cost Model (Clause 7.121)

We agree with ComReg's view to continue the cost orientated model and consider Eircom's investment in this market will be long recovered, hence costs should be falling. We disagree with Eircom's view that cost orientation will stimulate demand as cost orientation regulation already exists and the market is declining.

WACC (Clause 7.120)

We are concerned that ComReg appears happy for Eircom to substantially over-recover regulatory margin. Industry has no control over this and in our view this is a transfer of wealth from the industry to Eircom. This is incorrect. Hence if ComReg set a WACC, Eircom should be trading about this figure, not far above it. We assume if they were trading the WACC they would seek a price rise hence the ComReg approach in 7.120 is incorrect and detrimental to competition.

Accounting Separation Remedies (Reference Clause 7.139)

We agree that accounting separation should continue. However we are concerned about the lack of transparency of process that ComReg implies for the Additional Financial Statement (AFS) and Additional Financial Information (AFI). We consider ComReg should publish more about what these discussions involve (not including confidential figures). Too many of the financial processes appear bi-lateral between Eircom and ComReg and these should be more transparent.

Question 6: Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Response 6

We generally agree with ComReg's analysis of the competition problems in the Zone B MI WHQA market and the impacts on competition including exploitative practices such as excessive pricing, exclusionary practices, Non-Price based vertical Leveraging Behaviour, information asymmetries, price based vertical leveraging behaviour, horizontal leveraging. Based on one of the admissions in the Eircom RGM about downstream access to upstream wholesale systems within the organisation, we are also concerned as to the protection of confidential wholesale information being available to downstream people within Eircom. For example the Eircom Managed Network Services division should not have access to Eircom wholesale beyond that which is available to other operators. ComReg needs to ensure and regulate such that there is no confidential wholesale information passing to any form of downstream area within Eircom.

We are also concerned at the lack of progress in the RGM and that the serious governance problems within Eircom have not been resolved since the publication of the RGM in August 2015. It has taken too long to resolve these matters. There is increasing concern within industry regarding the ineffectiveness of the Irish regulatory system. The RGM is continuing to undermine any trust in the system and without some demonstration by either ComReg or Eircom that the Governance issues are resolved. It is difficult to have confidence in Eircom's ability to be compliant. Continuing difficulties at the industry forums give little sight of any reform improvements. Please also see our response on Statements of Compliance within our response to question 7.

Question 7: Do you agree with ComReg's approach to imposing access, non-discrimination, transparency, price control and cost accounting and accounting separation remedies in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Response 7

We would like to offer the following comments to Zone B MI WHAQA

- Zone B with nearest interconnect from Zone A. We consider that Eircom should provide regulated connectivity from Zone B to the operators Zone A WEIL location. We note (from Appendix 9) that this is very complex. It must be presented to industry in a forum where questions can be asked to check understanding.
- With respect to the proposed regulation for SLAs please see our response to question 6 as to the time and difficulty in concluding SLAs, particular important ones. We are of the view that Eircom is taking a hard line approach to leased lines SLAs and it feels as if there is a unilateral approach from Eircom. Hence, strong regulation for concluding SLAs is clearly required in the WHQA market and disputes are highly likely.

Comments on the ComReg Proposed Remedies

Application of the full suite of regulatory obligations

We agree with ComReg's introduction to Section 9 that its preliminary view is to apply the full suite of regulatory remedies into the Zone B MI market. We consider that this should all be to the modern standard particularly concerning EOI - as this concept was long established in the regulatory environment when Eircom brought forward its Next Generation Network Development (NGN) Wholesale Ethernet services (2010, 2011 and 2012 timeframe). Any argument that NGN is legacy is factually incorrect – it is a very modern network designed around 2009 following a special group (NGN Industry Steering Group (NISG)) in 2008 of Eircom/Industry hosted by ComReg. The industry provided a very detailed specification of what was required of this planned 'state of the art' next generation network. A copy is attached in Annex C. In 2018, it is still relatively new and well within the established EOI environment. EOI should apply.

Access Remedies

We agree with list of access remedies provided but ComReg are missing a key issue and that is access to information. The issues of the Eircom RGM has undermined confidence that we are being provided with all the relevant information to progress access requests. We are therefore now seeking an Access Request Obligation for Eircom to provide accurate and correct information pertaining to supporting access requests. [REDACTED]

[REDACTED] We thus consider this access remedy is necessary to prevent the action of providing insufficient or inaccurate information.

Duct and Pole Access

ComReg needs to add to the access remedies an obligation for full and unfettered access to the Eircom Duct and Pole Network including to the lead-in from the street footway box/chamber to the customer boundary wall – including access into the customer duct. As seen in our response to Question 3 it is uneconomic and non-viable for other operators to dig up the whole country. Access to the lead-in to the customer is essential. We note ComReg make the significant assumption in the 2016 Consultation that Duct and Pole will be available from Eircom, but it is inconsistent that remedies or links are not added to this Decision. Either ComReg includes a full suite of Duct and Pole access regulation within this market or it should formally and actively link one to it. Our view is the current Eircom Duct and Pole offer is not fit for purpose. We believe ComReg needs to link the remedies if it is ever to work.

Interconnection Services (Ref. 9.65)

We are aware that Eircom provide Interconnect Services to the roofs of their buildings for MOLOs and we would also like to be able to avail of this type on Roof Interconnect Service to support our interconnectivity with MOLOs on the Roofs of Eircom Exchanges. We believe that Eircom are forcing operators to buy a bundled backhaul component in access services from the interconnected exchange. This practice should be stopped (“Same Node” logical charges).

Requirement to Negotiate in Good Faith (Ref. 9.111)

As previously mentioned, the RGM disclosures and difficulties as regards access requests are clear evidence that this remedy is not effective. [REDACTED]

We welcome that ComReg in 9.111 to 9.118 is further defining the “Negotiate in Good Faith” remedy and we agree with the proposals.

Requirement not to withdraw facilities already granted. (Ref. 9.119)

We would like to offer the following comments:

1. Regulation is required in relation to network changes that have the impact of services changing between different price categories and therefore impacting competitor bid proposals at key times.
2. Other than a current issue in the broadband market around a software bug which we are assured will be fixed, we agree with the ComReg proposal.

Requirement to provide open access to technical interfaces and other key technologies. (Ref. 9.126)

We agree with ComReg’s proposals.

Requirement to provide access to Eircom’s OSS (Ref. 9.129)

Equivalence of Output vs. Equivalence of Input. We completely disagree with ComReg concerning the use of EOO for Next Generation Networks services (NGN) which now supply Wholesale Ethernet Services. The term Next Generation indicates these are new networks and it’s important to acknowledge they were developed in an environment of EOI. We therefore cannot understand why

ComReg continues with a discredited EOO system as shown by the poor experience of the RGM. EOI would drive Eircom downstream services to use the “same” upstream services as it offers to other providers. This would make it physically more difficult in practice to discriminate and easier to detect discrimination. It would also have the benefit of raising the industry standard if the incumbent leads by providing better services (as evidenced by RGM). We strongly disagree with the ComReg decision to use EOO legacy regulation for Wholesale Ethernet. This raises serious questions about equivalence for the services - even in 2018.

Updates to the OSS System

The industry is highly automated with continuous updates being made by Eircom to its order handling system. Whilst we welcome improvements and we work to ensure we can align with these continuous updates there is one issue which is a continuous difficulty and a second issue that can cause considerable problems. Both should be included in the remedies.

1. Eircom is often late against its own committed timescales in providing the “Data Contract” i.e. the specification of technical changes. This lateness reduces the time for our developers in other operators to update their systems. It puts them at risk of not being ready for the go live date for the updates. Most updates are timely, however, over the years there have been numerous instances of lateness causing unnecessary risk to others. We consider the Eircom committed timescale should now be coded into the remedies.
2. Breaking changes – whilst we understand that a small number of upgrades are not backwards compatible, we consider it now appropriate to code the process into the remedies. This is to ensure that such events are managed sensibly without causing unnecessary operational risk to others.

Requirement governing fairness, reasonableness and timeliness of access. (Ref 9.133)

ComReg will be aware and were involved in the hugely protracted attempt by the industry to improve the SLAs in other markets as discussed previously. This demonstrated the huge difficulty in resolving SLAs with Eircom. We agree with the extensive regulatory remedy being proposed by ComReg to assist a more constructive approach by Eircom to negotiations. In our view the SLAs for leased lines are long overdue for updating. However, recent events with the industry forum suggest securing agreement will be difficult for these.

New product development and changes to existing products (SLAs) (Ref. 9.158)

We agree with ComReg's proposals that Eircom should discuss and agree SLAs where necessary prior to product launch - otherwise there is little incentive for Eircom to offer a fit for product SLA. ComReg should take account of the SLA issues encountered at the launch of NGA and how long it has taken (years) to achieve a workable solution, with some aspects still not resolved.

Suspension of an SLA (Ref. 9.168)

We do not agree that Eircom can suspend the application of a contractual SLA without Eircom triggering the Force Majeure contractual condition. This would be a serious event and would trigger contract rights for the other parties to the contract. The approach of Eircom declaring Storm Mode is not contractual and is meaningless within the contract. The operation of Storm Mode depends on the good will of the industry for it to work but it does not suspend SLAs. After considerable discussion with Eircom several years ago at the ComReg hosted industry forum, it was agreed that poor weather should be addressed by the exclusions within the SLA where the weather directly causes the fault. It took approximately six months to reach this agreement hence the solution was not agreed lightly.

If there is a need to discuss the operation of Force Majeure and the suspension of SLAs, we would have to consider what rights would be conferred to the operators such as suspending payment for services not available (as is possible within the RIO).

Failure to meet SLA committed services levels (Ref. 9.174)

We agree with ComReg's concerns and support its proposals in this area. However, ComReg have overlooked that many instances of faults and failed provide instances do not get counted for SLA. Whilst there are a small number that should genuinely be excluded from SLAs such as a fault caused by lightning, these should be kept to an absolute minimum. We note this was not happening for other markets. Corrections were agreed with Eircom in 2017 for other regulated markets, but this needs to be reviewed and acted on for the leased lines market.

Requirement regarding Timeliness of Product Development (Ref. 9.183)

We welcome ComReg's consideration of this area. We agree timeliness and the lack of ability to influence prioritisation continues to cause serious concern. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Please see Timescales for developments below.

Timescales for developments (Ref. 9.183)

We agree with the proposed ComReg timescales for progressing Access Requests. As this aligns with contractual commitments Eircom have made, this should not cause difficulty. If we move to contractual timescales and ComReg can uphold disputes, then the difficulties we have today with Eircom prioritisation..

Summary of Preliminary Conclusions on Access Obligations (Ref. 9.203)

We welcome ComReg's diligence in capturing the many difficult issues experienced over many years and modernising the regulatory remedies in this area.

From the Consultation at least, ComReg is of the view that Duct and Pole services are essential to the competitiveness of this market. We consider ComReg needs to directly link regulation, including access request obligations, to Duct and Pole Regulation as an essential facility to this market. We acknowledge Eircom have said operators can use their ducts for leased lines. However, without a full set of regulatory obligations to supply on fair fit for purpose Ts&Cs the offer is meaningless. This market is dependent on fit for purpose duct and pole access hence Access Requests in this market must activate Duct and Pole facilities independent of markets 3a and 3b.

Practical Application of the Access Remedies in the Market

We agree with the concept of not stranding Zone B CSA from existing interconnect facilities. However Appendix 9 is so complex it needs to be discussed through for operators to understand it.

Non-Discrimination Remedies (Ref. 9.6.2)

Please see our earlier comments on EOO vs EOI. We do not agree with ComReg on this and Eircom had the ability and knowledge to have designed NGN on the UG - the same as for others.

We consider the legacy Non-Discrimination regulation is not fit for purpose as proven by RGM and do not agree with the continuation of failed non-discrimination regulation. As detailed earlier if ComReg decide regulation is appropriate then there is an obligation on ComReg to apply fit for purpose remedy.

Transparency Remedies to Support Non-Discrimination (Ref. 9.218)

We would welcome ComReg consulting on an update of the proposed KPI's - as we do not understand the actual input definitions and how the standard, non-standard and project split works in practice to compare performances. We believe a complete review is needed.

Transparency Remedies (Ref. 9.5.3)

We welcome the modernisation of the Transparency remedies which are essential to support the non-discrimination remedies. We specifically welcome and agree ComReg's proposals 9.290 and 9.921 around development prioritisation. Please our earlier responses to the Access questions.

Summary of the Transparency discussion and ComReg proposal (Ref.9.305)

We agree with the issues raised and the proposals and consider an update review of the KPI's definitions and reporting is required to ensure they are still correct and up to date.

Price Control Remedies in the Zone B MI WHQA Market (Ref. 9.5.4)

We agree to the Cost Orientation Price Control proposal as it ensures all customers will face the same costs assuming Eircom's downstream units pay the same as all others - adjusted for not having to pay for separate interconnects. This does not create an onerous obligation on Eircom as they are already set up for this.

We do not agree with the ComReg proposal not to have a Margin Squeeze Test (MST) given the ability to leverage between Zone A and Zone B. Hence for multi-site bids, pricing regulation could be completely circumvented. ComReg has a good reputation for MST testing of bundles and complex situations. We are concerned that no attempt has been made to establish a bundles type approach of regulated and non-regulated services. ComReg have decided price control regulation is required, but there is little value in offering remedies that can be circumvented. Better solutions are available.

As regards the actual cost model we agree the BU-LRAIC plus provides an accurate view of modern pricing and a modest margin. However, ComReg need to install a remedy that the return is aligned with the Weighted Average Cost of Capital and not at the high rates currently taken.

Accounting Separation and Cost Accounting Remedies (Ref. 9.5.5)

We consider using accounting separation to detect MSTs is too slow as the damage will have occurred in the market before such is detected.

We agree for ComReg to continue accounting separation as there are numerous abuses that can occur in cost allocations which are almost impossible to detect without accounting separation. However we consider ComReg should also include CCA to provide a more informed view of what is happening.

Requirement to provide a Statement of Compliance (Ref.9.5.6)

We fully agree with this proposed remedy. We would welcome the publication of the SoC so that we can apply our operational knowledge of networks and systems to assess whether we consider the statements are correct. However, we would expect any publication to be of far higher clarity than the

RGM reports presented to industry to date. For example there should be a set of simple answers per product that it is compliant i.e. YES or NO. The presentations of RGM reports by Eircom have chosen to provide information on process and training which are important and welcome; however they don't actually address the direct compliance of the services. Thus, they are not very useful.

Enforcement and Penalty – ComReg need to detail how they will deal with incorrect or misleading Statements of Compliance.

Eircom's Regulatory Governance Model

In 2013, Eircom said they would reform. Anecdotally, the industry view was that they would be judged by their actions and not on what they say. Many years later, we see little evidence of reform, even with the publication of the RGM in 2015.

The RGMs have delivered improvements in process and training. However, the RGMs do not appear to have specific detail on compliance specifics or reform proposals. We need simple compliance statements per product – i.e. Is the Wholesale Ethernet Service Compliant? – Yes/No (particularly as this market review does not even mandate EOI).

Whilst we welcome the Governance work underway, it is important not to lose focus on compliance and very direct statements of compliance. We note that many of the issues identified in the 2015 RGM report had remedies that either did not address the issue or were meaningless. Thus, after three years we have seen no incontrovertible evidence that they have been closed. For example, nobody has ever clarified compliance in straight forward comprehensible terms.

Question 8: Do you agree with ComReg's draft Decision Instrument set out in Appendix: 4, in particular, that its wording accurately captures the intentions expressed in this Section 9? Do you agree with ComReg's Definitions and Interpretations as set out in Part I of the Draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers in the Draft Decision Instrument to which your comments refer.

Response 8

We would like to offer the following comments to the Draft Decision Instrument.

Reference Clause 5 of the Draft Decision

For the reasons outlined in our previous responses we do not agree with ComReg's Market assessment for High Bandwidth TDM services or removal of the channelized 2Mbit/s services from regulation. With regards to the MI market we agree with the geographic split but with a different split of CSAs based on our updated economic analysis in Annex A.

Reference Clause 6 of the Draft Decision (2Mbit/s LB Market)

We agree with the imposition of the SMP obligations on Eircom and agree SMP on Eircom is correct for the 2Mbit/s and sub 2Mbits traditional technology market with the exclusion of analogue circuits from this category. However, we do not agree to the exclusion of channelized circuits from this market as we heavily use these for voice services. ComReg advised us not to submit this data to the ComReg Statutory Data Requests – hence it is not surprising the importance of these services has been underestimated by ComReg. We therefore consider ComReg analysis of the 2Mbit/s channelized market is misinformed and a wrong conclusion has been made.

Reference Clause 7 of the Draft Decision (Obligation to Supply Access)

Agreed

Reference Clause 8 of the Draft Decision (SLAs)

We do not agree with ComReg's approach of failed legacy regulation for SLAs for the 2Mbits market. We simply can't see the point of determining regulation is necessary and then applying failed legacy remedies. Please see our response to question 5.

Reference Clause 9 of the Draft Decision (Non Discrimination)

The proposed regulatory remedy is weak and the RGM has illustrated the consequences of poor non-discrimination regulation. Our view is Clause 16 of the Draft Decision should be also be applied in full for clause 9 and the TI LB Market. If Eircom are not discriminating then there is negligible extra work for them to comply with the modern form of regulation. We do not accept ComReg's arguments that this will be onerous – there should actually be no material difference if Eircom say they are compliant. If they are not compliant then it will flush out the issues.

Reference Clause 10 (Transparency)

We note that ComReg has used the modern approach for the transparency remedy which further begs the question why other modern regulatory remedies as above were not applied. We agree with the approach for transparency.

Reference Clause 11 (Obligation of Accounting Separation)

Agreed

Reference Clause 12 (Price Control and Cost Accounting)

Agreed

Reference Clause 13 (Price Control and Cost Accounting)

We generally agree with the regulation proposed for MI Zone B except where we have identified issues such as the lack of modern day regulation such as EoI.

We note that the Eircom Next Generation Network is a modern network developed around 2009 and please see our response to question 7 for further details. Hence EOI should apply.

Reference Clause 14 (Obligations to provide Access)

We consider that this clause should include active text at 14.2 (d) for operators to request fit for purpose duct and pole services and facilities for the MI market. Without such we consider there is a risk that a different markets argument will be made and no progress will be made. We are expecting Duct and Pole Access to be another 'LLU' and take a minimum of five years to achieve a fit for purpose services. Offers that can't be used are not considered as offered.

Timing of requests – agreed and we believe this will enable operators to more strongly push their access requests through the Eircom RAP process.

Reference Clause 15 (Conditions attached to Access Obligation)

We agree with ComReg's new approach which we consider aims to prevent a repeat of the unreasonably protracted SLA discussions in other markets (and we are already seeing early signs of same in this market); and the need to ultimately take disputes.

We would like to make a comment to 15.2 (vi) to request that the methodology should also include details on how faults crossing measuring periods are treated as its important such are not lost from the SLA.

Reference Clause 16 (Non-Discrimination)

As we have discussed in our earlier responses (Q7) we consider the Eircom Next Generation Networks (NGN) that Eircom use to supply MI Wholesale services to be a modern network. The 'Next' in Next Generation Network tells us such. This is not then the legacy network as suggested by ComReg. We therefore strongly disagree with ComReg's position that the Eircom Network to supply MI is legacy – it is not. In conclusion we strongly disagree with failed EOI regulation being applied instead of the stronger and modern EOI remedy.

Reference Clause 17 (Non-Discrimination)

Agreed and we agree to the implementation of modern remedies to help prevent another RGM. Strong transparency regulation is required to flush out discriminations and makes the Non-Discrimination remedy effective. An EOI regime would work better as the same interfaces and systems should be used the same by all so there should be nowhere to go for additional facilities and benefits.

Reference Clause 18 (Accounting Separation)

We agree this is needed to prevent discrimination within the accounting systems such as unreasonable cost allocations etc.

Reference Clause 19 (Price Control and Cost Accounting)

We agree with the price control - provided Eircom's lack of interconnect costs etc. are factored into the costs to their downstream units etc. However we do not agree with the ComReg decision to not apply an MST. ComReg are expert in MSTs where regulated and non-regulated components are combined. We do not believe Eircom's prices for "Same Node" logical links would pass an MST. The Zone A to Zone B split is ideal for leverage from Zone A into Zone B.

Reference Clause 20 (Statements of Compliance)

Whilst we agree and welcome Statements of Compliance, if the format of them is anything like the RGM documents presented to industry then we consider they do not offer a clear view of compliance. Whereas statements of processes and regulatory training etc. are welcome and helpful, there is no view as to whether products are actually compliant. It is still not clear to us whether all Provision and Fault information is being supplied as downstream divisions of Eircom appear to have direct access to backend systems.

We consider the SoCs should contain a very 'black and white' section which simply lists each service and demands a Yes/No answer on compliance. Hence we are increasingly concerned the SoC can be gamed to be effectively meaningless. The Eircom RGM reports to industry are certainly offering little transparency of compliance in our view; process yes, but compliance no. Hence our view is SoC should contain a simple transparent Yes/No compliance conformation by product. In the absence of EOI and functional separation better transparency is clearly needed.

Maintenance of Obligations, Withdrawal of Obligation, Operations and Effective Date.

Reference Clause 21 (Statutory Powers Not Affected)

Agreed

Reference Clause 22 (Sunset provision in High Bandwidth TI WHAQ)

We disagree with ComReg with its view of the TI WHAQ market. We consider this market should also be subject to Zone A/Zone B split but applying a refreshed set of criteria (for reasons why, please see our Annex A economic analysis).

Reference Clause 23 (Sunset provision in High Bandwidth TI WHAQ)

Subject to our position that the split of Zone A to Zone B needs to be revised.

Reference Clause 24 (Maintenance of Obligations)
Agreed

Question 9: Do you agree with ComReg's approach on the withdrawal of all existing obligations in the HB TI WHQA Market and the Zone A MI WHQA Market and withdrawal of the obligation to provide WLLs in the LB TI WHQA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Response 9

We would like to offer the following comments.

Reference Clauses 10.4. (WEILS)

A price control is no good on its own and needs ComReg to ensure the all the regulation around the supply and continuance of the WEIL is triggered. Please see our earlier response.

Reference Clause 10.5, 10.6 and 10/16 (LB TI)

10.5 - We agree to the de-regulation of the Analogue Leased Line but not the Digital Leased Lines (as it is not addressed in the Consultation), nor the Channelised E1 (2MB) Access (as we were told not to supply data on these by ComReg and it seems to us that the data is wrong. These are used for voice services).

Reference 10.6 – We agree to analogue KPIs being removed but not the others.

Reference 10.16 – We disagree with the ComReg view for the reasons above.

Reference 10.3.1 HB TI

We consider ComReg's decision to change the MI market has an impact on the HB TI market as its now possible to use TI to circumvent Zone B as ComReg regulation. We therefore consider HB TI should be treated the same as MI Zone A and Zone B to the revised BT Zone A to Zone B split.

Whilst we accept the supply of HB TI is now in very low supply, it is the maintenance of existing services where the issues remain. ComReg is creating considerable uncertainty to existing customers. As indicated in our previous response a minimum of two years should be allowed to protect services to existing customers. For Zone B the existing regulation should continue.

ComReg should also be aware that other regulation within the Users Rights obligation will allow customers to walk without penalty if a deal is changed. These are valuable contracts and expensive assets were deployed with an expected return over multiple year deals. Many of the multi-site contracts can take six months to negotiate and given such investment the aim is to achieve a substantial period of stability. Also, to open a variety of contracts at the same time stretches bid resource, damaging both those contracts and the ability to work on new contracts. Whilst we acknowledge the regulatory environment may be changing, it is proportionate and reasonable for HB TI to be managed out in a reasonable way such as giving reasonable time for existing contracts to

expire gracefully. Two years is manageable. A 'graceful exit' is the pragmatic approach, thus two years is a short period.

Reference 10.3.3 MI Zone A WHQA

As discussed in our earlier answers we agree to the geographic split of the MI WHQA market but we disagree with the allocation of CSAs to Zone A/Zone B. Our comments are therefore to a revised split of Zone A to Zone B. We also consider the HB TI market should align with the revised Zone A to Zone B split.

We consider that ComReg should seek to further understand the timescales involved trading in the business multi-site market as the timescales of the proposals don't appear to align with reality. This would lead to unnecessary disruption and ultimately enabling Eircom to engage in exploitative behaviour (i.e. take a commercial deal on Eircom terms or take your chances at a 100 Meter dig – how is this reasonable?). We would be happy to provide more information on timescales involved in multi-site deals to assist ComReg's consideration. Please see our comments to the TI HB market above for further details.

Reference Clause 10.21 ComReg's Preliminary Position in relation to the withdrawal of obligations.

- (a) HB TI WHQA Market – Within the BT revised Zone A de-regulated area we would agree to no new supply; however a two year sunset is required for existing services where significant investment has been made by the parties. This would better align with existing large scale contracts coming to term and provide a proportionate and pragmatic exit of the service. We consider the ComReg six month proposal unreasonable and disproportionate approach and allows Eircom to exercise unfair leverage over the industry..
- (b) (i) Analogue Leased Lines – we agree
- (ii) Digital Leased Lines - these should not be de-regulated
- (iii) Channelised E1 (2MB) Access - these should not be de-regulated as ComReg has been misinformed as it told operators not to send voice based circuit data and these are used for voice.
- (c) Please see our response for (a).

Question 10: Do you agree with ComReg's preliminary conclusions on the Regulatory Impact Assessment for the MI WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Response 10

We have set out very clearly in our Economic Annex A that we do not agree at all with ComReg's assessment of the impact in particular of Zone A containing likely very many SAs where there is not effective competition now nor will there be in the future. Fundamentally the algorithm assessing the extent of competition appears flawed in design and ComReg has neither provided sufficient

information to be confident in its conclusions nor done any sensitivity testing of its likely impact to alternative parameters such as dig distance and number of operators capable of serving.

We have some additional more general comments at this stage. We note that when the European Commission changes regulation and regulated markets it allows for a transition period which the national regulator can implement and to the extent that MI services are deregulated, we consider ComReg need to apply a formal transition period of 2 years. This will allow operators to manage large contracts as they near term and prevents exploitative behaviour by the incumbent.

With regard to Zone B, we also have concerns. The RIA assumes that the regulation being applied will be effective. Whilst we agree with many of the proposed regulatory remedies the Non-Discrimination remedy has been proven by the RGM to have weaknesses and ComReg's choice of EOO regulation for modern Next Generation Services over the Next Generation Network (NGN) is in our view is also wrong. It is noteworthy that the Next Generation Access Platform (NGA) platform is EOI regulated and operates over the NGN which is EOO regulated hence we consider that there is an inconsistency here. Whilst we agree with most of the remedies we do not agree with the use of failed regulatory remedies as such does not support the objective to regulate.

Finally, we wish to point out that with likely migration from TI to MI, we believe that there will be opportunity for Eircom to 'game' the remedies. We therefore consider that the HB TI market remedies should align with the Zone A/B split as finally determined for MI services taking into account the nature of the time it takes to negotiate multi-site contracts and which normally take a minimum of six months to negotiate with considerable investment to make operational. Opening these contracts mid-term creates huge risk to operators and that could potentially trigger the User Rights obligations for customers to walk away without penalty.

This is another reason for our preference of two years sunset period for TI HB services as it is more likely to align with the renewals of existing contracts and prevents the risk of exploitative behaviour from Eircom during this time. We are agreeable to no new supply within a comparatively short period of 3 months of new regulation however which will allow for orders in the pipeline to complete.



Annex A - The Economic Assessment of the Product market, Geographic Market and SMP assessment for MI Services

Annex B – Eircom Low Bandwidth Repair Performance Figures

Annex C – NISG Industry SOR



**ECONOMIC ASSESSMENT OF THE PRODUCT MARKET, GEOGRAPHIC MARKET
AND SMP ASSESSMENT FOR MI SERVICES**
CONTENTS

	<u>Page</u>
I. SUMMARY ASSESSMENT	
Outline	3
The magnitude of the proposed deregulation	3
Absence of any trend analysis	5
Increasing reliance by BT on Eircom	5
The treatment of E-net	6
Our proposals	7
II. THE PRODUCT MARKET	
Is there a bandwidth break?	8
The position of TI and broadband services in the economic market	8
III. THE GEOGRAPHIC MARKET	
The use of SAs as the unit of geography	10
The forward look in the TERA algorithm	10
Likely heterogeneity of SAs grouped together in Zone A	11
IV. THE SMP ANALYSIS	
Relationship to geographic markets	16
General criteria for effective competition	16
Strength of existing competitors	17
Barriers to expansion/Barriers to entry and potential competition	18
Credible sources of alternative supply	19
Other SMP indicators	19
V. SPECIFIC ISSUES RELATING TO GEOGRAPHIC MARKETS	
The treatment of E-Net	20
Capability of ANs to serve customers	25
Increasing reliance by BT on Eircom	28
VI. SPECIFIC ISSUES RELATING TO SMP ANALYSIS	
General costs of network expansion	29
The limited ability to build and compete against the incumbent	29
The short timeframe window	30
The duct lead-in problem	30
The economic viability of digging to customers	31
There is very limited wholesaling between ANs	32
The duct access offer by Eircom is not fit for purpose	33
The consequences of removing regulation	34



Appendix 1:	Source References For Geographic Market Delineation	36
Appendix 2:	Trends In Supply And Demand Of MI Services	38
Appendix 3:	Information On The Costs and Impact Of Network Expansion	41

ECONOMIC ASSESSMENT OF THE PRODUCT MARKET, GEOGRAPHIC MARKET AND SMP
ASSESSMENT FOR MI SERVICES

I. SUMMARY ASSESSMENT

Outline

1. This Annex contains the substantive economic assessment of the economic markets and SMP analyses for MI services. Section I provides an overall summary of why we have material concerns that the deregulation whilst not for the entire country is nevertheless very significant – cannot likely be justified by any coherent underlying assessment.
2. Sections II – IV respectively address the high level substantive issues regarding Product market, Geographic market and SMP assessments respectively. Our main problems are with the Geographic analyses and as the impact of this leads through to the corresponding SMP assessment. The two sets of issues are closely linked in any case.
3. Sections V and VI provide some commentary on certain detailed aspects of Geographic markets and SMP. A number of Appendices supply additional detailed numbers and evidence along with extracts of relevant regulatory documents.

The magnitude of the proposed deregulation

4. The WHQA (leased lines) market is widely acknowledged as the most challenging to analyse of all the markets which are subject to ex ante regulation. It encompasses the most diverse set of customers and technologies from those essentially just using the electricity in a connection up to advanced optical services at cutting edge of technical complexity.
5. The economic tests of market delineation may not give decisive answers, particularly as information on key factors such as price elasticities, switching costs and so forth may be hard to determine and not stable over time in any case. In such circumstances it is a good indicator if the regulatory proposals can find a broad consensus as being fair and representative of the perception of the marketplace.
6. In this review the outcome in terms of deregulation for MI HQWA services is at first glance very surprising. Table 1 below summarises the assessment of service shares at national level using such information as is possible to discern from the Consultation¹.

¹ Note, ComReg [4.223] states - 'no SP has a market share above 45% in Zone A'. We have assumed the SP at the upper limit referred to is Eircom.

Table 1**Indicative national service share of Eircom**

	Connected Buildings	Report States 4.223	Apply, say	Workings
Zone A	6,303	<45%	41%	2,584
Zone B	3,322	>70%	71%	2,359
	9,625			4,943
			51.4%	

7. A service share above 50% according to case law is generally of a presumption of dominance which can be rebutted by other evidence for example of a share declining significantly over time². No such evidence is provided in this Consultation and in 2016, ComReg actually defined the market as national. Yet in spite of this, ComReg proposes to deregulate in entirety roughly two-thirds of the very areas of the country where demand is most concentrated and in our view is not substantiated by consideration of any of the key factors which as essential parts of the analysis are employed to show effective competition.
8. The service share of over 51% appears likely to be a lower bound certainly for MI services at the lower bandwidths for a variety of reasons. In Zone A alone and across all bandwidths, it is just as likely that the service share is close to 45% which by itself would be indicative of possible dominance.
9. We set out substantial concerns regarding the methodology of classifying SAs into the two Zones and consider there are fundamental issues and concerns with the way it has been done in conjunction with the consequential SMP assessment on barriers to entry and expansion. These concerns include but are not limited to the following:
 - The classification of ANs as all relevant in the domestic market defined as MI layer 2 services.
 - The economic dig distance to serve including the difficulties building out, even to near-net/pre-ducted sites.
 - The way in which sites not taking MI services have likely affected the results of competition for MI sites alone.
 - Over estimation of the strength of ANs in general to compete against the incumbent effectively.
 - The particular treatment of E-Net as constituting two access networks.
 - An overly generous benchmark of effective competition in the geographic market algorithm.
 - The misplaced reliance by ComReg on the Eircom Duct & Pole Offer/other MI WHQA inputs from other operators as realistically functioning avenues for ANs to expand their network without digging.

² As cited in the 2002 Commission SMP Guidelines paragraph 75 see Appendix 1.

10. Any one or even two of these factors might be considered to be plausible but it is their cumulative impact which makes the conclusions of this Consultation so implausible to those operating in the marketplace. Not only is the overall level of competition exaggerated as a consequence, but it appears very likely that there is a very high degree of heterogeneity in the SAs that are grouped together as sufficiently homogenous in Zone A in particular.

Absence of any trend analysis

11. We note that ComReg has not provided any trend data on service shares which doubtless reflects the new methodology being applied to geographic markets in particular. However this is a serious weakness as a snapshot rarely gives an adequate basis for really understanding what is going on in the marketplace. Under these circumstances it is then imperative to undertake substantive sensitivity testing to alternative equally plausible scenarios of the relevant inputs; in our view this has not been done and what is presented is partial and somewhat misleading. We set out below the range of scenarios that ComReg should have considered as an integral part of its analysis.

Increasing reliance by BT on Eircom

12. Casual inspection however of the comparator data in the equivalent 2016 Consultation suggests the following is relevant:

3.11 Eircom's retail LL market shares measured in terms of retail LL circuits and revenues respectively has declined steadily since the 2008 Decision. In Q4 2015 Eircom had \times [REDACTED]⁸⁴ of all retail LL circuits, down from \times [REDACTED]⁸⁵ in Q4 2014 and down from \times [REDACTED]⁸⁶ in Q3 2008. Eircom's retail LL revenue market share was equal to \times [REDACTED]⁸⁷ in Q4 2015 down from \times [REDACTED]⁸⁸ in Q4 2014 and \times [REDACTED]⁸⁹ in Q3 2008⁹⁰. In this respect, ComReg notes that there were a total of 15,953 Retail LL circuits in Q4 2015, up from 9,380 circuits in Q3 2008.⁹¹

13. The nearest high level indication of Eircom's retail service share in Q4 2015 was in fact <35% although this was on the basis of circuit count rather than buildings. This broadly chimes with BT experience that dependency on Eircom is if anything actually increasing over time.
14. There are a number of possible reasons for this but our view is that the following are the most likely causes:
- New buildings will almost inevitably require Eircom to build duct, mainly for the lift phone line. ANs like BT will not even be considered at this stage and there are a lot of new buildings in Dublin.
 - Old buildings which were Pre Ducted and then refurbished can easily become off net as our duct can be built over and Eircom will again acquire first mover advantage as above.
 - Dublin City Council now imposes more traffic management obligations which themselves are costly. Eircom is unlikely to incur these now as they are likely already to have a connection in to the building.
15. What is happening is that first mover advantages not only arise for pre-existing buildings³ but also frequently for new buildings where Eircom again has an advantage not only in gaining quicker access but benefiting from economies of scope.

³ [REDACTED]

16. Table 2 below provides a picture of increasing dependency on Eircom by BT.

Table 2

Dependency of BT on Eircom



17. Against this background of a very strong and likely growing dependency of ANs like BT on Eircom, the ComReg proposal for partial deregulation of the country based on a very significant geographic area is a quite counter-intuitive position. Whilst it does represent a significant shift from the previous 2016 position of full deregulation, nevertheless it is a highly radical proposal and we believe cannot be substantiated from more detailed economic analyses which are examined below. Fundamentally this scenario does not pass the test of reasonable plausibility from those who operate in the marketplace⁴.

18. Notwithstanding these overall significant concerns and reservations, we consider that the approach using SAs and a reasonably granular build-up of the assessment of competition is the correct approach and applaud ComReg's work in this regard.

The treatment of E-Net

19. One particularly complicated issue which has arisen in our assessment of the economic analysis is the treatment of E-Net and we address this in Section V. It is nigh impossible for us to really see how in practice the modelling of the SAs has been affected by regarding this as an open platform and attributing this with a 'double count' in terms of its implied ability to support two downstream ANs. Almost certainly it has led to miss-classification of SAs making them currently or prospectively competitive when they are not. It seems likely that it will make many SAs automatically competitive depending on the actual MI circuit count⁵.

20. We are very clear that although there is no hard and fast rule under these circumstances, ComReg should have treated E-Net as a single unitary platform in terms of downstream impact i.e. equivalent to only one AN. Our position on this matter is based on economic argumentation and very real empirical evidence that ComReg [4.177] has overstated the impact of E-Net in this regard. For the purpose of this analysis, we believe that E-Net should be counted only as

[Redacted text]

⁴ ComReg will be well aware that in the UK the entirety of Ofcom's 2016 BCMR was overturned on Appeal by the Competition Appeals Tribunal (CAT) on all key aspects of the product, geographic and core market delineations as well as the subsequent SMP analyses and entire set of remedies relating to the equivalent of MI services here. Ofcom has now additionally abandoned its proposal for a dark fibre remedy at least for the time being. A considerable number of key stakeholders in this Appeal commented that the market characterisation based on the economic analyses made by Ofcom simply did not accord with their knowledge and long experience of how customers purchased services and suppliers provided them. The economic analyses were not congruent with what common sense would suggest.

⁵ There is some complexity here however in that the way in which the Criteria 2b algorithm works on a nominal or potential set of premises also has a compounding influence which we are not able to determine.

one equivalent downstream network and there is support for this from equivalent analyses elsewhere; we discuss this in detail in Section V below.

Our proposals

21. We are highly conscious that NRAs are limited by resource and timescale to do detailed analyses of this type but we believe that these suggestions are reasonable and proportionate for two reasons. First, we understand that all the relevant information needed is already at ComReg disposal and there is no intrinsic data gathering burden. Second, the current Consultation is totally different from that presented in 2016 and as such it is reasonable to expect that it can be developed according to informed stakeholder evidence.
22. To address these issues, the essence of our proposal is that ComReg undertakes additional geographic market analyses within the different Zone A categories (C1/C2/C3) in conjunction with distinguishing actual MI sites by bandwidth above 1G from those at or below 1G. In this way the product and geographic analyses can be coherently integrated⁶.
23. We believe that in conjunction with a more focussed SMP assessment and a significant reduction in the distance parameter, a number of Zone A C1 SAs would be re-classified. ComReg's reasons for adopting 100 metres is not appropriate. The selection of the parameter was based on only one aspect of network expansion – the time to deliver. It did not factor the significant economic costs of network extension/reach. The barriers to entry and expansion are significant in this marketplace.
24. More generally, we believe that ComReg needs to provide far more substantive evidence that the incumbent plus two ANs (excluding many that have been incorrectly considered as relevant and the highly questionable 'double counting' of E-Net) – will indeed satisfy the effective competition threshold.
25. We have set out a series of suggestions regarding the algorithm and the treatment of all the services that are being used in the forward look. Our position is that ComReg should extend its geographic and fibre presence analysis to allow proper appreciation and due weight be given to the products, capability and intentions of those network operators who can and will actually provide customers with the MI services in the true domestic market and critically taking into account realistic dig distances for new connections.
26. We are not in a definitive position here to say precisely what needs to be changed as there are a number of aspects of the analyses which are not clear such as the treatment of E-Net but our initial conclusions are that ComReg should only include as competitive presence the following:
 - [REDACTED]
 - [REDACTED]
 - Discard all operators who are in niche markets and where they are primarily dealing with international circuits.
 - ComReg needs to consider the commercial impact of the lead-in bottleneck that is pre-ducted capacity on the cost of reaching ANs.

⁶ This was a key requirement by the CAT when it overturned the UK 2016 BCMR.

- More generally to review the dig distance assumption and look at the impact in the range of only using pre-ducted buildings and of 20 metres radial distance in conjunction with the assessment of site value.
- Base analysis on known and reasonably foreseeable MI demand.

II. THE PRODUCT MARKET

Is there a bandwidth break?

27. ComReg [4.110] does not really address in any way the points made by BT in 2016 concerning the single chain of substitution ('no bandwidth breaks') but merely asserts that factors other than relative prices were taken into account. This is simply not tenable as a position to maintain in the absence of likely far more substantive and compelling evidence to the contrary. Again in the UK, the CAT looked exhaustively at all of the price and non-price issues on this matter and comprehensively dismissed them all. Whilst it is quite possible to argue that Ireland is different from the UK here, the fact remains that in 2016 ComReg's consultants heavily relied on the Ofcom approach and analysis and this should be a cause for concern here.
28. ComReg [4.112] suggests that MI products above 1Gb/s account for only 15% of all products; however it is likely double that in value terms and will grow. The value of site reflecting the potential revenue from network extension is a particularly critical factor and even short distances can prove prohibitively expensive in practice. Whilst demand generally is rising for bandwidth this does not always mean that it will continue with MI services and indeed some sites can be supplied effectively with XDSL technology. Migration can take place in both directions. It is imperative to assess the issue of a potential bandwidth break carefully as this will affect a lot of the subsequent analysis of geographic markets and then through to the SMP assessment.

The position of TI and broadband services in the economic market

29. The delineation of WHQA from shared broadband services is generally regarded as reasonable; the extent to which there is migration away from the former to the latter is however not to be ignored and BT is seeing demand for smaller sites as part of existing multi-site deals to be supplied by broadband which we set out below and at Appendix 2.
30. The separation of legacy TI (TDM) services from MI services again is commonly viewed as pragmatic albeit perhaps more uncertainty compared with broadband as it remains dedicated supply⁷.
31. For both broadband and TI services, the issue of separate or combined markets brings in the thorny issue of how to treat migration in general⁸. A formal application of economic theory employing the SSNIP test is in fact very difficult to do as it requires information on all sorts of factors which are likely elusive and the danger is that the investigator self-selects evidence or facts to support which ever hypothesis that is proposed.

⁷ It is arguable in fact that the change of interface from TI to MI is far less costly than for example upgrading overall bandwidth for example from 1G to optical service where it is necessary to augment the capacity of the entire network in line. Core bandwidth cost upgrade is considerable.

⁸ This took up a huge amount of time in the UK Appeal at the CAT.

32. If the migration hypothesis of single markets is to be employed and which is what ComReg does albeit highly selectively, then the two relevant questions to be addressed are: (a) will a SSNIP affect the rate of migration; and (b) even if it did will it be sufficient to affect the profitability of the hypothetical monopolist. There are further complications here as depending on the starting point of the focal product, the decision to switch up early may not be the same as the impact of a decision to switch down to a lower bandwidth/different service and there can be asymmetries which are extremely difficult to assess.
33. Put simply, there is little to no extant literature or case studies which deal even superficially let alone comprehensively with this issue. However, it is important in this Consultation for two key reasons.
34. First, as indicated above, ComReg asserts a single product market across all bandwidths. This seems unlikely from both demand and supply-side considerations and many NRAs distinguish economic markets here based on the very obvious evidence that competitive conditions of supply are markedly different; entrants are attracted to sites of higher intrinsic economic value as this allows acquisition of economies of scale and density. Businesses of similar type/bandwidth demand often cluster together and underlying bearer capacity is a crude indicator of site value. ComReg has not provided either the real economic assessment to justify the single product market nor the empirical cross-check that conditions of competition are reasonably homogenous by bandwidth.
35. The second reason why the substitutability between MI and broadband/TDM services matters concerns the detail of how ComReg/TERA has applied the SA algorithm for Criteria 2b SAs. This is somewhat intricate and difficult to follow but it appears to be the case and based on correspondence with ComReg⁹ that for organisations/premises with <4 MI connected buildings within the SA, that these are comprised of any connection and not necessarily MI services.
36. The assessment here in fact includes premises where currently and likely in the future no service of any kind (MI, TI or broadband) – is likely to be required. Yet the ability of ANs to serve actual MI sites in these SAs has not been assessed at all. In our view this is not adequate to determine whether or not deregulation is appropriate for MI services, let alone whether it is correct to simply aggregate them with the SAs which are deregulated where there are ≥ 4 actual MI connected buildings¹⁰.
37. We discuss this in more detail below under the Geographic market analysis but the gist is that implicitly ComReg is assuming that under some circumstances these alternative services are ‘in the market now’ as far as regulation of MI services are concerned and can count toward deregulation of an SA, but in other instances they are ‘not in the market’. What is needed is a coherent forward look of competitive conditions in all geographic areas and for the forward look to be reflected in the SMP assessment. In our view this has not been done.

⁹ Via the ComReg response (1828).

¹⁰ We note that in the UK, Ofcom has also used a generic business data set to assess theoretical capability to supply sites but it has on occasion also looked at ability to serve sites using actual circuit ends. What is most unusual here is the mixture of the two approaches simultaneously.

38. In the context of sites in the Criteria 2b assessment, there is however considerable uncertainty as to whether: (a) these organisations/sites with actual current connections across TI and broadband services will indeed migrate to MI services in the review period and ComReg in Section 3 provides no evidence either way on this¹¹; (b) whether the speed of migration would be affected as a consequence of a SSNIP increase in MI services to support a single market hypothesis putting underlying migration trend to one side; and (c) whether sites with currently no connection of any relevant type have any bearing on the competitive conditions now or in the future for MI services.
39. Taken purely pragmatically and putting theoretical aspects of SSNIP test theory to one side, the ComReg approach is simply inconsistent. If migration is to occur then ComReg should have looked at the extant and likely future service share of Eircom on the combined set of services, taking account of the costs of switching suppliers. This has not been done; we provide some projections at Appendix 2 and wider commentary on migration.
40. More generally, the weakness here in the product market assessment casts considerable doubt in our view as to the appropriateness of this highly unorthodox 'forward look' and consequent deregulation of so much of Ireland as we noted above and which is counter-intuitive. There is considerable uncertainty from both demand and supply-sides as to the size and timing of any migration and ability to serve MI sites in the C3 (and even C2) areas¹²; it would be wholly inappropriate absent far more compelling evidence for these SAs to be deregulated now and a competition problem to arise later on.

III. THE GEOGRAPHIC MARKET

The use of SAs as the unit of geography

41. We provide most detailed commentary on the geographic market below as there are a myriad of matters of principle and detail and which also link to the associated SMP analyses. In essence whilst we applaud the approach of a build-up of geographic competitive conditions based on SAs, there are serious doubts on the parameters used and their application.
42. We append the relevant Commission/BEREC Guidance at Appendix 1. In summary, we do not believe that currently ComReg's proposals meet these obligations and that SAs have been wrongly classified as actually or prospectively competitive when in fact conditions now and in the future do not meet the homogeneity requirements to justify this¹³.

The forward look in the TERA algorithm

43. Specifically, there appears to be an inherent contradiction in the 'forward look' assessment applied to the different categories which comprise Zone A. The largest component of Zone A, 60%, derives from 'STEP 2b 75% or more of organisations are within 100m of 2 ANs.' (TERA Figure 11). In this category, deregulation is primarily on the basis of the potential of ANs to serve premises with MI services. However many and probably the majority of these premises will likely never want an MI service.

¹¹ Note, the Consultation uses a mix of measures for TI (% circuit count) and MI (% connected building) and this in itself does not lend itself to easy interpretation.

¹² As notation in Figure 11 of the TERA Report.

¹³ The relevant passages are: Commission Notice on Market Definition paragraph 8; Commission Guidelines on SMP Analysis paragraph 56; and BEREC Common Position on Geographic Markets paragraph 129.

44. In the supposedly competitive SAs we find the smallest component of Zone A, 13% in the C1 category. This group of SAs derives from 'Step 2a 75% or more of premises are within 100m'. These 394 SAs are likely to have significantly more actual MI circuits than the other Zone A areas (there is no breakdown available). Further, within C1, the impact of ComReg's expectation of customer migrations from TI to MI is ignored entirely. But if it is the case that in both of these categories there are economic switching costs between the existing supplier and the rival, then the current service shares for example held by Eircom on MI services alone are not going to be representative of future service shares. Where Eircom's service share of TI services is also above a dominance threshold this will tend to reinforce its position in MI services quite possibly increasing it in absolute terms. This features however in category C3 SAs and as such demonstrates a fundamental inconsistency in the analysis.
45. The possibility to reduce regulation in the SAs in category C3 – which is highly speculative – should be counterbalanced then with the possibility that sites in category C1 should be regulated under an equivalent forward look and we set out at Appendix 3 additional analyses on this matter. To be clear, we fully anticipate that Eircom share of MI services will increase if/when their TI base migrates to Ethernet.
46. There are serious doubts as to whether this approach to a 'forward look' is correct in any case and we consider that ComReg should have done a complete analysis of the ability of ANs to serve all SAs with MI services regardless of the position of other services and whether or not there are at least 4 actual MI circuits in the SA.
47. We have similar concerns regarding the C2 category [4.207] where these SAs have been found to have no relevant premise. This represents 817 SAs which are *de facto* deregulated more than double the number in C1 and where there is no obligation to supply customers at all. Whilst it is reasonable to suppose that many of these never will experience demand for WHQA, this is not self-evidently the case everywhere and as such this represents a barrier to customers locating in these areas. We do not think it is appropriate simply to classify them into Zone A.

Likely heterogeneity of SAs grouped together in Zone A

48. Table 3 below summarises our assessment of likely heterogeneity in the categories which have been likely wrongly aggregated together in Zone A.

Table 3

Indicators of Heterogeneity of Zone A

Category ¹	Demand ¹	Density Assumption ²	MI WHQA Now? ²	MI WHQA Future? ²	CSA Count ¹	CSA %
C1	Current	High	Yes	Yes (reasonable)	394	13%
C2	Potential	Low	No	Not reasonable	817	26%
C3	Potential	Medium	Not necessarily	Not reasonable	1,837	61%

¹ Figure 11, page 28 TERA Report for CSA Count

² Reasonable assumptions/inferences made by BT

49. If the view is taken absent any SSNIP analysis that the product markets for broadband, TI and MI are to become sufficiently close that the SMP analysis needs to take this into account, it needs to be done across the board not selectively according to how the algorithm decides that some areas should be treated this way and others not. Product market assessment usually precedes geographic market assessment (the situations where geography comes first is normally in the context of international trade) and this is indeed what ComReg has done here.

Our suggestion that ComReg distinguishes between circuits above 1G (the bandwidth break) has no bearing on this point.

50. It seems quite likely that the barriers to entry/expansion in Zone A are not homogenous between the three categories (C1, C2 and C3) that have been aggregated and that Eircom has a much higher service share in the C3 category above a dominance presumption which, along with barriers to entry and expansion, mean that it has been misclassified.
51. This is being masked by the analysis looking at sites related to organisations which have many sorts of connections. Currently there is roughly a 27:1 ratio of broadband connections to leased lines (ComReg Figure 5) and given this ratio, the split of C3 is most likely to be made up of customers with/or moving to a broadband connection. This will in fact include sites where the customer is actually migrating down from TI/MI to broadband.
52. The Potential Demand element of the algorithm is based on retail multi-site customers with at least one Ethernet leased line. However, BT's experience is that many of its retail multi-site customers use fibre to connect their main offices together or to a Data Centre but rely on DSL/broadband for their branch network. Generic examples are grocery chains, retail forecourt operations such as petrol stations and smaller financial institutions. Specifically, BT can point to the following customers in Table 4 that are included in the C2 (no business category) and C3 (1 or more connections considered as 'Potential Demand'). These are mostly DSL/SFBB customers today with little outlook/customer driver for change.

Possible Customer migrations to other services

53. It is instructive at this stage to note that there are 3470 SAs which have either 0, 1 or 2 or 3 MI circuit ends to actual premises (derived from Figure 11 TERA report). However, the breakdown into the C3 category of 1837 SAs includes non-MI delivery as well so it is not possible to see what the distribution of MI circuits actually is. Nor can we adduce the total MI volume breakdown between the C1 and C3 categories and whether the analysis on real ability to service actual MI sites currently covers the majority or a minority of circuits or buildings.
54. This also means that it is difficult to interpret the service share set out in Table 1 above. The SAs in the Criteria 2b assessment have 0-3 actual MI connected buildings. For those SAs with 3 connected buildings and with three operators capable of supplying allegedly, then in theory each would have 33% market share. For single sites and SAs where there are only 1 or 2 MI connected buildings, in reality we suspect it is likely Eircom has a higher share still as most other operators are targeting multi-site customers and this is implicitly acknowledged by ComReg [3.59].
55. But the overall service share of Eircom in Zone A is less than 45% according to ComReg [4.223] which would imply that its service share in the more intense C1 category was actually higher than this notional estimate. At the minimum this looks to be inconsistent with common sense but whatever the truth of the matter, it also suggests that conditions within the SAs grouped into Zone A are far from reasonably homogenous. Stakeholders would have appreciated a more granular breakdown of services shares and the HHI values for the C1, C2 and C3

categories to be able to provide informed commentary on this matter. This lack of transparency of the make-up of the Zone A components is very important. Without it, it is hard to judge the potential impact of de-regulation and impossible to accurately assess the level of homogeneity across the Zone. The mix of metrics across Current Demand (served buildings) and Potential Demand (organisation premises) further obscures.

56. We have further material concerns in this area.
57. First, the algorithm has the peculiar property that sites with at least one MI circuit and quite possibly more, will automatically be classified into the C2 category if they fail to meet the definition of coming into one of the 15k Organisations (TERA Page 19) which is required before a test of network presence of ANs is applied. We have no idea how many of these there are and no numbers are provided giving any indication but it is quite possible that a small single site media company will want very high internet capacity for example. It is quite unacceptable however for such sites to be excluded from a full economic assessment; quite possibly they are in places where only Eircom or possibly Eircom and E-Net are present.
58. We therefore have the curious situation that the algorithm implies that if an SA has less than 4 actual MI connected buildings, then competitive conditions are assessed for sites/premises where quite possibly currently and in the foreseeable future - there is no demand for MI services and at the same time, the algorithm fails to look at competitive conditions for sites where there is currently demand (1/2/3 circuits) and where demand for circuits/bandwidth is actually growing. We are not in a position to say how serious a flaw this constitutes as relevant information is simply absent from the Consultation.
59. Second, ComReg fails to undertake a proper sensitivity testing of its algorithm in the classification of SAs which either fall into the C3 or U2 categories. There are two consequences of this;
- It is not shown that there is effective competition for supply to these sites as the parameters of effective competition are not validated and we have already explained that dig distance is clearly wrong.
 - It is not shown that the consequential grouping of SAs actually meets the requirements of regulation of reasonable homogeneity within groups and differences between surrounding areas.
60. We believe to rectify these very serious weaknesses, ComReg should have done sensitivity testing by flexing both the dig distance (say from pre-ducted buildings up to 50 metres radial distance) and simultaneously the number of relevant serving ANs (say from 2 to 4) together and then going to look at the actual MI circuit volumes and service shares on the consequential categories which grouped the SAs in this way¹⁴. Also it would be appropriate to calibrate the Herfindahl Indices for each combination, as this is a direct measure of the degree of heterogeneity in competition.

¹⁴ Note the algorithm of SA classification could in principle work off a notional set of premises rather than actual circuit ends but the final grouping of SAs would have to look at actual MI service shares on real circuits and not on connections of any kind. The analysis has to tie back to observed volumes of MI services in the marketplace.

61. Doing this would have achieved both goals of establishing that there was *prima facie* evidence that the categories would indeed be compatible with a more detailed SMP assessment and that also they would satisfy the requirement of homogeneity.
62. The value of simulation like this - and which has in the past been done in the UK by Ofcom – is that it is possible to see how quickly the service shares of the incumbent are eroded by reducing the dig distance and increasing the number of competitors. It might also show whether or not for example it would be sensible to have a ‘potentially competitive’ group of SAs where in conjunction with other factors which come into the SMP assessment the situation is not clear-cut one way or the other. Fundamentally, this exercise would have re-assured stakeholders that the deregulation would pass a ‘common sense’ view which currently as we set out in Section I above - ‘The magnitude of the proposed deregulation’ – does not seem at all plausible to those in the marketplace.
63. An additional concern which is hampering a meaningful assessment of the service share information provided in this Consultation, is that on our understanding, ComReg Table 15 is calibrated as a function of SPs connections to defined buildings. However there will be instances when many SPs connect to a single building and thus, the sum of all SPs shares of the Zone A, say, a building total of circa 6.6k - will be greater than 100%¹⁵.
64. In these circumstances it is difficult to establish the robustness of the claim that Eircom has a market share less than a nominal dominance threshold as we simply do not know how this would play out by individual operator to correct for the excess of 100% total market. It would be helpful for transparency and clarity therefor for ComReg could provide service shares on the basis of both circuits and if necessary buildings¹⁶.
65. In summary, there is no reason to believe that the competition assessment and associated forward look should be applied in the way that has been done here and it is decidedly unorthodox. Specifically, there is no linkage between the product forward look and the delineation of market segments as shown in the TERA Report Figure 11. It has to be stressed that the classification of SAs into the C1, C2 and C3 categories and those into Zone B is largely arbitrary depending on the precise criteria applied in the algorithm which is illogical in key aspects.

¹⁵ ComReg confirmed BT’s understanding of this in the Clarification Question, 18/28 q7.

¹⁶ BT requested clarity on this matter in the Clarifications Questions see Appendix 2.

IV. THE SMP ANALYSIS

Relationship to geographic markets

66. The appropriateness of the geographic market designations and the criteria used to set them plays a very big role in the subsequent SMP assessment and it is universally recognised that conceptually the two are highly related, albeit typically a wider set of criteria are used at the SMP stage than at the initial boundary analysis.
67. However the fact remains that if the original geographic market do not reasonably align with an approximate effective competition standard, then it will in practice be impossible to satisfy the simultaneous requirements of: (a) finding geographic areas which are reasonably or sufficiently homogenous within them in terms of competitive conditions; (b) it is possible to distinguish areas from the neighbouring ones where 'prevailing conditions of competition are appreciably different'; and (c) we can be confident that the areas where finally it is adduced there is effective competition are in fact correctly designated to be so.
68. The essence of our position on the SMP analysis is summarised as follows.

General Criteria for effective competition

69. ComReg makes extensive use of the criteria of incumbent plus two competitors alongside other indicators such as ability to serve a percentage of customers within a certain distance to delineate SAs. There is certainly some academic literature which suggests that adding incremental competitors beyond three has declining impact. For example, Xiao and Orazem¹⁷ adopted a model developed by other economists (Bresnahan and Reiss) to the US broadband market to look at competition by zip code area. They concluded that the fourth firm, including the incumbent - 'has little effect on competitive conduct in the local broadband market'. Extensive econometric analysis has been done by BT in the UK showing similar conclusions and was the basis of successive deregulation of the WBA market but as we explain, in fact Ofcom used a much more restrictive test for effective competition than applied here by ComReg.
70. There is a very big difference however with business connectivity which is that this is a highly diversified marketplace where needs are quite heterogeneous and few players are able to target or serve all customer types. As discussed above, the competitors in the WBA in the UK for example were broadly of similar size such as BT, Sky, TalkTalk and Virgin Media. There is no parallel for leased lines in either the UK or Ireland.
71. Along with additional aspects of competition including significant diversity between the component segments that comprise the two geographic Zones, we do not think that ComReg has actually demonstrated adequately the appropriateness of its basic criteria here.
72. Second, ComReg has included many ANs who have little if any real presence in this market. We put forward some specific pragmatic suggestions here noting that it is not possible to hard and fast in all such classifications. However the equal weighting of all operators is manifestly wrong and some other methodology needs to be applied here.

¹⁷ Xiao, Mo and Peter F. Orazem. "Does the fourth entrant make any difference?: Entry and competition in the early US broadband market." *International Journal of Industrial Organization* 29.5 (2011): 547-561.

73. Third, there are a host of very practical and economic issues which strongly support a more cautious treatment of economic dig distance – even if the appropriate benchmark is of a modified greenfield site presumption absent regulation. The 100 metre benchmark needs to be significantly lowered in our view.

Strength of existing competitors

74. We note that ComReg acknowledges [5.105] that both service shares and Herfindahl-Hirschman Index (HHI) indicate that even Zone A is not strongly supportive of effective competition¹⁸. In fact the evidence suggests a very high degree of market concentration with no other operator even a quarter the size of Eircom. Further as mentioned above, we strongly suspect that there is a very high degree of intra Zone A averaging taking place and that the C1 and C3 categories are very different suggesting that they are not sufficiently homogenous to be grouped together anyway.

75. Secondly, we have specific concerns over what appears to be the ‘double counting’ of E-Net in presence which we address in detail in Section VI below. [REDACTED]

76. [REDACTED]

77. [REDACTED]

78. [REDACTED]

79. Third, as mentioned, the heterogeneity of this particular market has resulted in some highly selective targeting by ANs where ComReg has assumed that they are in fact capable and interested in serving all premises/organisations at all bandwidths and for MI services. There are a number of smaller players who are similarly not really anything than niche players. We believe these networks should be either excluded entirely or alternatively their presence limited in terms of assessment of actual and potential effective competition.

¹⁸ On this matter we are not sure how ComReg has treated the C2 shares as zero values can have a hugely distorting effect on HHIs.

Barriers to expansion/Barriers to entry and potential competition

80. ComReg materially underestimates the true cost of network expansion and the 100 metre benchmark are frequently significantly far too optimistic in practice. ComReg [4.159] basis the 100 metres in the TERA algorithm on an assessment of notification time taken by Local Authorities and that an SP can expand its network in a reasonable timeframe if infrastructure is within 100 metres of the relevant premise.
81. This is fundamentally misplaced on many dimensions the most important of which is that it does not look at the true economic cost of expansion under Modified Greenfield Site terms. The question that ComReg has to address is a composite one of both timeframe (opportunity cost to the customer ultimately) but also of the absolute cost to the SP against the price in a competitive marketplace for the service itself. It is the combination of these which against the expected revenue, will determine the contestability or otherwise of the site. This in turn has to take into account the first mover advantages accruing to Eircom and which will be particularly strong for the lower bandwidth services where revenue will not be so great.
82. We provide detail at Appendix 3 on what is probably the most critical assumption which determines the classification of SAs in the algorithm in Figure 11 and summarise as follows.
83. First, the unit of measurement is radial distance which does not give any guide to the total length of the dig that is required and we give more detail below and at Appendix 3.
84. Second, the timeframes quoted by ComReg bear no relationship to real world conditions. Acquiring permission for wayleaves alone can easily take three months for circuits less than 100 metres radial distance.
85. Thirdly, sensitivity testing in Table 14 and Figure 10 are not really giving an adequate assessment of the uncertainty present in the computations in Table 13 and the final classifications of SAs into the two Zones. It is necessary to distinguish all dimensions simultaneously here as to how dig distance will be affected by alternative bandwidths/site value; alternative treatment of E-Net; a potentially higher AN presence needed for the benchmark of effective competition given the paucity of evidence of trends in service shares; and varying by dig distance to take account of the true economic costs in terms of time and resource to expand access.
86. Fourth, the nominal 'extension' of an operator's network by the 20 metre width rule i.e. a fibre is deemed to be 20 metres diameter to account for inaccuracy in location information by itself could inflate the number of SAs in Zone A by 600 (Appendix 3 details) which is a very material number of areas. The combination of correcting this in conjunction with other factors discussed above could easily drastically reduce the number of high density SAs.
87. A further very significant factor which ComReg does not appear to have appreciated, is that for a host of reasons – commercial, technical and operational – the scope for wholesaling between ANs in Ireland is very limited. This arises from conflict of interest with the same customers

being targeted and apart from E-Net, there are no significant purely wholesale operators in Ireland¹⁹.

88. In summary, our view is that ComReg's assertion [5.116] that barriers to entry have been largely overcome in Zone A is simply unsubstantiated in practice, even for the SAs in the C1 category, let alone those in the C3 category.

Credible sources of alternative supply

89. We provide detail below that switching between suppliers is not at all easy and indeed this is one of the barriers to entry as the customer has to dual source to avoid interruption of service. This is not impossible of course but it does mean that the conditions for effective competition and proportionate regulation of dominance are not only needed but seen to be transparent.
90. Equally, should the market become deregulated and we are faced, say, with an increase in our input costs for a site that is within 100 metres – the switching costs to alternative suppliers are substantial. This has to take into account: the true costs of the dig; the time; the project management costs associated with a parallel build; the impact on the remaining term on the contract may well be within one year and how to justify potential payback; and finally how to persuade the customer to re-sign the contract without giving away any of the margin you may make by bringing the site on-net.

91.

[REDACTED]

Other SMP indicators

92. Vertical integration and Strength of existing competitors. ComReg [5.104 and 5.139] wholly mischaracterises the market position of ANs and greatly exaggerates their capability to exercise a constraint on Eircom. Even with extant regulation the market disparities in service shares are huge and these can only accentuate with the deregulatory proposals in this Consultation.
93. Indirect constraints. Whilst we support the broad argumentation here of ComReg [5.107] we have specific concerns on how TI and broadband services have been treated which is in effect a mirror image of the indirect constraint issue.
94. Pricing behaviour. We do not see the relevance of evidence on retail pricing [5.109] as informative of conditions at the wholesale level. The Eircom Ethernet Network Price List has remained broadly unchanged since 2010 for logical links < 200Mb and unchanged since 2012 for all bandwidths at 200Mb and above. [REDACTED]

¹⁹ Technically E-Net is a wholesaler. However in recent years it has become part of a conglomerate including the retailer Airspeed. There is no transparency as to how they companies trade internally that we are aware of. In the UK, CityFibre has come in with a distinctly wholesale business model and which is proving to be a strong competitor outside London albeit highly focussed geographically at the moment.

95. Size of buyer and relative importance to seller in Zone A. We would broadly agree with ComReg [5.122].
96. Potential competition in Zone B. We support ComReg in very large measure here.

V. SPECIFIC ISSUES RELATING TO GEOGRAPHIC MARKETS

The treatment of E-Net

- (i) Economic principles

97. We disagree as to the underlying treatment of E-Net fundamentally as a matter of economic principle and consequentially how it comes into play within the key algorithm reflecting network presence of operators. as in Appendix 1 the Tera Report.
98. The TERA Report (Page 8) states the following:
“E-Net CMAN as a publicly owned access network with alternative backhaul available i.e. Eircom plus 2 other SPs (one of these maybe E-Net’s own backhaul network). These were weighted as being equivalent to the presence of 2 alternate SPs in the analysis as access to these network portions is regulated at maximum prices.”
99. ComReg [4.177] offers somewhat different explanations for the treatment of CMANs as follows:
- 4.177 Also, given access to publicly owned MANs is, arising from State aid conditions, subject to non-discrimination and maximum pricing obligations, the presence of an SP purchasing MI WHQA from Enet on these MANs ComReg has treated that particular MAN as having two ANs as effectively being present.
100. We address first with the backhaul explanation (TERA) and the argument on backhaul. Backhaul is discussed in the 2014 Commission Staff Working Document²⁰ as follows:
- ‘An issue related to the definition of the wholesale high-quality access market is whether ex ante regulatory intervention is required in a market for access to backhaul (distinct from the market for access to fixed networks) in order to facilitate or enhance the competitive provision of services’.*
101. The presence or otherwise of backhaul is in effect the complementary activity to access and is considered to be the boundary between bottleneck access and competitive core. If there is a problem with backhaul then in theory this can be dealt with separately. The TERA justification related to backhaul is in our view somewhat misplaced but it is not easy to see whether or not in fact this was an important factor in ultimately affecting the split of SAs into the various categories in Figure 11. We also have serious doubts that the classification is valid as it assumes that operators can wholesale backhaul easily to each other and we discuss this in more detail below as it will often not be the case.
102. The algorithm of course deals with many urban areas which may have some access presence by ANs other than E-Net and Eircom. However it is quite possible – and we are not able to say – that a number of SAs have been classified as a consequence of this assumption into the C1

²⁰ Commission Staff Working Document Explanatory Note SWD(2014) 298. Reference at Page 51.

category which we would dispute as where there are only two ‘real’ access networks (whether supplied fully commercially or one on State Aid terms) -- will not imply real competition.

103. Our assumption is that the substantive argument for counting E-Net as double is in fact given by ComReg [4.177]. It appears that ComReg believes that the State Aid requirements mean the CMAN becomes a ‘super upstream supplier/competitor’ to Eircom in the sense that it can support two downstream ANs simultaneously each able to compete directly for the end-customer²¹.

104. The circumstances of when an entity such as E-Net offers downstream ANs like BT to ‘climb a ladder of investment’ and consume dark fibre or even duct access and to self-supply the active service – raises some challenges for economic assessment, even putting to one side whether or not the upstream supply is really as good as the nominal requirements in this case such as maximum prices and non-discrimination might imply.

(ii) Parallels with UK regulation

105. A very similar issue arose in the UK in the equivalent 2016 BCMR with a purely commercial operator (CityFibre) offering dark fibre in metropolitan towns outside London. Essentially it had been argued that as their dark fibre offer in any area was open to any Communication Provider (CP [equivalent of Other Authorised Operator]), then it should be attributed higher value as an underlying network access supplier. However, Ofcom treated its access network on a unitary basis for the assessment of network presence to service sites, broadly similar to the Criteria 2b analysis²². We believe that was probably the correct decision in the circumstances in spite of the fact that City Fibre really does market its services very strongly to a wide range of CPs and we see a marked difference here compared with the treatment of E-Net.

106. We see a parallel here with the way in which LLU (MPF unbundling) was treated in the UK in the corresponding downstream consumer broadband market where BT provided CPs with an active bitstream service in competition to the self-provide of this functionality by CPs who took MPF instead. In these circumstances, Ofcom did indeed treat the provision of LLU as facilitating more than one entry downstream and the relevant economic market (Wholesale Broadband Access – WBA) looked at retail customer service shares which one could argue was broadly similar to ComReg shares of access to buildings here.

107. There are very big differences however in the two downstream markets on both supply and demand sides. Certainly in the UK the consumer market is comparatively homogenous and there eventually emerged four players of roughly equal size and capability namely BT (downstream), Sky, TTG and Virgin Media which operated its own network. Critically, the switching processes between suppliers is simple and fully regulated. Finally, Ofcom actually applied criteria to deregulate BT on an exchange basis which was at a very much higher threshold than the criteria which ComReg has used here and fundamentally this off-set the

²¹ A number of customers can of course be present within a particular building as we have discussed. It is also conceivable for a customer to simultaneously contract with two separate ANs for example to achieve resilience. Sometimes this can be done from one access provider offering alternative physical routes and in other cases alternative arrangements can be made. However the number of customers requiring resilience of this kind tends to be quite small.

²² See Annex 10 and the statement at A10.49. The network presence of CityFibre was distinct from the service share analysis of the downstream CPs that it served.

impact of having the upstream component being treated as facilitating multiple downstream suppliers²³.

108. The business market for leased lines in Ireland and UK are manifestly very different from the high volume consumer markets. They are both characterised by great heterogeneity in customer requirements; of suppliers who are frequently selective and sometimes greatly so; where switching between downstream suppliers is expensive and not regulated in any substantive way at all.
109. Ultimately in our view the treatment then of upstream suppliers such as E-Net has to be empirically-based as any number will be arbitrary if based on speculation. Will the provision of these services really provide sufficient inducements to enable multiple downstream suppliers to compete as if they themselves had multiple choices of upstream bottleneck inputs?
110. Our view therefore is that the treatment of E-Net should have been examined much more closely and not simply assumed to be a 'double network'. Specifically, ComReg should have investigated as to whether or not the State Aid obligations were in fact material to indicate that the conditions of competition in those areas (SAs) were actually different from others as a consequence. This is of course the relevant regulatory criteria set out by the Commission and BEREC as set out at Appendix 1.
111. We also see a parallel here with the provision of state aids to facilitate broadband roll-out (BDUK). Recently Ofcom assessed the impact of these provisions in the WLA market as follows²⁴:

²³ For most of the period up until the 2014 review i.e. over a decade, BT was subject to substantial regulation of bitstream services and the criteria of presence of BT + 3 CPs was applied for full effective competition and which was comparatively recently reduced to BT + 2 CPs. (Ofcom also had a prospectively competitive grouping which had backstop regulation along the lines we have proposed here for C3 SAs.) This reduction also reflected consolidation in the market. Bearing in mind that LLU allows for all customers within an exchange area to be targeted subject to technical limitations, this was a very much harder set of criteria than for example the Criteria 2a as in the TERA Report.

²⁴ Ofcom Draft WLA Statement dated 23rd February 2018 Volume 1 available on the Ofcom website. Note the relevant downstream services were broadband services so this was the equivalent of LLU but it also included an upstream active service supplied out of Openreach (VULA).

3.178 In BDUK areas, BT has a number of obligations that are defined by contracts with local bodies (local authorities, groups of local authorities, devolved governments or local economic partnerships). Therefore, as we noted in the March 2017 Consultation, there is a possibility that BT's pricing could have been constrained by these contracts in a way in which it was not in the rest of the UK. However, following a review of a sample of BDUK contracts¹⁹⁰, we concluded that competitive conditions in the BDUK areas are not sufficiently different from those in the rest of the UK.

3.179 While some of the contracts in the sample have what amounts to charge control provisions these are linked to our market reviews. The contracts further contain procedures for changes to pricing and other terms in various circumstance and are of limited duration, minimizing the effect of any contractual constraints. BT appears to have priced at the same level for fibre access to lines upgraded under the BDUK programme and for lines where there was already a commercially deployed fibre upgrade to the access line.

3.180 Given that the underlying provision of connectivity to a fixed location is unchanged, and that BT appears to have priced at the same level in BDUK and non-BDUK areas, we have included BDUK areas within the same geographic market as that covered by the rest of BT's local access network.

112. As noted above with respect to the WBA analysis in the past, the Ofcom assessment was of course in a completely different market to leased lines. The key point for us however is that ComReg has made a presumption of the impact of the CMANs without checking whether the evidence supports a double downstream provider equivalent and indeed this has actually likely had a major impact on the designation of SAs through the TERA algorithm of AN presence in Figure 11.

(iii)

113. [Redacted]

114. [Redacted]

115. [Redacted]

116. [Redacted]

[Redacted]

[Redacted]

117. [Redacted]

118. [Redacted]

119. [Redacted]

120. [Redacted]

(iv) [Redacted]
121. [Redacted]

122. [Redacted]

[Redacted]

[Redacted]

Capability of ANs to serve customers

123. This issue is relevant both to the mapping analysis in the geographic market assessment and to factors such as ‘Size of undertakings’ which comes into the SMP assessment.
124. We believe that Table 16 of the consultation and the SMP assessment both greatly exaggerate the capability of ANs to serve end-customers. Further, the very same limitations not appreciated by ComReg greatly restrict the feasibility of ANs to supply each other, quite apart from many conflicts of commercial interest when both ANs may be trying to serve the same downstream customer base.
125. We summarise our position in Table 5 below with specific comments on individual operators following.

Assessment of capability of ANs

A large rectangular area of the page is completely redacted with a solid black fill, obscuring the main content of the table.

126. [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

127. [Redacted]
[Redacted]
[Redacted]
[Redacted]

128. [Redacted]
[Redacted]
[Redacted]

[Redacted]

129. [Redacted]

130. [Redacted]

131. [Redacted]

132. [Redacted]

133. BT Ireland. Our primary market is multi-site bids and we welcome ComRegs reconsideration of this particular aspect. We do provide small offerings and wholesale but prior to offering services we will consider the the viability of using our own network versus using another network on a case-by-case basis. If its not viable we 'no-bid' and that happens quite often.

134. [Redacted]

[Redacted]

135. In reality, ComReg does not properly assess the functionality and capacity of these networks and whether they can backhaul to appropriate points of interconnection and whether or not they are are they really relevant for the services under consideration here. The overall classification simply does not chime with what we see on the ground.

Increasing reliance by BT on Eircom

136. [Redacted]

137. [Redacted]

Table 6

[Redacted Table 6]

138. [Redacted]

139. [Redacted]

Table 7

[Redacted Table 7]

VI. SPECIFIC ISSUES RELATING TO SMP ANALYSIS

General costs of network expansion

140. The 2016 Consultation references the BEREC Common Position on Geographic Aspects of Market Analysis [4.152] which states that ‘...network investments tend to be incremental’. This is BT’s general experience with a need to justify each network expansion on its own merit and to satisfy internal financial hurdles²⁸.

141. Where there is the prospect of supplying new customers, like other entrants, BT takes a view on the totality of all costs associated including:

- Civil infrastructure costs including wayleave and dig costs.
- Interconnection costs.
- Other costs of supply including core network.

142. A further factor is the time to deliver the new service from network expansion versus the equivalent costs and time of using a third party. These calculations have to be set against a revenue projection which is frequently very difficult to establish. As noted above, Eircom’s standard lead time for an Ethernet leased line is 45 working days but planning permission approval alone for network expansion can take three months.

143. In the text below, we reference two projects we commenced in 2017 that highlight the issues we experienced in trying to expand our network to areas of concentrated demand. Both involved switching customers to on-net from pre-ducted/near-net. Also, we reference Desk Top Survey estimates to support bids and the difficulties arising.

The limited ability to build and compete against the incumbent

144. We consider there are two primary approaches for expanding our network. The first is to grow (as suggested by Oxera in the 2016 Consultation) the network to locations where we forecast a concentration in demand and the second is to build to support actual live bids. The latter raises a very difficult issue of timing quite apart from underlying cost of network expansion.

145. [Redacted]

146. [Redacted]

147. [Redacted]

²⁸ This is distinct from the issue of whether the expansion is physically incremental i.e. a network expansion could be to a new area altogether physically distinct and separate from another area which is currently served.

148. [REDACTED]

The short timeframe window

149. In the context of building new network as part of a bid, the timeframe must be factored in to include the following and which is not an exhaustive list of time needed:

- To secure approval to build out instead of buy.
- To undertake Desk Top Survey and Site Survey.
- To cost the proposal.
- To secure wayleaves/arrange engineering crew.
- To dig/complete work.

150. Often when these are aggregated, the lead time is greater than the time and cost of an OpenEir provide and this often drives a BT decision to deliver via OpenEir. Even though the following distances are <100 metres, a 7 day notice period does not apply for Dublin City Council for very many special cases as below and an upper limit of three months can apply. This is too long considering that OpenEir can deliver within 45 working days. These times do not align at all with the assumptions that ComReg [4.159] has made on the time to deliver.

151. Dublin City Council require a three month notice for digs:

- < 100 metres but crossing two streets; or
- < 100 metres but crossing a bridge or major piece of infrastructure; or
- <100 metres but likely to pose some engineering difficulty.

152. If Dublin City Council guidelines did apply across the country, we believe that [REDACTED] of the buildings in Zone A would require a 3 month lead time for planning approval. This, when combined with plan, build and commission times is far too long considering that OpenEir can deliver within 45 working days. See Appendix 3 for our work on 100 randomly selected sites in each county at various distances analysed for propensity to trigger the 3 month rule.

153. Note, there are circa 88 local authorities in Ireland. We reference below our experience (in practice) of other councils. The timescales can be long:

- Cork County Council – approx 30-40 days for digs greater than 5 mtr sq.
- Fingal County Council/Dun Laoghaire Rathdown County Council have minimum 40 days for any road application.

154. Dublin digs that are close to the Luas/train lines etc. require co-ordination with the Luas operator. Equally, private landowners have their own individual criteria requiring the telco to work to their own established/ad hoc decision timelines/application rules and procedures.

The duct lead-in problem

155. A key characteristic of a competitive market is what commentators often refer to as a 'level playing field'. However, before we even start our analysis of the ability to connect to customers we note that Eircom has ubiquitous access to virtually all customers through its existing duct access network which is often shared with its PSTN and broadband services. ComReg has made no assessment of the advantage this provides to Eircom when bidding for customers. i.e. most

installs will either use existing fibre infrastructure into the premises or existing ducts without the cost and delay of breaking the ground. Eircom even has the further advantage of using its existing pole infrastructure to carry fibre tubes to make the connection.

156. [REDACTED]

157. Hence we consider ComReg need to seriously consider the lead-in issue in the analysis to ensure they are genuinely openly available. Where lead-in is not available then there is considerable extra cost assuming first that the customer will even allow new trenching into their premises and second that there is space for a new footway box. These hurdles represent real economic barriers faced by operators to compete with Eircom.

The economic viability of digging to customers

158. BT's planning tools work on a radial distance basis from a point of egress. However, in reality, digs do not happen in straight lines and BT finds from its analysis of digs with an average radial distance of circa 100 metres that the actual dig distance is circa 149 metres (see Appendix 3). When we run this again for radial distances of circa [REDACTED], we find that the actual dig distance is [REDACTED]. The multipliers are [REDACTED] respectively and there is good statistical evidence for this. Further, applying the actual dig distance could take an application from circa 7 days wayleave to circa 3 months (as now over 100 metres threshold), at least for Dublin City Council. Importantly, our calculations show that the average cost of digging to provide on-net vs. buying off-net access aligns closer to [REDACTED] than 100 metres radial as ComReg uses.

159. ComReg's analysis is also making a critical assumption of 100 metres radial distance. In reality, networks are not expanded in straight lines especially in a city centre when in practice they must cross over rivers (Liffey, Lee, Shannon etc.), canals, motorways, train lines, and go round buildings, cemeteries etc. We do not believe that ComReg has taken this into account in its parameter selection methodology. When 100 metres is added to the 20 metre "thickness" and then corrected for actual dig (using the multiplier derived above), the actual dig distance could be 179 metres. This is almost double the upper limit distance presumed for a 'simple' 100 metre dig.

160. Generally, the difficulties of digging may be grouped as follows:

- Landlord issues.
- Planning issues.
- Lead In difficulties accessing Eir's Duct & Pole Offer (Athlone).
- Commercial of E-Net's Duct & Pole Offer (Athlone).
- Car Park issues where site ownership is vague.
- Ducts filled with concrete.

- Traffic Management.
- Unexpected problems etc.

161. [Redacted]

162. By definition Zone A areas are generally higher density for alternate supply and this also implies high density for roads and population. Whilst this allows for some economies of density, pure dig costs (which exclude a whole host of other costs including traffic management) are also heavily dependent on surface types e.g. Concrete (€145/m) vs Grass (€25/m) .

163. The concentration of Zone A in dense areas serves to dramatically increase the cost of digging compared to Zone B areas. [Redacted]

Table 8



[Redacted]

164. [Redacted]

There is very limited wholesaling between ANs

165. [Redacted]

166. [Redacted]

[Redacted text block]

167. [Redacted text block]

168. [Redacted text block]

169. [Redacted text block]

170. [Redacted text block]

171. [Redacted text block]

172. [Redacted text block]

The Duct Access Offer by Eircom is not fit for purpose

173. There are limitations in the current capacity of Eircom’s network for example where there is no room in the Eircom ducts. This then requires digging onto the carriageway and incurring significant reinstatement works. Eir have overhead cables and local authorities are increasingly removing these in city centres.

174. The Open eir Duct & Pole Offering is relatively new to the market. The product started as a broadband-only one with the associated SLAs referenced and at the end of 2016 Open eir said it would also carry leased line services in their ducts. The SLAs have not been uplifted for what is needed to support a MI WHQA class of service.

175. The current version of the Duct (and DF) SLA on the Open eir website - “Open eir Duct Access Version 3 dates 17/03/2018” - has no credits or penalty mechanism to encourage compliance for duct provision or repair (see Appendix 3). For example, for faults the SLA has no provision for the short timescales required to repair a business critical leased lines and all that is offered is to advise of progress within two working days and even then without an obligation to fix the issue. The dark fibre features are really more akin to consumer SLAs rather than to business SLAs.
176. We cited above the example of [REDACTED] which had lead-in issues concerning E-Net and we understand the same issue applies with Eircom as their duct offer does not include the sub-duct service from the footway box to the boundary wall.
177. ComReg [5.166] cite they are ‘not aware of any Access Seeker currently using Eircom’s ducts & poles for their access network extension on a significant scale’. ComReg suggests [3.116/4.160] that Eircom will provide such passive access and we understand that Eircom effectively endorsed that proposition for at the end of 2016. However, ComReg should also be aware that the Duct and Pole offer made by Eircom was explicitly not endorsed by industry at the ComReg hosted LLU industry forum, given serious concerns that it was not fit for purpose. However Open eir simply published the product specification anyway.
178. As part of the 2017 3a and 3b market review by ComReg, the consultants Cartesian found some 33 problems with the Eircom Duct and Pole Offer which as far as we are aware have never been resolved²⁹. Our experience of LLU does not give any reason to be at all optimistic that a fit for purpose solution will be provided.
179. In summary, the repair timescales and certainty of resolving faults expected as a feature of the WHQA leased lines market are not available making the product effectively unusable. Recent experience trying to improve SLAs with Eircom demonstrates it takes years to agree fit for purpose SLAs. We therefore consider that It is unreasonable for ComReg to include duct access as a solution to an operators’ network expansion if the service is not of usable quality to support the characteristics in the WHQA leased lines/Ethernet market.

The consequences of removing regulation

180. We set out above in Section IV in the sub-section ‘Credible sources of alternative supply’ – the implications of having to source from other than Eircom in the event of a very likely margin squeeze. They are formidable.
181. [REDACTED]

²⁹ ComReg Document Reference 16/96d clause 5.1 – Cartesian Report on CEI Service Delivery Process Equivalence Options.



182. If OpenEir is to be deregulated to the extent proposed, there is the very clear potential for their prices to increase and as we have highlighted earlier in their response there is negligible scope for operators to switch to alternative providers (assuming that there are suppliers pre-ducted to the site). We will likely face a margin squeeze and the huge market disparities already observed will increase yet more.

Source References For Geographic Market Delineation**Commission Notice on Market Definition 1997**³⁰

“8. ‘Relevant geographic markets’ are defined as follows:

‘The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those area’.

9. The relevant market within which to assess a given competition issue is therefore established by the combination of the product and geographic markets. The Commission interprets the definitions in paragraphs 7 and 8 (which reflect the case-law of the Court of Justice and the Court of First Instance as well as its own decision-making practice) according to the orientations defined in this notice.”

Commission Guidelines on SMP Analysis (2002/C 165/03)³¹

“55. Once the relevant product market is identified, the next step to be undertaken is the definition of the geographical dimension of the market. It is only when the geographical dimension of the product or service market has been defined that a NRA may properly assess the conditions of effective competition therein.

56. According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. The definition of the geographic market does not require the conditions of competition between traders or providers of services to be perfectly homogeneous. It is sufficient that they are similar or sufficiently homogeneous, and accordingly, only those areas in which the conditions of competition are "heterogeneous" may not be considered to constitute a uniform market.

57. The process of defining the limits of the geographic market proceeds along the same lines as those discussed above in relation to the assessment of Section G 145

BEREC Common Position on Geographic Markets BoR (14) 73 2014³²

“Thresholds to aggregate geographical areas

(128) In order to group geographical units, there is no need for competitive conditions to be perfectly homogeneous across all geographical areas included within one market.

(129) Areas should be aggregated so that competitive conditions within a market are sufficiently homogeneous whereas competitive conditions differ between markets with potential effects on either the SMP finding or the identified competition problems. With a large number of small areas, however, there is likely to be a continuum of competitive conditions, so it will usually be difficult to draw a clear line between more and less competitive areas. One approach would be to evaluate competitive conditions in each geographical unit on its own and classify the area accordingly. However, this would cause a huge workload for NRAs and is also likely to be arbitrary to some extent. A more practical and appropriate approach is to define clear and unambiguous criteria according to which the geographical units are grouped. In this regard, it is important for NRAs to bear in mind the purpose of market definition, which is not an end in itself but a means to undertaking an analysis of competitive conditions, for the purposes of determining whether ex-ante regulation is required or not.

(130) As mentioned above, in case of significant differences in competitive conditions, the criteria listed before are likely to be closely correlated. However, the correlation is unlikely to be perfect. It is, therefore, likely to be appropriate to base the segmentation on a combination of several of the criteria

³⁰ [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209(01)&from=EN)

³¹ [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52002XC0711\(02\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52002XC0711(02)&from=EN)

³² https://berec.europa.eu/eng/document_register/subject_matter/berec/others/4445-berec-common-position-on-geographical-aspects-of-market-analysis



mentioned above. A segmentation based on a single criterion (e.g. the number of operators) will usually not be appropriate. Which criteria are the most relevant will – as in an SMP analysis – depend on the circumstances and has to be decided by the NRA. The relevant criteria should be applied cumulatively and in such a way that differences in competitive conditions between different markets are large while differences in competitive conditions within a market are small.

Trends In Supply And Demand Of MI Services

The position of TI and broadband services in the economic market

1. Table 1 below provides an assessment of the position forward looking of Eircom in TI and MI services.

Table 1



2. Our experience is that customers may need a fibre connection between their Head/Regional offices/Data Centre but then only a DSL/broadband connection for their sites back to HQ in a hub/spoke structure. Examples would include grocery chains, retail forecourt operations such as petrol stations and financial institutions. A driver of some of the changes noted is that Eir are closing their legacy DSL platform and it would seem inappropriate for these sites to be presumed to be included in the definition of the potential demand for LL MI WHQA market.

3. 

e. [Redacted]

4. The following from ComReg confirms that the total share of buildings will sum to more than the total number of buildings served by the industry.

Stakeholder	No	Clarification Being Sought	ComReg Doc. No.	Reference in ComReg Doc.	ComReg Response
BT	6	Have Comreg applied a "relevance floor" to its selection of operators active in the market – e.g. Operators with less than 1% measured market share?	ComReg 1808-1	Page 150, footnote 365	No "relevance floor" was applied to the selection of SPs active in the market. All MI WHQA SPs have been considered in the analysis.
BT	7	The data shared by ComReg for BT Zone A connected premises #/%, confirms that the market share % is the count of connected premises/total count of connected premises. Are we correct in thinking that the sum of connected buildings will therefore sum to a number greater than the number of actual buildings?	ComReg 1808-1	Table 15, page 165	Yes.

Strength of existing competitors

5. [Redacted]

Table 2

[Redacted Table Content]

Capability of ANs to serve customers

7. [Redacted]

[Redacted]

6. [Redacted]

[Redacted]

Appendix 3

Information On The Costs and Impact Of Network Expansion

The limited ability to build and compete against the incumbent

1. We encounter difficulties connecting sites that were already pre-ducted. Thus, even being pre-ducted can bring its own difficulties and completion is more often than not, far from easy. The extract below from our records gives a flavour of the sorts of difficulties that arise.

Table 1



2. 






Table 2



Impact of dig distance on SA in Zone A

3. To arrive at an estimate of the uplift in the count of Small Areas as a result of extending each operator's network by 20 metres (s3.1, TERA Report, page 18), we have derived the

value on a pro-rata basis. We appreciate that this may not be precise but it is the only way (with no detail available) to approximate the impact as shown in Table 3 below.

Table 3

Possible impact of dig distance on SA count Zone A

	30 mtrs (50 mtrs)	80 mtrs (100 mtrs)	100 mtrs (120 mtrs)
Pro-Rata # Small Areas	12.37% 2,306	13.08% 2,438	16.35% 3,048
Estimated Uplift in Count of Small Areas in Zone A as a result of network 'extension'			610

4.

[Redacted text block]

Table 4 (following)





5.

[Redacted text block consisting of five horizontal black bars]

Table 5 (following)





6. 


Table 6

7. [Redacted]

Table 7

[Redacted Table Content]

8. [Redacted]

The Duct Access offer by Eircom is not fit for purpose

9. The following in Table 8 shows the SLA for duct access offered by Eircom.

Table 8

Eircom SLA for Duct Access

Activity Description	Performance Target
Acceptance or rejection of Operator fault report	Response to be provided within 1 Working Days of fault receipt
Target Repair	Advise Operator of repair progress within 2 working days
Dark Fibre in lieu of Duct	Repair same as NGA Standalone FTTC SLA (activity 3.1) Exclusions & Parked Time (where relevant) as per NGA SLA Service credits same as NGA Standalone FTTC SLA (activity 3.1) Penalty Exclusions (where relevant) as per NGA SLA

Table 3 : Fault Management

**ECONOMIC ASSESSMENT OF THE PRODUCT MARKET, GEOGRAPHIC MARKET
AND SMP ASSESSMENT FOR MI SERVICES**

SUPPLEMENTAL OBSERVATIONS BY BT IRELAND

CONTENTS

	<u>Page</u>
I. INTRODUCTION	
The new SMP Guidelines	2
Structure of Submission and key points	2
II. THE NEW COMMISSION SMP GUIDELINES	
Background	4
SMP Factors in the new Commission Guidelines	4
ComReg's 2016 Consultation	7
ComReg's 2018 Consultation	8
ComReg's assessment in the light of new Commission Guidance	8
III. THE TREATMENT OF MNO BACKHAUL	
Summary	9
Observations on self-supply and captive sales	10
Commission and BEREC guidance on self-supply	12
Practice in other Member States	13
Implications of the Hutchison/O2 merger	16
Eircom's current position in MNO backhaul	17
IV. A PLAUSIBLE FORWARD MARKET PROJECTION	
Source of gains in Eircom's market share	18
Forward forecast of Eircom market share	19
Summary basis of calculations	21
V. PROPOSALS FOR FURTHER ANALYSIS ON GEOGRAPHIC MARKETS AND SMP	
Principles of geographic market analysis	22
Using buildings as the unit of analysis	23
Using SAs as the unit of analysis	24
ANNEX 1 BARRIERS TO ENTRY IN THE REGULATORY SMP ASSESSMENT	29
ANNEX 2 COMMENTARY ON THE NEW COMMISSION SMP CRITERIA	32

14 June 2018

I. INTRODUCTION

The new SMP Guidelines

1. The Commission has now issued updated market and SMP Guidelines with an associated Staff Working Document and which have been published in the Official Journal¹². In the light of these, we address the following issues:
 - The treatment of legacy (TI here) and new services (MI) where the Commission now suggests that they may be in the same economic market³.
 - The new criteria for SMP assessment.
 - The treatment of MNO circuits as ‘captive’ and outside the relevant market
2. In addition, we have given further consideration to the likely impact of the proposed deregulation in Zone A in the light of factors which we believe are relevant to a forward market projection such as the migration from TI services to MI services where Eircom will likely acquire a disproportionate number of customers.
3. This is the first update of the telecoms SMP Guidelines since 2002, although the Commission has amended the list of markets susceptible to *ex ante* regulation with associated commentary on a number of occasions.
4. Our overall impressions are as follows. First the Commission has made some moderate changes to the market analysis framework with a clear emphasis on the need to ensure effective competition and choice at the relevant retail layer. Second, there are some additional factors which have been identified as relevant to single firm SMP dominance. Third, there is much more extensive discussion on the necessary conditions to find joint dominance⁴.

Structure of Submission and key points

5. This Supplementary Note is structured as follows.
6. Section II focuses on the relevant criteria to assess SMP and we first go back to briefly assess what ComReg examined in 2016 and consider these in the light of the complete list of factors now in front of NRAs.
7. We conclude that ComReg was too limited in the factors it assessed both in 2016 and subsequently in 2018. In particular, ComReg gave insufficient attention to a number of key factors including: barriers to entry (BTE); economies of scale and scope (both within the relevant market which we believe should include MNO backhaul and immediately outside it); and profitability of Eircom which was not apparently reviewed at all. There are other new SMP criteria which we consider are particularly relevant for MNO backhaul.

¹ Hereafter referred to as Commission [1, x] and Commission [2, y] where x and y are paragraph and page numbers respectively.

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2018:159:FULL&from=EN> and <https://ec.europa.eu/digital-single-market/en/news/staff-working-document-guidelines-market-analysis-and-assessment-smp-under-eu-regulatory>

³ See Commission [1, 44] in particular.

⁴ This issue is not explored in this Note.

8. These factors all have a direct bearing on current and potential effective competition for MI services. The new approach to geographic market delineation – which we support in general terms even if not in the detail – does not seemingly permit any real trend analysis of service shares to see what has been happening over a period of time.
9. Further, ComReg presents shares on the basis of buildings served rather than circuit volumes or revenues which is a somewhat unconventional measure⁵. For consistency we have kept to the metric of buildings in our assessment of ComReg's SMP assessment but we do make some suggestions in Section V for using actual MI circuit ends in the geographic algorithm.
10. We have set out in considerable detail in our April 2018 submission why network expansion is highly problematic and constitutes a material BTE even putting to one side the huge advantage that Eircom has in time to deliver new circuits.
11. In our view, the new Commission SMP criteria add weight to these concerns as they suggest that Eircom is much larger than its competitors in both absolute and relative terms and will continue to benefit from its position as dominant across a wide range of access services. NRAs are also expected to undertake a forward look and we believe this needs to recognise likely developments in the migration of legacy technologies and growth in MNO backhaul as well.
12. Section III examines the particular issue of MNO backhaul. ComReg's logic for excluding MNO backhaul as outside the relevant market for assessment is not correct in our view. Sales to the downstream retail services for business access are no less 'captive' than those that will be provided to a related subsidiary company for mobile provision. In fact, the presence of captive sales would normally be considered an issue of regulatory concern warranting careful analysis for both horizontal and vertical effects. There could be significant short and long term consumer detriment here from ComReg's failure to address the state of competition for MNO backhaul not just in retail mobile but also for provision of business access services⁶.
13. The new Commission Guidelines reinforce the emphasis on retail markets which makes the exclusion of MNO backhaul even more perverse as many business customers buy a bundled package of fixed access and mobile services. Our own desktop research does not indicate that other NRAs have treated MNO backhaul in this way even if in some circumstances the regulation differs from business access.
14. Section IV provides a quantitative assessment of our forward projection of the high level impact of ComReg's proposals to deregulate Zone A. We have used a mixture of facts and commercial judgment on the likely exclusionary impact on BT and other ANs from this proposal. We conclude that Eircom will strengthen what is already likely a dominant position in any case in many SAs currently included in Zone A and the overall service

⁵ The Commission [2, 26] comments on this matter suggesting that shares on a number of dimensions might be appropriate to establish clear findings.

⁶ It is our understanding that ComReg in fact is obliging Eircom to provide MNO backhaul services in Zone B by virtue of the text at paragraph 9.57 and Appendix 4 Part III. The latter includes the requirement to meet all reasonable requests for access to MI WHQA products, services and facilities in Zone B.

share in Zone A will likely be approaching or even above a threshold where there would be a presumption of dominance.

15. Finally, in Section V we provide some additional suggestions on how a more focussed analysis of the competitive conditions of circuit provision on a buildings basis could better identify geographic markets which satisfy the requirements of homogeneity and lead to appropriate SMP regulation. We also suggest how the TERA algorithm based on SAs could be enhanced to provide a much clearer position on competition for actual MI circuits.

II. THE NEW COMMISSION SMP GUIDELINES

Background

16. The Commission has finally officially updated its 2002 generic guidance on SMP analysis for the first time and in the light of this development we felt it would be appropriate to reflect on this in the context of ComReg's Consultation.
17. In this Section we first set out what we see as the key new advice and then provide some additional comments in the light of this going back first to the 2016 Consultation and then the updated 2018 SMP assessment for Zone A in particular.
18. Our focus is mainly on why economies of scale and scope and profitability are important considerations here and how these link to the new SMP criteria in the Commission Guidelines which now identify barriers to entry and absolute and relative size of undertakings as relevant criteria. We consider that a full structural assessment requires greater attention to these factors particularly as we are very clear that ComReg has materially overstated the ability of ANs to expand their networks and provide a real competitive constraint to Eircom.
19. The concept of a barrier to entry is not without its complications and a number of economists have emphasised somewhat different aspects of for example the relevance of sunk costs. We explain why we consider that the Zone A SMP assessment is not robust which adds to our concerns that the TERA algorithm fails to look at the actual real life competitive conditions from the use of a 'synthetic' database.

SMP Factors in the new Commission Guidelines

20. The Commission [1, 58] lists 16 non-exhaustive factors which are used in an SMP assessment:

'58. The following non-exhaustive criteria are relevant to measure the market power of an undertaking to behave to an appreciable extent independently of its competitors, customers and consumers:

- barriers to entry,
- barriers to expansion,
- absolute and relative size of the undertaking,
- control of infrastructure not easily duplicated,
- technological and commercial advantages or superiority,
- absence of or low countervailing buying power,
- easy or privileged access to capital markets/financial resources,

- product/services diversification (for example, bundled products or services),
- economies of scale,
- economies of scope,
- direct and indirect network effects;
- vertical integration,
- a highly developed distribution and sales network,
- conclusion of long-term and sustainable access agreements;
- engagement in contractual relations with other market players that could lead to market foreclosure,
- absence of potential competition.'

21. The Commission at this point also makes clear that SMP will be derived from a combination of factors:

'If taken separately, the above criteria may not necessarily be determinative of a finding of SMP. Such finding must be based on a combination of factors.'

22. The Commission has added five criteria to the equivalent 2002 list of SMP factors:

- Barriers to entry.
- Relative size (in addition to absolute size) of undertakings.
- Long term and sustainable access agreements.
- Direct and indirect network effects.
- Contractual relationships that could lead to market foreclosure.

23. We set out some brief observations on some of these below recognising that in many instances these factors are inter-related. Annex 2 contains further more detailed observations on the case law and general background to some of these factors.

24. Whilst for some reason not explicitly listed, BTE were fully recognised in the relevant accompanying text of the 2002 Guidelines. Indeed, this factor was highlighted as the first most critical item – 'A finding of dominance depends on an assessment of ease of market entry. In fact, the absence of barriers to entry deters, in principle, independent anti-competitive behaviour by an undertaking with a significant market share'⁷.

25. This text is effectively reproduced in the 2018 Guidelines [1, 59] where the following commentary is particularly relevant – '.. barriers to entry are often high due to ... or where entry into the relevant market requires large infrastructure investments and the programming of capacities over a long time in order to be profitable'.

26. Our response to the 2018 Consultation (in particular paras 144-148) highlighted the very great risks for ANs such as BT of committing high capital to fund pre-build infrastructure expansion prior to assured sales. We also explained that even if it was possible to acquire the underlying core transport over some distance, the final drop of ingress to the customer site is frequently problematic and hard to predict. The combinations of uncertain demand and unpredictable access costs are material BTE.

⁷ 2002 Commission Guidelines paragraph 80.

27. The Commission [1, Footnote 59] cites economies of scale and sunk costs as the most important barriers to entry and the Commission in the working document [2, 28] gives special emphasis to these factors:

‘The fact that electronic communications services are provided over interconnected networks means that economies of scale and scope are more prevalent than in most other industries, as is the relevance of network effects, the fact that most (but not all) networks require access to scarce resources, and the fact that successful market entry is often associated with very significant sunk costs which are irreversible. These network-specific characteristics mean that the existence of regulatory and economic entry barriers, barriers to expansion and barriers to switching between operators have a material impact on the feasibility and scale of potential entry.’ (emphasis added)

28. The text is noteworthy in its stress of the difficulties of switching between operators and this is something which our first submission [89-91] emphasised at the wholesale level. Our submission to the Consultation has highlighted our growing dependence on Eircom [136-139] and that this would continue to be the case in many of the SAs in Zone A that ComReg proposes to deregulate. The implications of higher prices will force exit as we set out in Section IV below. In our view there is also a clear link in this discussion to the new Commission criterion of absolute and relative size.

29. The Commission [1, 62-63] states the following:

‘62. Market entry is more likely when potential new entrants are already present in neighbouring markets or provide services that are relevant in order to supply or contest the relevant retail services. The ability to achieve the minimum cost-efficient scale of operations may be critical to determine whether entry is likely and sustainable.

63. NRAs should also carefully take into account the economies of scale and scope, the network effects, the importance of accessing to scarce resources and the sunk costs linked to the network roll-out.’ (emphasis added)

30. We suggest that the analysis of ‘neighbouring markets’ is highly relevant here as it links through to the issues of economies of scale/scope and absolute/relative size. ComReg’s own data for 2016 and for 2018 actually suggests that Eircom has an even stronger position if anything in the marketplace for these services⁸. We set out below that Eircom has strengthened its position in the provision of MNO backhaul services which we believe should also have been included in the market assessment.

31. In fact as well as MNO backhaul, the Commission [1, 44] suggests that TI services might be legitimately considered as in the relevant market of WHQA. Our position is open on this matter - what is relevant is that ComReg recognises that the provision of services in neighbouring markets of which TI is but one example - will allow for density economies to be realised and which further reinforce the ability of Eircom to maintain its dominant market position.

⁸ ComReg 2018 A6.12 and associated Footnotes.

ComReg's 2016 Consultation

32. ComReg identifies the following factors:
- Overall size of the undertaking;
 - Control of infrastructure not easily duplicated;
 - Absence of or low countervailing buyer power;
 - Product/services diversification (e.g. bundled products or services);
 - Economies of scale and scope;
 - Vertical integration;
 - Absence of potential competition; and
 - Barriers to expansion.
33. ComReg then looks at the following:
- Market shares [6.111-6.114]⁹.
 - Network coverage [6.115-6.117].
 - The need for provision of wholesale services from Eircom [6.118].
 - A range of other factors including vertical integration [6.123]; strength of existing competitors [6.124]; barriers to expansion [6.125]; indirect constraints [6.126] and pricing behaviour [6.127].
34. ComReg [6.131-6.134] also gives attention to Potential Competition but in our assessment this analysis largely is duplicating observations on barriers to entry which have been proxied by infrastructure presence and market shares.
35. The two factors of service shares and network reach also played a role in the geographic market boundaries themselves. ComReg [6.119] assessed whether or not there was heterogeneity of competitive conditions at a more granular level to suggest there were local markets. (This has been superseded in 2018 through the application of the TERA algorithm.)
36. ComReg [6.135-6.141] discusses Countervailing Buyer Power but largely dismisses its relevance in the Irish marketplace. In broad terms, we would concur with this but there are segments of this marketplace where large customers in particular can negotiate with suppliers for bespoke terms providing that alternative wholesale networks are within economic reach. In the case of LLU and MNO backhaul, arguably the contract itself can become the focal product rather than the individual circuit link and it can be the case that competitive conditions for long-term supply are very different from standard business access services. This is an empirical issue however and requires a detailed assessment of the facts of the case.
37. The overall position in our assessment is that in 2016, ComReg focussed on market shares as the primary indicator of market power and secondly, on network coverage as the underlying barrier to entry and expansion. To at least some extent these factors fed into - or at least influenced - the assessment of the other factors noted above which were mostly assessed by ComReg in only one or two brief paragraphs of discussion.

⁹ Service shares were not apparently listed in paragraph 6.14.

ComReg's 2018 Consultation

38. ComReg sets out its assessment of SMP in Sections 5.5 and 5.6 and in particular at [5.69, 5.87-5.127] regarding Zone A. We follow the order of analysis and provide some brief additional comments supplementing our original response.
39. We note that ComReg [5.88] lists the same criteria as those used in 2016 and our impression is that ComReg's 2018 SMP assessment for Zone A is in fact very similar in structure and order to that of the equivalent SMP assessment of the national market in 2016. The role of market shares and network coverage very largely overshadow consideration of other criteria which are dealt with very quickly indeed.
40. Market shares and Network reach [5.67-5.76] form the pivotal part of this assessment. Our response [125-135] highlighted that ComReg greatly exaggerated the ability of ANs to expand their access networks to sites with modest MI demand. Specifically with regard to Zone A, ComReg [5.69, 5.87-5.127] suggests that Airspeed (as distinct from the parent, E-Net) and Digiweb have on-net national coverage which we do not believe is the case and they cannot by themselves acquire the same economies of scale as Eircom.

ComReg's assessment in the light of new Commission Guidance

41. In our response to the 2018 Consultation, we set out a number of concerns on the way the geographic boundaries have been determined and in particular the form of the TERA algorithm and how this links through to the SMP assessment. Absent a clearer exposition of the algorithm and verification that it delineates areas with sufficient homogeneity, we are not confident that the SMP findings are robust. Fundamentally, this is a major shift in approach since 2016 and it requires a completely new SMP assessment and not an extension to what was in the previous Consultation. To be clear, we are supportive of a disaggregated geographic approach.
42. The market shares assessment has some uncertainties which arise from the units of measurement (buildings, circuits etc) and also the highly questionable exclusion of MNO backhaul. We do not accept that many of the ANs included in the network coverage assessment are relevant to this marketplace. ComReg's assessment of the other factors is very brief indeed.
43. Annex 1 provides some economic background to the concept of BTE and how the different approaches to BTE might be appropriate here. Our firm conclusion is that ComReg has not undertaken a sufficiently detailed structural assessment of the marketplace. In particular, barriers to entry – which is now much more explicit in the new Guidelines – is not properly explored nor the impact of economies of scale and scope in the MI and neighbouring markets.

III. THE TREATMENT OF MNO BACKHAUL

Summary

44. This Section covers the treatment of MNO backhaul by ComReg. It is a sector which potentially is extremely important for BT as in urban areas, there is somewhat less benefit of ubiquity to Eircom given the growth of new cell sites which are only for backhaul and do not necessarily allow for a First Mover Advantage (FMA) to arise which puts BT at a disadvantage.
45. ComReg draws a distinction between the downstream retail division of leased lines of the incumbent and sales to a daughter company. Arguments are made that the former is potentially available to outside competition but the latter are not. Purely on economic grounds, we do not see this distinction as relevant; there is no difference between the two in terms of how a contract would manage an economic price to be charged between an upstream unit and a downstream unit to maximise profitability in the retail market.
46. Nor do we see this distinction as arising from Commission guidance; if ComReg was correct then the whole point of *ex ante* regulation by postulating notional upstream markets would likely evaporate in large measure. The exact pricing solution is not the pertinent factor to regulate upstream. Ireland would not be the only Member State facing this situation but we cannot see other NRAs dismissing MNO backhaul for the reason of captive sales and as we detail below.
47. ✂
48. Under these circumstances, it was not only open for ComReg to review competitive conditions for MNO backhaul, in fact it was essential to do so and not regard them as outside the scope of *ex ante* regulation. It is our understanding that in Zone B the access obligation on Eircom does extend to MNO backhaul even though there has been no competition assessment here. Nor has there been any assessment of Zone A conditions where Eircom has no obligations nor any assessment as to whether there is any linkage between conditions of competition between the two for MNO backhaul. ✂
49. ✂
50. This is a highly unsatisfactory situation which is also likely distorting the forward look of the SMP assessment. From BT's own perspective, this sector is very important commercially.

Observations on self-supply and captive sales

51. ComReg 2018 [4.39] dismisses BT's objections on the exclusion of MNO backhaul repeating the assertion that as such sales are captive then they must be excluded from the market analysis. We understand that the market shares [5.96] in both Zone A and B exclude MNO backhaul.
52. This is a critical piece of the SMP assessment given the strong focus on service shares and network reach as indicators of effective competition. For completeness, the precise argumentation in the 2016 Consultation [5.24] is reproduced below. This was in fact

preceded [5.23] by an explanation of why self-supply to downstream retail business access services would be included rather than excluded:

‘5.23 Eircom provides WHQA to its own retail divisions (self-supply), as well as to third party SPs (external merchant market supply) using its copper and fibre network inputs. For the purpose of this market definition exercise, ComReg considers that Eircom’s self-supply of WHQA falls within the market regardless of whether it is used to supply other LL SPs, or by Eircom to its own retail arm (save for the exceptions noted in paragraph 5.21 above). Eircom’s existing WHQA products are available on a national basis and are purchased by a number of SPs. Its self-supply to its retail arm could be converted relatively easily to external merchant market supply in the short term without incurring significant additional costs. Similarly, ComReg considers that the retail self-supply of other SPs active in the merchant wholesale market should also fall within the relevant WHQA markets.

5.24 In relation to Eircom’s supply of WHQA products to its mobile arm Eircom Group Mobile and its joint venture subsidiary Tetra, ComReg considers that such supply is likely to be captive. ComReg notes that in the event of a price change in the WHQA market, Eircom is unlikely to stop supplying its own internal demand. Eircom’s subsidiaries are also unlikely to purchase WHQA products from alternative SPs irrespective of the price (typically an internal transfer charge) charged for these products by the upstream arm. Thus, ComReg is of preliminary view that Eircom’s self-supply to its mobile arm and to Tetra is outside the scope of the relevant WHQA product market as such supply is unlikely to be converted to external merchant market supply. Similarly, other MNOs’ internal supply of leased line connectivity to their own downstream mobile operations is excluded from the relevant WHQA product market as such supply is also considered to be captive.’

53. ComReg [5.23] includes self-supply for downstream business access essentially on technical equivalence i.e. the same capacity could in principle be used for business access¹⁰. However, for mobile supply, ComReg uses a rather different test - one of a price change inducing a shift from internal to external supply¹¹.
54. The justification for excluding an assessment of sales to the downstream MNO division as they are ‘captive’ is not self-evidently correct in our view and derives from a narrow view of the relevance of vertical integration or separation. As discussed below, for mobile mergers in both the UK and Ireland, regulatory authorities such as the Commission and the UK CMA have given great thought to the potential for vertical or horizontal foreclosure. The *ex-ante* regime of regulation explicitly addresses notional upstream markets as set out below.
55. Further, to our mind it is also unclear why ComReg would summarily dismiss this set of services which the Commission has explicitly included as relevant to Market 4 in its guidance. We discuss this in more detail below; to our reading the Commission is clear that these sales should be included in a notional market.

¹⁰ This is in any case only partially true as ingress to a specific site by definition is dedicated capacity. A building could of course have a mobile mast as well as a business customer present.

¹¹ Arguably both tests might be regarded as implicit if not explicit in both paragraphs.

56. ComReg rightly notes that there will be a gap between an optimal internal transfer charge and a quasi-competitive price for the same service. We have three points to make here.
57. First, the gap between an internal transfer charge – which should be at real marginal cost of LRIC or even a short run marginal cost – and a regulated ‘quasi-competitive’ price could be very substantial indeed but there is no difference here as a matter of principle between sales to a downstream affiliate and a downstream division within the same organisation¹².
58. It is well established in economic literature that it is possible in principle to replicate integration via contract such as a two-part tariff where the LRIC is applied to the units sold and a lump sum to adjust overall relative profitability. (There are other reasons why integration may be chosen but this has no bearing on the matter here.)
59. Second, the incentives on Eircom to set a very low internal transfer charge are not immediately obvious at least not to the level that in theory the sales are necessarily captive. At the time of the H3G/O2 merger, Eircom was only one of the downstream retail providers and remains the smallest of the main MNOs. It has every incentive in fact to extract as much of the industry profitability from its downstream rivals as possible from the essential upstream input.
60. The solution on optimal pricing is compounded by other factors:
- Eircom actually supplies the upstream inputs for the rival infrastructure operated by Vodafone so it has to balance its prices across the entire portfolio of upstream and downstream services and the mathematics of optimisation is not straightforward.
 - ✂¹³.
 - Depending on whether Eircom has an obligation to supply MNO backhaul at all and if so on what terms, it can price to exclude potential entrants as we discuss below¹⁴.
61. Third, as discussed below, it is important to reflect on the relevant downstream retail market which may well in fact include both mobile and fixed services. ComReg is supposed to look at the relevant retail market which may well extend beyond just fixed access; indeed this is one clear reason why MNO backhaul is actually part of Market 4 in any case.
62. These are all clearly not simple matters and they are outside the scope of BT to address. They are however precisely the sorts of things that NRAs are supposed to look at in detail in the regulatory framework – does the provision of MNO backhaul have features

¹² See for example, Section 31 titled ‘Integration, Decentralization, Transfer pricing, and Related Decisions’ in *Managerial Economics*, Ian Dobbs, Oxford University Press, 2005.

¹³ ✂

¹⁴ ✂

that meet the three criteria test¹⁵? If the answer is negative then a full structural assessment is required.

63. Our view is that there is the potential for both short and long-term consumer harm here from the exclusion of rivals to provide backhaul. In the short term, mobile prices for the industry may be set at higher levels than is required to sustain upstream investment and in the long-term, new entry may be deterred¹⁶.

Commission and BEREC guidance on self-supply

64. The Commission [2, 17] labours here that self-supply has to be linked to the wider issue of potential upstream services across all relevant downstream markets through the creation of a notional upstream market:

‘The correct treatment of self-supply in the market analysis is not only relevant for the question whether the wholesale market comprises only one or multiple network infrastructures. It is also essential in order to carry out a proper market analysis and to identify correctly the competition problems in the market, which need to be taken into account in the assessment of the appropriate remedies.

In addition, in many cases the incumbent operator is the only undertaking that is in a position to provide a potential wholesale service. In the absence of a merchant market and where there is consumer harm at retail level, it is justifiable and appropriate for NRAs to construct a notional market when potential demand exists. Here the implicit self-supply of this input by the incumbent to itself should be taken into account.’ (emphasis added)

65. The equivalence of contracting and integration is in fact confirmed in the new Guidelines by the Commission [2, 29] which sets this out very clearly as follows:

‘NRAs should consider the ability of an operator to self-supply (either through a portfolio of products generated through vertical integration or through the operation of intra-corporate arrangements with members of a wider corporate group) multiple-play services, in markets where such offers are important and/or where a separate retail market could be defined for bundled offers, when compared to the smaller portfolio offerings of its immediate competitors.’ (emphasis added)

66. We believe that the relevant interpretation of self-supply is in fact the combination of the two quotes set out above at [2, 17] and [2, 29]. To our reading, they say that MNO backhaul should be included in the regulatory assessment.

67. We also consider it is relevant for ComReg to recognise that the fact that Eircom has its own downstream mobile arm and that this is something which many of its fixed competitors do not have. This should feed into one or more SMP factors reflecting the overall absolute and relative size of Eircom. Specifically, product/services diversification

¹⁵ As set out in Commission guidance of lack of effective competition and absence of a tendency toward competition in circumstances that could be handled by competition law.

¹⁶ Note the Footnote above where we state that it is our understanding that Eircom does have to offer MNO backhaul albeit only in Zone B.

(for example bundled products or services) - is one of the factors which is cited by the Commission itself in its Guidelines [1, 58] as noted above.

68. As far as we can tell, the Commission [1] does not refer to ‘captive sale’ whilst the Staff Working Document Commission [2, Page 19] refers to captive customers and not to captive sales as such. However this is in the context of customers who are considered captive from their apparent unwillingness or inability to move off legacy networks. MNO backhaul is not in any sense a legacy network even though the technologies being utilised are necessarily evolving over time from SDH to Ethernet. For 5G it is not entirely clear what solutions will be optimal although Ethernet is certainly a strong candidate.
69. The BEREC 2010 report¹⁷ also discusses self-supply in the context of direct and indirect competitive constraints. For example, page 11 discusses the issue of the complexity of price ratios at different levels and how this relates to retail price elasticity. Page 15 discusses the general treatment of self-supply. We do not see anything here which supports the automatic exclusion of MNO backhaul.

Practice in other Member States

70. BT has undertaken some desktop research utilising our knowledge of operating in many countries¹⁸. ✂¹⁹
71. The situation with regard to the relationship between business access, fixed backhaul and MNO backhaul is decidedly mixed with the following outcomes from our research:
- NRAs ignore MNO backhaul in its entirety. Whether this is simply due to inability to analyse the market or a perception that it should not be reviewed in any case is not clear.
 - NRAs ignore MNO backhaul in the market assessment but their SMP obligations spill over to provide a regulatory basis for provision of services²⁰.
 - NRAs that explicitly addresses MNO backhaul but find that backhaul is competitive and no regulatory remedies are needed.
 - NRAs that explicitly address MNO backhaul and find that in some geographies, backhaul is not competitive and regulatory remedies are required. These may be the same or different to those of business access.

¹⁷ Available from the BEREC website.

¹⁸ See also the following helpful report by Analysys Mason on MNO backhaul - <https://www.vodafone.com/content/dam/group/policy/downloads/analysys-mason-final-report-vodafone-phase2.pdf>

¹⁹ ✂

²⁰ We understand that in the 2016 draft BNetzA Decision in Germany, the German NRA considers mobile backhaul a service for which network access may be needed but one that does not constitute a market of its own or warrants any special remedies. When a mobile operator wishes to use network capacities of Deutsche Telekom for mobile backhaul, they can use the standard regulated products that Telekom must offer on markets 3b and 4 i.e. Layer2 or Layer3 bitstream access, or SDH or Ethernet leased lines with speeds between 2 Mbit/s and 155 Mbit/s. Wholesale access products outside of this scope (e.g. leased lines with speeds beyond 155 Mbit/s) are available too but not regulated. See the Cullen website which now includes the draft BNetzA Decision http://www.cullen-international.com/product/applications/MarketAnalysis/ManalDE_ref.htm#m12007

72. In short there is no common position here as it is not always evident whether the conditions for MNO backhaul played a specific role in the findings. There are some general themes however which come out from our research here.
73. First, it is very evident that MNO entrants who were not affiliated with incumbents tended to use microwave for the early generations of mobile technology. This was cheaper than using leased lines at high and typically unregulated prices from incumbents.
74. Second, the advent of LTE and 3G/4G has made this solution unviable generally as the capacity across microwave is usually insufficient and there is no alternative to moving to a fixed solution. A number of NRAs like ComReg and Ofcom have consciously separated wired and wireless technologies into two economic markets.
75. Third, there appear now to be a complete range of regulatory solutions which are highly dependent on contingent regulation in related markets. It appears that in France for example, the role of FttH and the role of duct access and dark fibre have also played a related role in MNO backhaul²¹. In Sweden, there are a large number of local municipalities who are offering access based services broadly on similar conditions to BT Openreach. It is understood that provisions of service are such that there are generally no special requirements to impose MNO backhaul obligations as such²².
76. Fourth, where NRAs have looked at competitive conditions for MNO backhaul and decided that regulation is appropriate e.g. Italy, Portugal, Spain²³, and UK. Here we cannot see that they employed the ‘captive sales’ argument as a possible reason not to regulate²⁴. The decision not to regulate such as in Netherlands²⁵ and Sweden has been

²¹ See Commission comments re Case FR/2017/2032 dated 24th December 2017 available on Commission website. Note the Commission specifically wanted ARCEP to impose on Orange an obligation to provide a non-discriminatory access to its fibre network based on equivalence of input; and fibre-based bitstream services. In its consultation on the market for high quality services (market 4) as of 2017, ARCEP proposes to maintain a finding of SMP and obligations for Orange to provide wholesale fibre-based leased lines. Dark fibre is not included in the relevant market for high quality access services. ARCEP notes that it is not necessary in the context of market 4 to duplicate (passive) remedies that have been applied in the context of market 3a and symmetric regulation.. ARCEP also issued a consultation on its planned analysis of the wholesale local access market in July 2017. It proposes to maintain the existing LFO (fibre optic line) obligations and lift restrictions on usage such that it could be used for any backhauling service including mobile and increase the maximum length offered (currently constrained to 40km). see - https://www.arcep.fr/uploads/tx_gspublication/adm-hd-thd-fixe-3a-consult-juil2017.pdf

²² <https://www.pts.se/contentassets/1249d5ed1eca4e5e996928aa6117901d/beslut-m4-hogkvalitativt-tilltrade-170220.pdf>

²³ Note that market analysis of leased lines in Spain is not yet included in Market 4 but in the old Market 7. The last decision that can be found in <https://www.cnmec.es/ambitos-de-actuacion/telecomunicaciones/analisis-mercados> Remedies which apply to MNO backhaul are the same as those of PPCs including - Provision of lines up to 1 Gigabit (10 Gigabit only subject to reasonable prices); Price regulation (cost orientation for SDH and retail minus for Ethernet); Reference offer; Prohibition of anticompetitive practices (i.e. margin squeeze); Accounting separation; Non -discrimination.

²⁴ A useful summary of MNO backhaul conditions for Italy in particular is contained on the Cullen website - http://www.cullen-international.com/product/applications/MarketAnalysis/ManalIT_main.htm#m42014

²⁵ See Cullen website. Note in NL there is dark fibre mandated in the business access segment and for fixed backhaul but not for MNO backhaul.

based on the normal approach to analysing markets and again we have not spotted the ‘captive sales’ argumentation. In some cases, active services are regulated whilst in other cases it is passive services or indeed a combination of the two.

77. The findings of ANACOM in Portugal are very interesting here to explain why MNO backhaul should be regulated and the following points are made in their Decision²⁶:
- According to the market analysis, in 2013 and in order to reinforce the capacity of mobile data and the improvement of the network quality, MEO (MNO) had already guaranteed fibre coverage of mobile base stations by 94%, all with IP-based connection (page 75).
 - ANACOM concluded that MEO (MNO) has SMP in all the relevant markets defined (pages 116 to 131).
 - ANACOM conducts a comparison with the UK, stating that “in other countries, in particular the United Kingdom, the Regulatory Authority failed only to regulate the backhaul service and collocation in SLS [submarine landing stations], given that collocation was a common business practice and as such there was competition in the provision of backhaul services, which resulted in significant price reductions” (page 156).
 - As a consequence, ANACOM decided to maintain all generic obligations for wholesale access to and use of specific network resources imposed in the former market analysis (page 157), as well as to impose additional remedies (pages 154-187).
78. In summary, the situation is that there is wide variation in domestic circumstances which has meant there is great variation in outcomes for the regulation of MNO backhaul. This appears to range from no regulation either by default failure to look at the issue at all or at the other extreme where there has been intense analysis and it is established that there actually is real competition or other arrangements in place which ensure non-discriminatory supply. There is no support for the captive sales argument not to look at MNO backhaul purely as a matter of principle.

Implications of the Hutchison/O2 merger

79. BT had anticipated that the merger between Hutchison 3G and Telefonica would likely strengthen the position of Eircom in upstream backhaul markets as the following extract of our letter to the Commission dated 4th February 2014:

‘The growing importance of MNO customers to suppliers of wholesale leased lines cannot be overstated. Leased lines are a crucial enabler of mobile broadband and the last few years have seen explosive growth in the take-up of mobile broadband with a c. 70% annual growth rate across Europe in 2012. With the deployment of new 4G/LTE networks and the exponential growth in mobile data demand, demand for mobile backhaul is to increase significantly. This will require MNOs to increase the capacity of their networks by consuming higher bandwidth leased lines. This trend, also recently confirmed by Ofcom in its 2013 leased line market review²⁷,

²⁶

https://www.anacom.pt/streaming/FinalDecision1sep2016Market4.pdf?contentId=1400979&field=ATTACHED_FILE a useful summary in English is contained at <https://www.anacom.pt/render.jsp?contentId=1395262>

²⁷ <http://stakeholders.ofcom.org.uk/binaries/consultations/business-connectivity/statement/Sections1-4.pdf> see for example, paragraph 2.18.

illustrates the importance of MNO customers to wholesale suppliers of leased lines in Ireland.

Meteor is owned and controlled by Eircom which is also a supplier of wholesale leased lines to each of the four MNOs in Ireland. BT is not an MNO but competes with Eircom in the supply of wholesale leased lines to MNOs. ✂²⁸

80. In its clearance of the merger²⁹, the Commission (669) suggested that the merged entity would reduce Eircom's ability to compete at the retail level as the merged parties would have incentives to frustrate the Mosaic agreement. Absent the merger, Eircom would no longer need to rely on Vodafone for roaming (673).

81. The two sets of commitments were simultaneously designed to assist Eircom but also to support new MVNO entry where the presumption was that MVNO entry would resolve any regulatory issues on call origination and network access³⁰:

(1026) Therefore, the Commission considers that by ensuring attractive wholesale access to two new MVNOs and by enabling Eircom to become a credible MVNO host the Final Commitments address any potential concerns on the Irish wholesale market for call origination and network access.

82. The Commission explicitly noted (1018) that Eircom did not need any new spectrum and then made this point regarding Eircom's overall market position i.e. its relative and absolute size and specifically identified strength in backhaul:

(1019) The Commission also notes that Eircom has other strengths which give it a sufficient ability to compete in the retail mobile telecommunications services market. Eircom is the fixed incumbent operator, the market leader in fixed telecommunications in Ireland, with a valuable fibre network which gives it a competitive advantage in the provision of backhaul services for its mobile activities. In addition, Eircom is favourably placed in being able to leverage its position in the fixed market to cross- sell triple and quadruple play bundles to Vodafone customers. (emphasis added)

83. ✂³¹. ✂.

Eircom's current position in MNO backhaul

84. For all intents and purposes, as far as we can judge, Eircom has captured the entire MNO backhaul market nationally i.e. not just in Zone B but also in Zone A, effectively acquiring a 'super-dominant' position from the provision of both active and passive services at wholly unregulated charges. This is a sign of its absolute and relative size and ability to leverage economies of scale and scope via its ubiquity. These are generally signs of market power in terms of SMP assessment and which ComReg is wrongly ignoring.

²⁸ ✂

²⁹ Case No COMP/M.6992 Hutchison 3G UK/Telefonica Ireland Merger Procedure Regulation (EC) 139/2004 available from Commission website.

³⁰ It appears to have been implicitly assumed that if these were resolved then backhaul would also be competitive. This is not the case in fact and indeed TERA delineates Enet's network according to whether competitive backhaul is deemed to be present.

³¹ ✂ and ✂

85. We draw ComReg's attention here to the discussion in the new Commission SMP criteria Annex 2 of long term and sustainable access agreements and contractual relationships leading to market foreclosure, both of which seem highly relevant indicating dominance. For MNO backhaul, Eircom unquestionably is 'an unavoidable trading partner' in many parts of Ireland and which is one of the features of the new SMP criteria of Relative size of undertakings.
86. BT and other potential backhaul operators have in effect been frozen out of this marketplace as can be judged by seeing what has happened on the two net sharing platforms.
87. ✂³²: ✂.
88. Vodafone has just over 40% of the retail mobile market by revenue. ✂³³
89. ✂
90. Finally, we note that in the equivalent leased line market review in the UK, Ofcom reviewed the impact of BT's takeover of EE in the light of comments from the CMA³⁴. The takeover did not change the underlying regulatory assessment by Ofcom of including MNO backhaul in its market review.

IV. A PLAUSIBLE FORWARD MARKET PROJECTION

Source of gains in Eircom's market share

91. We are unable to discern any forward look in ComReg's Consultation that offers any indicative guide as to how Eircom's market position might be expected to develop over the coming years.
92. ComReg [Appendix 4] provides a few mainly redacted statistics which shed no real light on what might happen. In our April 2018 submission we have indicated a growing reliance on Eircom [12-17] and now provide an indicative guide in light of expected market developments in the following:
- The migration of TI to MI services. Eircom has a very high share now of residual TI circuits and it is likely that these customers will be less open to move to other suppliers.
 - Exclusion of other operators that are not directly relevant (for example those that serve international 'b'-end customers primarily) but that were included and thereby depressed the shares of the remaining operators in Tables 15 and 16 of the Consultation.

³² ✂.

³³ ✂

³⁴ See Annex 7 of the 2016 BCMR Statement available on the Ofcom website. This position did not change when Ofcom issued its Temporary Statement under emergency powers in November 2017. Note also paragraph 15.53 (b) in the Final 2016 CMA Report clearing the takeover where for backhaul the CMA explicitly included dark fibre in the relevant product market along with Ethernet active leased lines. Available from CMA website.

- Loss of access in Zone A. The proposed deregulation in Zone A will likely lead to exit for ANs such as BT not only in Zone A but also contingent circuits in Zone B where multi-site contracts are at stake.
- Rise in MNO capacity. Eircom can expect to benefit from high growth in MNO backhaul demand and for economies of scale and scope in aggregated backhaul.

Forward forecast of Eircom market share

93. In deriving a forward view of the possible change in Eircom’s market share to 2021, we have made some reasonable assumptions and proxies. Accepting the lack of precision, the model serves to demonstrate a plausible range of Eircom’s service share³⁵. Our starting point is to take ComReg’s finding [4.223] ‘that no SP has a market share above 45% in Zone A’. Here we presume Eircom to be the SP referenced and with a market share above 40%. Our baselines are 40.5% and 44.5% - towards the lower and upper ends of the range.

94. The build-up of the likely growth in Eircom’s share in Zone A is shown below with separate representations for the alternative lower (40.5%, Figure 1) and upper (44.5%, Figure 2) baselines. In deriving a forward view of the possible change in Eircom’s market share to 2021, we have made some reasonable assumptions/incorporated reasonable proxies. Accepting the lack of precision, the model serves to demonstrate a plausible range of Eircom’s service share. In Figure 3, we model the lower baseline for Zone A/Zone B.

95. ✂.

96. ✂.

✂

Figure 1

Figure 2

97. ✂.

✂

Figure 3

Summary basis of calculations

98. ✂.

99. ✂.

³⁵ The share projections are based on the regulation that ComReg is imposing are compatible as we understand with the representation of shares in ComReg 2018 Table 15. The total Eircom share is made up of internal putative or notional sales to its retail arm and its external wholesale sales. Our chart also includes MNO sales excluded by ComReg.

100. ✂.

101. ✂.

102. ✂.

V. PROPOSALS FOR FURTHER ANALYSIS ON GEOGRAPHIC MARKETS AND SMP

Principles of geographic market analysis

103. Many commentators have suggested that in an ideal world, each customer identified for sake of argument as associated with a unique building, would constitute the relevant unit of measurement. In principle, each building could be a separate economic market. In principle and subject to transactions costs, each supplier could negotiate with each customer. In practice, all operators offer a mixture of bespoke retail services and standard services depending on the size of the contract i.e. the likely revenue. Here the contract defines both the product and the geographic unit which are unique.
104. Putting the issue of negotiation and CBP to one side as the exception rather than the norm, geographic market boundary analysis tends to follow SSNIP type argumentation. According to the Hypothetical Monopolist Test theory of market boundary analysis when allied to geographic boundaries, the existence of a market is identified on the demand side by the willingness of a customer to move location to switch supplier under a SSNIP and similarly on the supply side to extend network infrastructure.
105. It is usually assumed that neither demand nor supply side switching will take place in fact with a modest 5-10% increase in prices. However, notional *ex ante* demand side geographic 'switching' might arise when a customer has not yet decided on a new location and the availability of supply of telecoms is an important factor in the selection of the site itself³⁶. However, in most circumstances, customers will not move location to get a 10% saving on their telecoms supply. Therefore, other than some specifically identifiable buildings, the basic assumption must be that the demand side geographic switching does not happen.
106. Supply side geographic switching in the form of network extension is inherently risky as our previous submission has explained, both where it is to meet anticipated future demand but even to serve existing customers who may subsequently choose to migrate to alternative suppliers or services in the future in any case. A SSNIP of 5-10% is of little relevance where long run capacity has to be installed.
107. The geographic analysis is therefore, at least in the first instance, an analysis of existing buildings and the task is to aggregate these into groups which have the same conditions of supply for equivalent products, that is homogeneous conditions of

³⁶ Technically, it is also possible analysis the network nodes of operators has a high degree of demand side geographic switching as the network operators will undoubtedly select their network nodes according to the availability of competitive connectivity whether supplied internally or externally. This is also often the case for data centres and clusters of like buildings will tend to attract more suppliers leading to a virtuous circle of high demand and high supply.

competition and this is well established in Commission guidance and case law. In other words, the emphasis moves directly toward the SMP assessment effectively bypassing the SSNIP framework.

108. The problem arises as soon as some sort of ‘pragmatic’ geographic areas are defined such as electoral areas, census areas or postal areas as the basic unit of measurement, as very quickly it becomes apparent that many of these areas do not end up with even their smallest units being homogeneous. In other words, there can be a high degree of heterogeneity of competitive conditions within the chosen area as well as between groupings of areas’

109. We make the following specific observation here. We note that TERA Page 14 asserts that SAs are sufficiently small to allow a reasonable homogenous analysis within each one. This however is not actually proven although it is certainly the case that much larger geographic units will frequently not be homogenous. Further, much of the analysis is on the synthetic database (TERA Page 19 ‘The 15k Organisations’). The likely ratio of ‘synthetic’ buildings in the TERA algorithm to actual MI connected buildings is probably very high, but we do not have the breakdown of buildings to see whether that is the case. We note that ComReg 2018 (Appendix 6 Page 508) suggests that Eircom has a higher overall share based on circuits than on connected buildings. However, given that it applies to SAs where there are less than 4 MI connected buildings it seems likely that the SAs will have fewer relevant MI buildings on average than where there are 4 or more MI connected buildings

Using buildings as the unit of analysis

110. It appears that most NRAs have shied away from using buildings as the basis of analysis on purely pragmatic grounds. However, in our view this does not mean that analysis of competitive conditions on the basis of individual buildings is ruled out completely and contrary it could well lead to a more accurate analysis and final structure of geographic regulation.

111. In most cases this has been a result of the absence of reliable data at the building level. However, this appears not to be the case in Ireland and we note that TERA has in fact been able to geo-coded every relevant building and those taking MI circuits are also uniquely identified. This is an extremely useful dataset and we suggest that it would be instructive to group individual buildings together which have similar conditions of competition even if they do not necessarily fall within the same SAs such as data centres.

112. Fundamentally, an analysis of the strength of Eircom to serve buildings according to their location and the bearer bandwidth - would add a great deal to our understanding of the likely areas of homogenous competition. The Commission [2, 18] has noted that there is an inherent interaction between product and geographic markets where there is a bandwidth ‘break’. In these circumstances, it may be appropriate to allow the

geographic markets to vary as competitive conditions may not be the same for if there are two product markets and a break in between³⁷.

113. Our pragmatic suggestion therefore is to start the analysis by analysing the presence of competitive networks using all business access buildings which have MI connections and where no network expansion is needed although it is worthwhile to assess how close they are to potential suppliers. To test the hypothesis of bandwidth breaks, the buildings could be split into two groups depending on whether they include a high bandwidth circuit³⁸. It would then be feasible to produce 'heat maps' of more or less competitive areas by number of serving ANs within a given radial distance and then see how these relate to SAs or other geographic units. In principle, this analysis could be extended in the same way for both LLU and MNO backhaul.
114. We suspect that if all buildings with high demand of above 1G (or possibly $\geq 1G$) were separated out from the remaining MI connected buildings, the consequential analysis of remaining buildings and associated SAs would in fact be very much simpler as for the vast bulk of the country, Eircom will be the primary supplier. Analysis would include computation of service shares and HHI values similar to those by areas as discussed below.
115. However, absent actually undertaking this exercise, it is impossible for us to predict what it will show but likely there will be areas which are 'honeypots' for sites with high bandwidth and which will have buildings competitively served with lower bandwidths. It is probable that these will be quite limited to some very specific areas. It might even be appropriate to define a national market for lower bandwidth services under these circumstances. Conversely, it might be appropriate to define a national market for very high bandwidth services but this is not at all self-evident.
116. In conjunction with a more detailed full SMP assessment, we believe that using this approach the final set of SAs would likely comprise three groups or Zones:
- Both high and lower bandwidth services regulated dependent on geography.
 - Neither bandwidth regulated dependent on geography.
 - Only lower bandwidth services regulated quite possibly in a national market.

Using SAs as the unit of analysis

117. We understand why ComReg has chosen to use a use SA as the unit of analysis but disagree with the current approach used where there are multiple different thresholds used to categorise each SA into either Zone A or Zone B.
118. We support use of the proximity of ANs to connected buildings as indicator of competitive conditions in a given SA. We think this could however be modified to include a weighting of the number of circuits sold at each connected building which

³⁷ This was an important conclusion of the CAT when it rejected Ofcom's 2016 BCMR product and geographic markets.

³⁸ The UK break has been established at 1G but conditions may be different in Ireland and possibly analysis ought to look at three groups of <1G, 1G and >1G. Note these are the retail bandwidths not the underlying bearer bandwidth.

would then give a more accurate indicator of competitive conditions in the SA, rather than the current method which treats all buildings equally.

119. As discussed in our April 2018 Submission [paragraphs 48-65], we are very doubtful that the synthetic database is giving robust conclusions on homogeneity of competition within the SAs and leading to correct SMP designations. Our suggestion therefore is to use the form of the TERA algorithm Figure 11 on the Left Hand Side of a certain percentage (75% here) of connected Premises within a revised serving range of a variable number of ANs. This would be applied to all MI connected buildings in all SAs and we would drop the synthetic database. We also question the validity of including all SAs in Zone A where there are no actual MI customer nor any potential customers (in the synthetic database) purely on the basis that 2 ANs pass through the SA.
120. At the minimum the results of the synthetic database should be corroborated by analysis on actual MI circuits and/or the building analysis discussed above noting the exclusion of SAs with no existing connections where regulation is necessary. This could be achieved by looking at the correlation of the results from each database (synthetic vs. actual) in areas where there are sites from both sets. It is not reasonable to assume that all multi-site customers with an MI connection in at least one national location will look to upgrade all sites to a fibre connection at all, or even within the timeframe of this market review.
121. There are additional changes that we have suggested in our response to the Consultation. First, we believe that ComReg should treat all of Enet as only one access network irrespective of the position of state aid and whether competitive backhaul is present³⁹; there is simply insufficient evidence to show that it is able to support multiple downstream providers. Second, ComReg should exclude all irrelevant ANs for example that are only serving international 'b' ends of circuits or are providing services which are not technically comparable with layer 2 Ethernet or optical services.
122. The challenge then is to find groupings of SAs which are sufficiently homogenous within the groups but differ significantly between them that will be a guide to the consequent SMP assessment. We suggest undertaking the following analysis first by grouping the SAs as follows:
- Which have at least one MI connected building and which could then be sub-divided into -
 - Those which have between 1-3 connected buildings. (The 75% threshold would need to be amended.)
 - Those which have ≥ 4 connected buildings.
123. This procedure further could allow for the impact of varying the economic dig distance against the number of ANs to see how indicators of competition such as service shares and HHI values vary. Table 1 below provides the framework with which useful information such as service shares and HHI could be populated. We imagine that this analysis would not be time consuming or difficult to do.

³⁹ TERA Report Page 8.

124. For avoidance of doubt, whilst we have shown the possibility of using a 50m radial dig distance, we are categorical that this is a gross over-estimate of economic presence as we set out in our April submission [Section VI and Appendix 3]. It may however serve a purpose to evaluate the size of potential marginal customers as discussed below.

Table 1**Assessment of competitive conditions in SAs****Average number of ANs present⁴⁰**

Dig distance	0-1	1-3	4+	Total
Pre-ducted buildings (zero dig distance)				
Up to 20m radial distance				
Up to 50m radial distance				
Total				

125. By grouping SAs according to similarity in HHI values and service shares, this might form the start of a subsequent SMP assessment. From such results it would be possible to see how the service shares (or HHI) varies with both dig-distance and number of ANs. It also gives insight into the competitive conditions in the “marginal” areas which are included when the distance criteria is relaxed. It may be the case that this would offer a similar result to that working on buildings directly as suggested above.

126. The impact on marginal buildings/customers is actually the most important aspect of this analysis and the degree of sensitivity here for example to dig distance is critical in establishing the robustness of the conclusions drawn on effective competition⁴¹. Table 2 below can be derived therefore from Table 1.

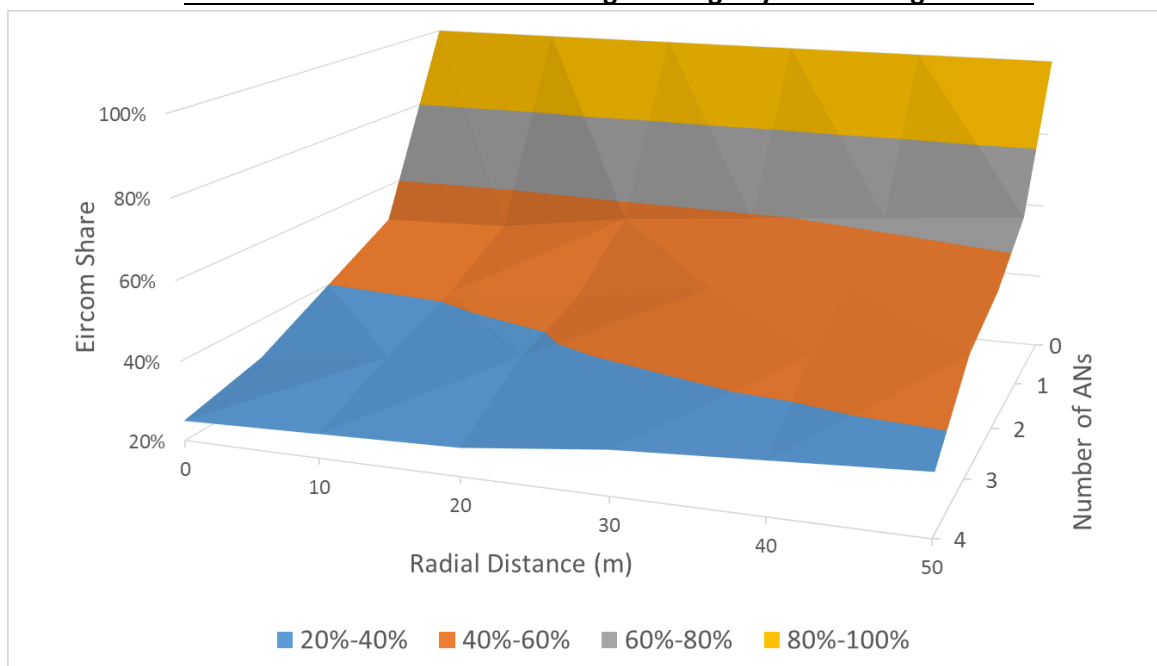
⁴⁰ This would be computed by the weighting of buildings served. In the case of pre-ducted buildings as an example, if there were 10 MI connected buildings and ANs were at 3 of them, the average AN count would be 0.3 and it would fall into the first cell. It is unlikely that the average number of ANs pre-ducted to buildings (i.e. zero distance) would be greater than 1, but we have included this row for completeness. As radial dig distance becomes more positive, this value will rise. So for example in a SA with 10 sites, with 4 alternative networks all of which have built to within 50m of a cluster of demand of 6 of the sites, with one of them additionally serving 2 other sites, the average would be $((4 \times 6) + (1 \times 2)) / 10 = 2.6$ ANs per site.

⁴¹ In 2008 Ofcom undertook exactly this kind of analysis to see where a possible 40% service share threshold might lie in terms of dig distance and number of ANs. See Annex 6 of the 2008 July Consultation available on the Ofcom website. In 2015, Analysys Mason also prepared a Paper on the issue of sensitivity of dig distance to AN presence which is available on request.

Table 2**Assessment of competitive conditions in SAs for marginal buildings**

Dig distance	0-1	1-3	4+	Total
Not pre-ducted but within 20m radial distance				
Between 20m and 50m radial distance				
Total				

127. Figure 4 below shows a schematic of what ComReg might find as these variables are flexed and the Eircom service share computed from different groups of SAs. In practice the actual surface of the distribution might look rather different. A similar chart could be computed for HHIs.

Figure 4**Schematic of how service share might change by ANs and dig distance**

128. As an illustration, we have generated the shape of the surface of Eircom's share in each grouping of SAs as the thresholds for radial distance and average number of ANs are varied. Where no ANs are present at the buildings in these SAs, Eircom's share will be 100% by default and this extends all the way at the top of the chart. As the number of ANs increases, Eircom's share will fall and this is seen as the top line at 100% 'drops down'. As the radial distance is increased, additional buildings will be included where ANs are not currently present, and therefore Eircom's share will increase which can be seen from moving from the left hand side of the chart to the right hand side and blue turns to orange, orange to grey and grey to yellow.

129. The benefit of undertaking this exercise would be considerable. It would show the extent to which the presumption of homogeneity from SA groupings are likely to be reasonably robust or not. Specifically, it would show the sensitivity of varying dig distance and the number of ANs and give a fair indication of where there is uncertainty as to whether competition is likely to be effective or not.
130. In turn this would allow ComReg to tailor remedies respecting the principle of proportionality. We draw attention here to what the Commission [2, 21] states:

‘In a situation where NRAs could not identify substantially and objectively different conditions stable over time, which are sufficiently clear in order to define sub-national markets, the existence of geographically differentiated constraints on a SMP operator who operates nationally, such as different levels of infrastructure competition in different parts of the territory, are unlikely to be strong enough to justify the finding of distinct markets. If, however, an operator is found to have SMP in a relevant market, such geographically differing constraints are more appropriately taken into account at the remedies stage by imposing a geographically differentiated set of obligations.’ (emphasis added)

ANNEX 1**BARRIERS TO ENTRY IN THE REGULATORY SMP ASSESSMENT**

1. There are in fact many definitions of what might constitute a BTE and some of the differences are somewhat subtle. The following text in Figure 5 sets out the basis of a number of generic definitions albeit coming from a USA perspective rather than one of the EU regulatory framework⁴². It is however feasible to see how the policy goals of effective competition in downstream retail markets relates to these different definitions and we highlight the following points.
2. First, we believe that the identification of supra-normal profits (Bain) definition is highly relevant here and the apparent absence of any such analysis by ComReg on Eircom's profitability in either of the two Zones is a major weakness. ComReg places too much reliance on just two indicators – service shares and network expansion. The former is not well defined as different bases may give somewhat different conclusions and the latter is materially flawed in our view from assumptions about dig costs in particular which are wildly over optimistic.
3. If indeed there are economies of scale and scope, then it is quite possible that ComReg is in any case making very high returns in Zone A as unit costs will likely be lower (our submission [162]) and pricing will likely not vary significantly from Zone B⁴³.
4. Second, we believe that the MacAfee definition of an anti-trust BTE is the most relevant insight here and critical in this marketplace. The most important BTE arises from the First Mover Advantage (FMA) which generally Eircom can acquire as the incumbent having ubiquity and which gives a material time advantage in delivery of service as we set out in detail in our submission [149-154, 155-157 and paragraph 150 in particular]⁴⁴.
5. Third, the presence of economies of scale and scope has a compounding impact here. The FMA BTE does not come from the fact that costs are sunk as such - which will be the case for both incumbent and entrant - but it is due to the timing of the sunk costs incurred along with economies of scale which makes entry so problematic. The Bain definition also comes into play here as the discussion at the end of Figure 4 sets out.
6. Economies of scale and scope arise not just from provision of the focal product but as noted above, the Commission [2, 27] is clear that it is important to see how presence in neighbouring markets affects these factors. Here we would highlight not just TI services but also a wider range of access services where they compound to assist Eircom.

⁴² The text here draws on the Paper by P Richards in Competition and Regulation in Network Industries, Volume 8 (2007), No. 2 'Technical progress, market evolution and the regulation of the electronic communications sector in the EU'. Full Paper available on request. Figure 4 is a direct extract from this Paper.

⁴³ There is of course a potential circularity here based on existing regulation. ComReg in 2016 in its assessment of pricing behaviour [6.127] looked at changes over time rather than geographic variation as such.

⁴⁴ It will not always be the case that incumbents are in fact ubiquitous for provision of fibre services and in rural areas in particular it may well be necessary to extend the duct network. However these are likely circuits which are out of scope for entrants in any case.

Figure 5**The Basis Of Barriers to Entry In Economic Theory**

It may be judged that over the last 50 years, the economic notion of a BTE has evolved to be a more subtle set of ideas rather than a unified economic theory as such. This change in emphasis is in line with the parallel development of economic theory of industrial structure into game theory out of the simple SCP paradigm.

The literature on BTE is now often one of comparing different approaches and assessing whether or not they are welfare beneficial if used in a policy setting. In other words, the debate is as much about the framework as to the exact circumstances which may justify regulatory intervention; it is now a debate as much on first principles rather than empirical evidence.

This tendency toward a less prescriptive analysis may be seen from consideration of the following influential ‘definitions’ of what constitutes a barrier to entry:

- Bain [1956]. A *BTE* is anything that allows incumbents to earn super-normal profit without inducing entry.
- Stigler [1968]. A *BTE* is a cost that must be incurred by entrants that is not incurred by those already in the industry.
- Fisher [1979]. A *BTE* is anything that adversely affects social welfare.
- Von Weizsacker [1980]. A *BTE* is a cost that must be incurred by entrants that is not incurred by those in the industry, and which has an adverse effect on social welfare.
- MacAfee et al [2004]. An *economic BTE* is a cost that must be incurred by entrants that is not incurred by those in the industry, whilst an *anti-trust BTE* is a cost that delays entry and reduces economic welfare relative to immediate and equally costly entry.

Some economists emphasise the impact of a *BTE* on the industry (proxied by the focus on profit) whereas others take either a more consumer-centrist view (consumer surplus in effect) or a total welfare view (consumer plus producer surplus). The point is that if one disagrees with the initial premise (the focus alone on consequences for consumer surplus), then this casts doubt on the appropriate definition of a *BTE*. This point is recognised by Schmalensee [2004] who notes that, if one takes a total welfare perspective, then neither the Bain nor Stigler definitions are satisfactory, as they are centred purely on profit.

There are other important areas of difference. Some economists view *BTE* as arising from asymmetries in costs arising from first mover advantages, whereas others take a broader view which might include regulatory barriers and switching costs of consumers, again potentially arising from the limited choice of an original monopoly supplier protected by regulation.

The concept of a ‘barrier to entry’ is therefore rather like the concept of ‘price discrimination’; that is, it is possible to offer a variety of definitions, but there is no obvious *a priori* reason to prefer one to another unless one first recognises that there must be an underlying *purpose* for the definition. This in turn centres on the public policy goal of the issue in hand which is a value-based assessment – there is no one unique correct answer.

To give an example of why this may arise, consider the case where firms must incur a sunk cost to enter an industry, where all operational firms have zero operating costs, and competition post entry is Cournot. Stigler’s definition suggests there are no barriers to entry so long as entrants sunk costs are the same as the incumbent’s sunk cost, so there is no barrier to entry on this definition. However, the Bain definition recognises that, *looking to effects*, the incumbent has already sunk its costs whilst the entrants are still deciding whether to or not. Sunk costs and economies of scale can deter entry – and hence constitute a *BTE* under Bain’s definition.

7. The BTE literature is effectively a set of economic ideas with which to frame a structural assessment. It is important not to lose sight of the reality on the ground here. Our April 2018 submission [Sections IV, VI and Annex 3] – provided copious evidence of material BTE which directly fit the definitions as discussed above. It is critical to appreciate that these are as much in Zone A as in Zone B. Their relevance to the SMP assessment is fundamental to augment the information that ComReg has collected for example on service shares and to look at the position of market power ‘in the round’ across many sources of evidence as the Commission has required.
8. In summary, our view is that ComReg’s SMP assessment is not really capturing the structural aspect of BTE in this sector and does not provide a picture of the dynamics which economic literature and Commission guidance indicates is needed. A very different picture would likely emerge in much of Zone A when these are taken into account and when a more accurate algorithm is used to classify SAs as we discuss in Section V.

ANNEX 2**COMMENTARY ON THE NEW COMMISSION SMP CRITERIA**

1. We provide some thoughts on three of the new SMP criteria now identified by the Commission and how some of the relevant case law may be applicable to telecoms.

Relative size (in addition to absolute size) of undertakings

2. From what we understand, the addition of this “relative” size element captures a pre-existing consideration seen in the context of market share assessments i.e. that it is not only the size of the undertaking but also the size of its competitors that matters in determining the market structure and relative importance of various operators in the market (see e.g. Commission [1, 54]. The recent Article 102 cases continue to consider relative size in the dominance assessment by reference to market shares.
3. This includes the case of Google (COMP/39.740, decided 27 June 2017). Relative market share was the primary factor used in calculating Google’s market dominance in this case. The Commission compared Google’s national market shares for general search services to those of its competitors, none of whom had a market share exceeding 4.1% in any of the 5 countries analysed. Google, by contrast, had market shares of between 84.6% and 91.3% in those countries (para 277).
4. The Commission also made a useful general comment on its attitude towards calculating dominance through market shares (Para 266):

“One important factor is the existence of very large market shares, which are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position. An undertaking which holds a very large market share for some time, without smaller competitors being able to meet rapidly the demand from those who would like to break away from that undertaking, is by virtue of that share in a position of strength which makes it an unavoidable trading partner and which, already because of this, secures for it, at the very least during relatively long periods, that freedom of action which is the special feature of a dominant position. That is the case where a company has a market share of 50% or above. Likewise, a share of between 70% and 80% is, in itself, a clear indication of the existence of a dominant position in a relevant market. The ratio between the market share held by the dominant undertaking and that of its nearest rivals is also a highly significant indicator.” (emphasis added)

Long term and sustainable access agreements

5. The EDF case cited below is the only recent A102 case where an undertaking was found to be dominant on the basis of its conclusion of contracts with downstream operators. In the other examples set out below, dominance might equally fall under the ‘control of infrastructure not easily duplicated’ criterion.

Case law. Long term electricity contracts in France (EDF) (COMP/39.386, decided 17 March 2010)

6. The Commission found that EDF may have abused its dominant position in the relevant market by concluding contracts in France with large industrial customers of electricity which, by their scope, duration and nature, foreclosed the market for the supply of electricity to those customers, both to firms wishing to operate as principal suppliers, and to firms wishing to operate as secondary suppliers. EDF also imposed resale restrictions in its contracts for the supply of electricity to large industrial customers in France.
7. Note that the above practices were set out under part of the decision labelled “practices giving rise to competition concerns”, and so were not expressly taken into account in the Commission’s calculation of dominance. Nonetheless, this case implies that the ability to enter into restrictive contracts with customers (who could potentially act as competitors via the resale of electricity) is in itself an indication of dominance.

Case law. Slovak Telekom (COMP/39.523, decided 15 October 2014)

8. Slovak Telekom (ST) was found to be dominant in the wholesale market for access to unbundled local loops (ULLs), due to the fact that it was the owner of the only nationwide local loop network. As a result, the only alternative to ST’s wholesale broadband access to ULLs was for operators to roll out their own access network. The very existence of these access agreements with other operators therefore supported the Commission’s conclusion that ST held a dominant position in the market (para 279).

Case law. See also Telekomunikacja Polska (COMP/39.525)

9. This concerned a Polish telecoms company found to be dominant on a similar basis to ST.

Contractual relationships that could lead to market foreclosure

Case law. German electricity wholesale market (COMP/39.388, decided 26 November 2008)

10. The Commission found that the market was collectively dominated by the three operators E.ON, RWE and Vattenfall Europe; this view was partly based on the fact that these operators were linked by network of agreements concluded between themselves on production and wholesale supply. These structural links would have allowed the operators to adopt a common policy to raise prices, and was therefore evidence of their dominant position. (para 20)

ComReg & BT Meeting 21st June 2018 to follow-up on BT Leased Lines Submissions

Venue – ComReg

BT Notes and Actions from the meeting - Issued 10th July 2018

Theme	Meeting Notes	Follow-On/Notes
General	ComReg confirmed that they would treat our Supplementary Observations as part of our submission	
	BT to share the Powerpoint slides with ComReg	Sent 27 th June
	BT to share the Excel workings behind the Forward Look	Attached
	✂	✂
The Model	ComReg acknowledged that no service share trend analysis was undertaken but expect to be able to provide some in the future as they now have 2 data points (SIR 2016 and 2017)	
	ComReg shared their plan to do some work on service share, not just building share.	We request that ComReg clarifies this – is a service equivalent to a circuit that would be included/excluded based on its nature – say, wireless, broadband, TI, Ethernet leased lines
	ComReg acknowledged a clearer explanation of the TERA algorithm and its justification is needed for stakeholders to understand the implications of its workings	
	The coverage of Zone A: The Consultation proposes that only 1/3 rd of the market would be regulated	In the UK, over 85% of the market is regulated (up to 1G). It is odd to expect that Ireland would be regulated to such a minimal extent (33% vs 85%). In the UK, Virgin Media can reach approximately 90% of the UK market with their L2 solution. Even with such competition, the market is largely regulated
	Synthetic Database	BT shared briefly their thoughts on the inclusion of the synthetic database – this formed part of the BT written response to ComReg
	Possible Models	BT discussed their hypothetical modelling and shared their willing to discuss further with ComReg – engaging another UK data specialist if ComReg wished. A few examples

		are included in the Powerpoint referenced in the meeting
Treatment of MNO backhaul	BT suggested that MNO backhaul was of concern for many NRAs to ensure, in particular, that 5G services would be effective. ComReg acknowledged that 5G will be dominated by fibre demand	
	BT expressed the view that the circuits for MNO backhaul should be regarded as open to potential competition and subject to regulation rather than mobile backhaul being captive and not included in the market share assessment. Action for ComReg and BT to assess the current status of Mosaic	As per BT research – Mosaic are not relevant in meeting the fibre needs of Meteor or H3G today. ✗. It is understood that Meteor’s requirements did not come to the market as they were self-supplied. BT’s view continues to be that there is a competitive market including self-supply – H3G came to the market and Meteor were free to come to the market. That they chose not to, should be reflected in the market share assigned to Eir
E-Net	BT expressed the view that it is ComReg’s choice to count the E-Net C-MAN as two equivalent SPs as an ‘Open network’ but not a legal obligation to do so and there is nothing in economics dictating this. ComReg accepted this position.	
	BT researched the relevant State Aid Approval Decision E-Net undertakings – shared at the meeting	C(2006)436 final, State aid n° N 284/2005 – Ireland Regional Broadband Programme: Metropolitan Area Networks (“MANs”), phases II and II
	ComReg noted their intent to count the actual provision of services on E-Net’s C-MANs (those with competitive backhaul) to aid in assessing how competitive the individuals C-MANs are	
	✗	
	✗	✗
Network Expansion	✗	✗
	✗	✗
	✗	
	Recent experiences	✗

Extra	✂	✂
	Observations on SAs	Without a full view of all networks, it is hard to assess what SA's may be rightly/wrongly classified independently. When we review the primary data centres, we can see that most of these are classified, as one would expect, as Zone A. However, we were surprised to note that 1/3 rd of the buildings in the Citywest area will fall under Zone B. ✂

Appendix - The standard for effective competition with regard to UK/International References

ComReg explained that in coming to a view that 2 ANs might be sufficient for an SA to be classified as effectively competitive, they had looked at the practice of other NRAs.

Below is an extract of various OfCom reviews featuring their evolving market definition and assessment of relevant operators. ***As a preface, the UK WBA looks to operators who are already on-net, not based on an assumed expansion of their network. We would expect not many Irish SAs would meet this threshold except for those that are in DCs/Business Parks.***

- A. NRAs have taken the view that SPs must be relevant to and material enough in the market in question to be included in the assessment of market power. The NRA has discretion to sift out operators that do not meet appropriate criteria. The criteria may be arbitrary and may change over time, but must at least be sensible
- B. ComReg acknowledged their external research for an international standard. We thought it may be useful to add to this by referencing an economic policy note prepared for the Dutch NRA (OPTA). This concluded that “there is no “magic number” for the minimum number of competitors necessary for effective competition. One way to approach this is to look at the rules of thumb used by competition authorities. The European Horizontal Merger Guidelines declare markets with an HHI below 2000 as normally non-problematic. Although very roughly, this suggests that between 5 and 6 market players with similar market shares might provide effective competition. The practice of the European Commission shows that 3-to-2 mergers are normally viewed as problematic, whereas 5-to-4 mergers are typically only regarded as problematic in particular circumstances.”¹ The Ofcom document also considered the size of the geographic unit; and included some remedies to avoid Type I and Type II errors. The research may be useful to review.
- C. The extract below is from the Ofcom WLA Draft Statement 2018:
“4.44 In general, the number of firms necessary to generate effective competition will vary from market to market and a case specific assessment needs to be made. Academic studies, competition cases and other market reviews suggest that *at least* three firms are required for effective competition though, in some cases, four or more may be needed. As an economic policy note prepared for the Dutch NRA concluded: “there is no “magic number” for the minimum number of competitors necessary for effective competition. One way to approach this is to look at the rules of thumb used by competition authorities. The European Horizontal Merger Guidelines declare markets with an HHI below 2000 as normally non-problematic. Although very roughly, this suggests that between 5 and 6 market players with similar market shares might provide effective

¹ This was quoted in Ofcom, 2013. *Business Connectivity Market Review: Review of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments*, paragraphs 6.252-254 (https://www.ofcom.org.uk/__data/assets/pdf_file/0026/57860/sections6-7.pdf).

competition. The practice of the European Commission shows that 3-to-2 mergers are normally viewed as problematic, whereas 5-to-4 mergers are typically only regarded as problematic in particular circumstances.”²

- D. For the three geographic markets referenced in Ofcom’s 2017 CAT Judgement, Ofcom used two tests as proxies to assess the differences in competitive conditions across the UK3. These were: (1) The High Network Reach Test (the “HNR Test” or “Network Reach Test”) was used as a way of identifying areas where competitive conditions appeared to differ from the RoUK to an extent that merited further analysis. The HNR Test was a measure of the average number of OCPs with infrastructure within a given distance of businesses within a postcode sector. Ofcom considered that areas where the average business had two or more OCPs’ networks within 200m had greater potential for competition than other areas in the RoUK; and the (2) The **Boundary Test** was used as a proxy for identifying areas where rival infrastructure was sufficiently dense and extensive for Ofcom to conclude that competition was likely to be effective across the CISBO market. Broadly speaking, Ofcom defined the Boundary Test by reference to the boundary of the CLA, which it considered was an area of particularly dense concentration of rival infrastructure and businesses with the greatest potential for competition for CISBO services of all bandwidths to be fully effective. This led to a Boundary Test requirement that:
- a. Businesses should have on average five or more OCPs within 100 m; or
 - b. Businesses should have on average four or more OCPs within 100m and 90% of businesses should be within 100m of at least two OCPs.
- E. For the WBA Market Reviews, Ofcom has been careful not to include ANs which could not reasonably be regarded as having a relevance to the downstream market under review. Over time and under consolidation, the number of relevant POs declined (2010 = 8; 2018 = 5) but they were/are of broadly similar share of national WBA connections (excluding BT, 15-25%). This is very different to the situation in Ireland for leased lines.
- F. For the 2008 and 2010 WBA reviews, Ofcom excluded Updata as it had relatively low coverage (at slightly more than 10%) and was deemed to have a ‘niche’ business model, targeting the public sector. In 2014, Ofcom excluded Updata and Zen – again due to low overall market coverage, less than 20%. In 2014, Ofcom consulted on excluding Vodafone due to its low national service shares, low maximum shares per exchange, and that they had no plans to expand on their presence in the broadband market. Their presence as a Principal Operator (PO) had very little impact on Ofcom’s analysis, however Ofcom included them due to the potential of Vodafone to expand in a short period of time.

² Quoted in Ofcom, 2013. *Business Connectivity Market Review: Review of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments*, paragraphs 6.252-254. https://www.ofcom.org.uk/data/assets/pdf_file/0026/57860/sections6-7.pdf. From OPTA, 2006, page 10. <http://www.opta.nl/en/news/all-publications/publication/?id=2051>.

³ FS 4.372. Section E 54

- G. From the 2018 report, Vodafone’s inclusion is justified “Vodafone has a high coverage level but a lower share of connections than the other POs. Vodafone is currently actively marketing its residential broadband services after launching its offering in this segment in 2015. It therefore has the potential to expand its customer base. We therefore also include Vodafone as a PO.” (s4.61 page 64)
- H. In the 2018 WBA Draft Statement, Ofcom define a PO as ‘a provider that is likely to exert a substantial competitive constraint on the other providers across the UK’. Ofcom take into consideration market share and network coverage as key factors in determining which SPs are POs. Ofcom included self-supply in this analysis. Many Openreach MPF customers are not included as POs because they do not achieve the threshold in either market share or network coverage.
- I. s4.61 page 64 “Vodafone has a high coverage level but a lower share of connections than the other POs. Vodafone is currently actively marketing its residential broadband services after launching its offering in this segment in 2015. It therefore has the potential to expand its customer base. We therefore also include Vodafone as a PO.”

Table 1 – Extract from the 2018 Draft WBA Statement⁴

Table 4.1: Coverage and national wholesale shares of broadband connections

Provider	Network coverage of UK (excluding Hull)	National WBA share of connections
BT	100%	[<] <40%
Sky	[>] >95%	[<] 15-25%
TalkTalk	[>] >95%	[<] 15-25%
Virgin Media	[>] 40-50%	[<] 15-25%
Vodafone	[>] >95%	[<] <5%

Source: Ofcom calculations based on data provided by BT and Virgin Media¹⁶²

⁴ https://www.ofcom.org.uk/data/assets/pdf_file/0010/115111/Draft-statement-Wholesale-broadband-access-market-review-2018.pdf, page 64

Table 1: Evolution of Geographic Markets, Coverage and SMP Remedies*

Review	Markets (SMP/No SMP)	Coverage of SMP market(s)	Remedies in SMP Markets**
2008	Markets 1 & 2 – split between 1) BT only exchanges 2) exchanges with 1 or 2 Principle Operators (POs) Market 3 – exchanges with BT + at least 3 POs	30%	<ul style="list-style-type: none"> • Obligation to supply on fair and reasonable terms • Obligation not to unduly discriminate
2010	Markets 1 & 2 – split between 1) BT only exchanges 2) exchanges with 1 PO or 2 POs where BT’s market share > 50% Market 3 – exchanges with BT + at least 3 POs or 2 POs where BT’s market share <50%	21%	<ul style="list-style-type: none"> • Obligation to supply on fair and reasonable terms • Obligation not to unduly discriminate • Charge control in Market 1; Cost Orientation in Market 2
2014	Markets A – exchanges with BT and up to 1 PO Market B – exchanges with BT + at least 2 POs	10%	<ul style="list-style-type: none"> • Obligation to supply on fair and reasonable terms • Obligation to supply on an EOI basis • Charge control in Market A
2017	Markets A – exchanges with BT and up to 1 PO Market B – exchanges with BT + at least 2 POs	2%	<ul style="list-style-type: none"> • Obligation to supply on fair and reasonable terms • Obligation not to unduly discriminate • Obligation to supply on an EOI basis • No charge control in Market A

*In each review Ofcom also defined a separate market, The Hull Area, covering 0.7% of UK premises in which KCOM has been designated as having SMP

** In all SMP markets Ofcom also imposed requirements to publish a reference offer and notify changes to terms and condition (28 days) and technical information (90 days)

- 1.1. In 2008, Ofcom recognised Market 1 as the market with the least prospect of competition; Market 3 as effectively competitive and Market 2 as having potential for further LLU rollout going forward. Ofcom regulated Markets 1 and 2, but it did not impose a charge control in light of voluntary price ceiling and floor commitments given by BT.
- 1.2. The boundaries of Markets 1, 2 and 3 were revised by Ofcom in 2010 to i) reflect further LLU and cable rollout and ii) deregulate exchanges with at least 3 POs (including BT) where BT's market share was less than 50%. Following the expiry of BT's pricing commitments Ofcom also introduced a charge control in Market 1. As Ofcom expected Market 2 to see further LLU rollout it did not impose a charge control in Market 2.
- 1.3. In 2014 most of Market 2 was deregulated when Ofcom defined only two Markets, A (SMP) and B (no SMP). By then LLU rollout had already slowed down. CPs began to take up new fibre based access products and the economics of rolling out LLU to ever smaller exchange areas became more challenging. It has since slowed down even further. Market A in 2014 comprised just under 10% of UK premises, typically remote areas where the economics of rolling out competing broadband infrastructure were more challenging.
- 1.4. Ofcom considered the purpose and proportionality of remedies applied in such a small geographic market, given that consumers in Market A were already afforded protection through a combination of factors. These included BT's national pricing policy at the retail level, so consumers living in Market A areas benefitted from competitive retail prices set in the context of effective retail competition in Market B, and general competition law. In 2014, Ofcom found that the national pricing policy did not afford sufficient protection as BT was free to change its policy at any time if it were in its commercial interest. Ofcom also recognised that it was unlikely that much further LLU or cable based competition was likely to arise in Market A areas.
- 1.5. Since 2014, as expected, further LLU-rollout has been limited. Ofcom accepts that this is likely to be a feature of the investment economics in the remaining Market A areas, where a sparse and remote population drives up the unit costs per customer.^[1] However, as foreshadowed by Ofcom in its 2014 decision, fibre-based wholesale access (VULA) has evolved into a larger source of competitive pressure to BT's WBA access products.^[2] In its current proposals Ofcom recognises this in its geographic market definition, reducing the size of Market A from 6.5% (based only on copper and cable-based competitive presence) to less than 2%. Ofcom further recognises that in light of BT's enduring national pricing policy at the retail level, and the small size of Market A, imposing a charge control is both unnecessary and disproportionate.

^[1] See paragraph 5.21 of the WBA MR.

^[2] See paragraph 1.17 of the WBA MR

1.6. Ofcom is therefore – rightly – continuing the historical trend towards further deregulation of the WBA market, which has allowed broadband competition to develop and flourish. The proposed reduction of Market A to less than 2% of the UK and the removal of the charge control are critical milestones, reflecting Ofcom’s DCR commitment to deregulate and simplify wherever feasible.

BT Response and Questions to ComReg Publication Reference 18/08: Concerning: Wholesale High Quality Access at a Fixed Location – Workshop on the Practical Application of Remedies in the Zone B Modern Interface (‘MI’) WHQA Market

1.0 Introductory comments

BT Ireland is appreciative of the opportunity to provide ComReg with observations and questions on the implications for the regulation set out in Appendices 8 and 9 of the 22nd February 2018 Consultation. We have found this a very difficult document to draft given the complexities and consequences we are still discovering with Appendix’s 8 & 9, apologies if the flow is not perfect but a lot of work went into this paper.

ComReg will be aware that not only BT Ireland, but we imagine many other stakeholders have found it a highly challenging task to assimilate and comment on this major piece of work and which differs in many critical ways from the 2016 Consultation in respect of MI WHQA services. Indeed, it has only been with the passage of time since official responses were submitted, that we have been able to grasp some of the possible ramifications for our business in Ireland.

We are providing you therefore with a rather more detailed set of comments than would be normal in such an invitation made by ComReg and to facilitate comprehension, I have added a few section titles to guide the reader. As always we are very willing to come and discuss these matters with you either before or after the industry session on September 12th 2018. We firstly provide a summary of our key issues and concerns.

2.0 Our Key Concerns Re Appendices 8 and 9

In essence, it appears to us that the actual implementation of Appendix’s 8 and 9 will act in practice to undermine the intentions of the Comreg proposals to foster competition. It will neither give ANs choice at the network wholesale level nor will it provide real alternatives in retail markets. Further, in practice and based on historic experience, we believe there will be both the motivation and opportunity for Eircom to circumvent these rules. In turn this will create competition problems with long-term consequences for infrastructure competition. Given the current legislative weakness in the ability of ComReg to apply proportionate enforcement - as recognised in the ComReg submission to the Law reform Commission¹ - even close monitoring of Eircom’s behaviour is unlikely to be effective. In effect, we see no alternative to *ex-ante* regulation with clear, consistent, enforceable rules and with predictable incentives for ANs.

The negative Impact on Infrastructure Competition

ComReg’s proposals as set out in Appendices 8 and 9 appear to put at significant risk other operator network actual historic and potential investments and most particularly in the WHAQ market from the almost complete removal of backhaul regulation. Even where Small Areas zones are declared as requiring access regulation (Zone B) in practice there now appears to be no route, other than possibly through new commercial agreements to backhaul many of these circuits to key nodes in the AN network.

¹ Submission to the Law Reform Commission – Enforcement of Competition and Regulatory Law: The Case for Reform. 18 Jan 2018.

In fact, it appears from the proposal that for an operator to provide a national solution based on regulatory inputs, the operator itself is now responsible for obtaining connectivity to the 107 nodes. We also note that should the nodes contain de-regulated Small Areas (Zone A) these are already not in scope for regulated connection and this in itself will undermine the investment case for other operators in any case. ComReg is aware of the significant doubts that BT Ireland has raised here. If ComReg were to push this proposal through in its current form, the impact for existing operators that have made considerable investments over the years and for any new entrants look distinctly bleak. Our assessment is that infrastructure competition will become very limited towards a combination of the incumbent and State funded solutions.

It is now our understanding from the February 2018 Consultation that following analysis of Eircom's NGN network, ComReg is proposing to fundamentally redraw and fundamentally change the current interconnection rules. Table 1 below and the following text highlight the impact on BT.

Table 1 – Analyses of our NGN estate with OpenEir by Trunk/Non-Trunk Node and examines available alternative backhaul options (based on our knowledge of other networks).

✂

- All Node WEILs are downgraded to "Local WEILs". Eircom will be entitled to refuse to hand off customer connects except those directly served by any given node, including all connections of less than 155Mb. Thus "same area" handoff to sister nodes, despite being a formal price option since the launch of NGN, has been withdrawn from regulation. The justification is the suggestion that three or more networks are within 100m of the exchange location. This is regardless as to whether: these network providers are offering any backhaul services to other ANs; whether they have appropriate capacity and capability to offer such a service; and counting the private operator Enet as two network providers where possibly just one of their customers can offer own backhaul to itself. This presumes or anticipates a level of network sharing which in our view is not evidenced in practice and far too optimistic.
- For example, ✂ is considered a Trunk Node and BT does not have a ✂ at ✂. BT has not one single customer connection served from the ✂ node – and should our customer request one, we would either have to buy it from our direct and dominant competitor or to build out an interconnect to deliver that single link. This would put the business community of ✂ back 10 years in terms of competitive supply of critical services.
- In essence, ComReg's approach to the assessment of competition here ignores the considerable commercial and logistical challenge of connecting to these supposedly competitive nodes. In this context we question whether ComReg factored in the absence of a ✂ and "Leased line VUA" into its assessment of the competitive options for backhaul?
- ENH handoff, ✂, has been downgraded to a "Same Area" WEIL and Eircom will be entitled to refuse to hand off an access except those served within the ENH node region.
- The economics and logistical challenges of interconnection at Eircom Trunk Node exchanges, and which has limited us to only ✂ of the 107 exchanges that ComReg deems to be "well served" by ANs, are being further challenged by removal of these commercially important elements of regulated backhaul from what is deemed to be competitive access. For example, our interconnect in ✂ currently serves as handover for six end-user connections. The consultation proposes that four of these originate in CSAs that are competitive and so Eircom will be obliged to maintain current terms and conditions on only two of those six. The ✂ interconnect could not be economically supported today were it not for our broadband business and no operator could realistically provide an aggregated interconnect to collect a single end user link. Instead

we would be forced to accept whatever terms Eircom would offer us to backhaul all six links to Dublin and the level of competition would reduce.

- We estimate that the consequences of the approach set out in Appendix's 8 & 9 would be that Eircom could force us to re-plan over \times of our Zone B active end user links. This would be extremely disruptive for our end users and our network planning strategy. For example, BT pays Eircom \times per annum for a \times Ethernet connection to \times . The serving NGN node is \times , but since BT does not have an interconnect we take the handoff at our \times node in \times . The Consultation proposes that we remap this connection to one of the two serving PE nodes (\times). BT does not have a WEIL at \times , and so could be obliged to redeliver that circuit so that it hands off via \times . There would also be an increase of cost to go to same region rather than ENH.

Potential Stranded Investment of Eircom Edge Node Handovers

Over the past several years, BT and likely other ANs have made considerable investments for Eircom to install Network nodes on the sites of the AN operators with a product known as Edge Node Handover (Appendix 9 Figure 23 RHS). Absent a commercial agreement with Eircom, the proposals potentially strand these investments which only will pay back over many years.

We set out further regulatory concerns which are elaborated on in more detail below.

The problem of implementing regulation to a changing network structure just of Eircom

- ComReg has specified an implementation of the regulatory remedies in Appendices 8 and 9 using Eircom's existing network to define the regulated access and associated backhaul services. However, Eircom's network is constantly changing and specifying regulation on this unreliable foundation runs the risk of regulation which is neither clear and consistent nor predictable for AN investment. Adverse outcomes may well arise as a result of the unintended consequences of planning actions within Eircom from change their network structure and thereby changing the effective regulated service (including the list of handover points as a particular example). In order to understand the importance of this, we suggest that Comreg needs to examine the historic pattern of Eircom changing its handover arrangements in an unanticipated and often unreasonable way which is highly disruptive to effective competition. Three examples of such network changes include the following:
 - i. **The rehomings of VUA ports.** The NGA network uses the NGN network as its underlying platform so is relevant to this discussion. Whilst in certain situations re-homing exchanges can be helpful, in others it can strand expensive 10G backhaul investments such as we have experienced in \times . Circa $\times\%$ of our VUA exchanges have unexpectedly been rehomed at considerable cost. In support of our concern here, we note that ComReg in the 3a/3b BB Market Review submission to the European Commission of the 15th June 2018 discusses this very issue in clauses 7.228 to 7.232. Please see Annex B (Clause B.1) for our supporting evidence file which includes other cases. We note ComReg state in the 3a/3b BB Market Review to the European Commission 15th June 2018 clause. 7.233.

*“Such uncertainty regarding Eircom’s network topology (and Eircom’s management of changes to it) potentially impacts on Access Seekers’ ability to engage in business planning regarding the deployment and availability of services, **thereby impacting on their incentives to invest in such access with a subsequent potential impact on competition.**” (Italics and emphasis added).*

- ii. **Changing of Interconnect Arrangements.** On 14th Dec 2016 Eircom communicated to the industry that it intended to change the service design rules for VUA at exchanges with more than one aggregation node. This change would have required ANs to purchase a second interconnect at that exchange solely because Eircom made an internal change to their own network design by adding a second piece of equipment in the exchange. In this case, following ComReg intervention, ANs needed only to purchase one interconnect at each exchange. We consider if Eircom makes changes to its network which affects interconnect arrangements then the general rule should be that Eircom should bear the costs of the change and not the ANs. However, we note that this principle is not being applied more generally as our other examples show and as currently being demonstrated ✂.

- iii. **Ongoing redefinition of the NGN platform.** ✂ When planning to invest in providing backhaul to a particular node, the potential base of customers is an important consideration. However, Eircom continues to roll out/change to continuously smaller scale nodes likely facing little competition in either access or backhaul from these nodes. This has the impact of undermining our original investments as these potential customers are now no longer available at the larger nodes absent a commercial deal with eircom or another competitor. Hence again the investment is undermined making the next investment decision increasingly difficult. (This has a particularly acute problem as we explain below because of the high fixed costs of each individual handover.)

We consider ComReg needs to create an environment for sustainable competitive infrastructure investment and ensure that there is reasonable certainty that new assets will not become arbitrarily stranded. We believe the proposals set out by ComReg in Appendix's 8 & 9 do not do this and instead ComReg ought to consider a new approach of long-term designated interconnect POPs through which all regulated access services are available. If Eircom then decides to make changes to their network which affect agreed interconnect arrangements, then Eircom must bear the cost of maintaining interconnect arrangement (or ANs need to be fairly compensated for stranded assets).

The problem that we can only purchase aggregated access services from Eircom

- Eircom has built its new packet-based access and backhaul network as a vertically integrated company solution. As a result, all the interconnect arrangements are 'add-ons' to this network which mean that: a) interconnect appears as an additional cost which is borne only by ANs; and b) Eircom's own use of its network, including for bottleneck access and backhaul, is uniquely optimised and efficient. Other operators face two obstacles here. The first is the high price that Eircom charges for interconnect (in particular the minimum price of its aggregated interface) and secondly they have to pay twice, once for Eircom's aggregated interface and then again for their own aggregation in their own network. Eircom avoids this second cost because interconnect is an 'add-on' to an otherwise vertically integrated network.
- If, for example, ComReg were to compare the network topologies of Eircom's Managed Network Service (MNS) with the topologies of other operators trying to gain access to regulated end-user links, ComReg will find the two are different and ANs inevitably have to bear higher costs which arise from the decision of Eircom to only provide electronic aggregation.
- In addition, the charge for the aggregation interconnect is in itself a major hurdle. For example, if a non-aggregated option were provided to ANs such as in the UK, or if the aggregation node had a very low charge, then at least other operators would not face the cost of two aggregations where Eircom has to experience only one. It has to be stressed that the precise charge for the aggregation interconnect does not arise directly from cost orientation just of the direct equipment costs. We believe that the charge from the aggregation interconnect is largely

covering common costs which could just as easily be recovered on the access end charge without impacting overall cost recovery.

- In our view, ComReg should have a more detailed look at precisely how the obligation of cost orientation is being applied across the physical access versus the aggregation and whether the balance here is correct.

The proposed regulatory implementation has profound implications for competition more widely and is potentially open to manipulation

- From our understanding, ComReg is effectively proposing deregulating around two-thirds of the access market but we believe the proposed deregulation of 107 nodes will greatly extend that deregulation beyond the two-thirds estimate. This will arise as in practice there will be a significant cohort of Zone B circuits parented just on these 107 nodes and the handover arrangements are – if we have understood correctly – very different from current regulation. In any case we believe the number of competitive nodes is overstated and there are many of these 107 nodes where in practice BT Ireland and other ANs will not be able to acquire competitive backhaul contrary to the presumption of ComReg. This will then extend the implicit extent of access deregulation beyond our initial expectation which we set out in our original submissions to ComReg. Please see our earlier discussion in this matter.
- We also believe based on current experience, and as illustrated by the examples of changing nodes set out above, there may well be opportunities for Eircom to ‘game’ the little backhaul regulation that is left in place.
- Fundamentally this very widespread and deep deregulation means that ANs are expected to compete against the internally optimised network topology based on Eircom internal economies of scale and scope while at the same time paying the additional costs of interconnect. These difficulties are exacerbated if the regulation is open to manipulation when Eircom continuously re-optimise its network for its own internal purposes and ANs are expected to pick up the costs of resulting changes to interconnection arrangements.
- Finally, we believe that the proposals summarised by Figure 23 leave open very real opportunities for an effective margin squeeze by Eircom between the proposed regulated upstream inputs and Eircom’s downstream services (both wholesale and retail). We detail below both the opportunities as well as current evidence.

3.0 Further Detailed Analysis of Problems with Appendix 8 and 9

Inter-linkage with other market reviews

We see a direct link with this market review and the corresponding review for the 3a/3b Market Review notified to the European Commission Article 7 process 15 June 2018². Not only is business backhaul common to both but many issues including infrastructure competition are also linked. Over time we expect to see more businesses taking NGA services although of course this in itself does not mean that there are necessarily single product markets. In passing, we believe that it will be of interest to see if Ofcom manages to find a greater coherence in these matters now publicly stating its intention to review access markets contemporaneously in a Single Access Market Review³.

² Appendix A – WLA and WCA Market Analysis DRAFT DECISION Non-Confidential – 15 June 2018.pdf

³ <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/regulatory-certainty-investment-full-fibre>

We thought it would be helpful to ComReg to explain how we see the need for remedies in WHQA to be fully cognisant and congruent with the ideas and solutions now being promoted for Market 3a.

Our position is that we feel that the sustainability of access regulation in both mass market and business markets has to align with a vision for infrastructure competition more generally so that both access and backhaul networks by ANs can be planned and operated efficiently and in fair competition to Eircom as the ubiquitous incumbent.

In this context we note that the latest draft EECC Article 3 2 (a)-(d) repeats the current Framework Directive Article 7 General objectives but specifically now referring to *networks* rather than *data connectivity*. It is also relevant we suggest that Art 3 2 (a) includes mobile networks which in our view ComReg has wrongly excluded from its WHQA assessment.

Drafting changes apart, the underlying themes in the new Art 3 (d) are little if at all changed from the current objectives which mean that it is the interests of citizens to be promoted through choice, price and quality at the end-user level. Here we interpret end-users to include businesses; even if they do not constitute being citizens directly but clearly their ability to offer choice is itself greatly affected by the choices open to themselves on how to provide their services.

The EECC Art 3 3 (a)-(f) identifies factors inter alia such as no discrimination, innovation in new and enhanced infrastructures and technological neutrality and our comments below draw on some of these matters.

Specifically, we feel it is very important in reviewing the proposals in Appendices 9, that ComReg fully consider the more general incentives infrastructure competition and not just limit discussion to matters of practicality and implementation, important however as these are in their own right. We turn now to address some of the underlying factors which we believe will strongly affect the feasibility of sustainable infrastructure-based competition.

Factors affecting infrastructure competition in access and backhaul

It is commonly argued that infrastructure competition is the best promoter of end-user benefits and such a position has recently been expounded by the UK Government in its desire to promote faster roll out of FTTP services⁴.

BT Ireland has provided ComReg with copious information in our submissions to the WHQA Consultation on the economics of extending our *access* networks where we have explained that the costs of digging up roads is particularly expensive and frequently limits our ability to move sites on-Net. Customers have limited flexibility to allow for such changes also as we set out in our evidence following the 21st June meeting. For new customers the planning and other delays of us acquiring legal rights to install including wayleaves can effectively destroy a potential offer. Alternatively, whilst pre-building of our network to clusters of sites may be viable; this is often in restricted circumstances such as to data centres, business parks or areas of high business presence density more generally.

To extend our network into new areas of the country where building either takes too long to meet customer requirements or is uneconomic it is necessary to have a Point of Presence (PoP). The

⁴ <https://www.gov.uk/government/publications/future-telecoms-infrastructure-review>

reasons for establishing this can arise from targeting either or both mass market and businesses. Sometimes the backhaul from the PoP can be self-supplied but in other cases BT has to purchase this typically but not always from Eircom. The point is that establishing a PoP is itself costly and risky irrespective of whether backhaul is present or not. It is the counterpart to extending the access network at a higher level of network hierarchy.

Backhaul is therefore a complementary activity to access and in most circumstances neither is of use by themselves alone⁵. Given that for at least some customer sites, most ANs will need to purchase access or backhaul, or indeed both as upstream wholesale services, this means that the very nature of the regulated access products and their terms and conditions also have a profound impact on the decision to roll out infrastructure in the first place. Subsequent changes to the products available can augment or degrade the original investment decisions.

There are two critical issues that emerge as follows:

- i. **Aggregation** - In the context of WHQA services, a critical matter which we wish to bring to ComReg's attention is that Eircom only provides ANs with an electronic aggregation service. Whilst we believe other incumbents also may do this for business access services, it is completely different in design for example to the physical aggregation of fibres offered by Openreach in the UK⁶. In fact, the equivalent of the NGN handover provided by Eircom is treated as a downstream deregulated service by BT and sold to other network providers out of the Wholesale and Ventures Division⁷. Physical handover of the regulated Openreach service does not have the inherent trade-off with electronic aggregation as charges are linear with the number of circuits themselves. I.e. Openreach do not aggregate these circuits.

The compulsory addition of electronic aggregation to the access service by Eircom has very profound implications for the establishment of PoPs and incentives more generally to roll out infrastructure. In effect, the high minimum charge for handover - which is otherwise bandwidth-related - generally works to deter network rollout. Subject to limitations of network modularity, the more PoPs simply means additional minimum charges for every handover. In order to reduce these interconnect costs, APs are pushed to a few centralised handovers. However, this means that the AP no longer has distributed infrastructure and PoPs. This form of access product by Eircom with its minimum price for an interconnect introduces an inherent bias against AP infrastructure expansion and therefore is inherently has something of an anti-competitive effect. The high minimum charge also creates an inadvertent benefit to State funded operators such as E-Net that do not require the Eircom access circuits and can also avoid the high minimum aggregator charge but then potentially replicate the same benefits to their own downstream arm.

⁵ There are exceptions here of course.

⁶ In the UK the Ethernet Access Direct is a fibre service which terminates in the CP cage in a BT exchange and is fully transparent into the CP network. Openreach has a management card on the frame which monitors the circuit and throttles the bandwidth.

⁷ BT Wholesale and Ventures have a generic facility called Harmonised Ethernet which is broadly equivalent to Eircom's WHQA product and there is a suite of specific wholesale services supplied from this - <https://www.btwholesale.com/pages/static/products-services/wholesale-ethernet.htm>

To be very clear, BT Ireland is not opposed to Eircom offering an aggregation service as such, especially if there was a low or minimal charge for interconnection, but as we make clear below, there are strong arguments for saying in many circumstances this should be an option and it would be far more appropriate for there to be a physical handover as for example is the UK model.

- ii. **Fitting Regulation to a changing infrastructure** - As it stands, ComReg is fitting regulation in Appendices 8 and 9 not only around the Eircom network topology but also the form of products and pricing which it has chosen to be best for its own circumstances. This solution is by no means obviously optimal for the industry as a whole⁸.

This issue is further amplified when the decision is taken to change the number of nodes in the Eircom network which are deemed to be 'competitive'.

In commercial terms, the implication of extending core network deregulation from the current 20 Trunk Nodes to around 107, is to present ANs with a completely different trade-off where competition from Eircom will be between its marginal costs of backhaul against whatever the AN can source for itself. The import of this cannot be understated as Eircom is now able to utilise the entirety of its fully meshed backhaul network benefitting from its internal network optimisation together with its economies of scale and scope which no other operator can expect to match⁹.

We discuss below the classification of Trunk nodes and note that over 40% of Trunk Nodes (48 out of 107) have only 2 SPs and this appears largely to arise from the treatment of Enet where we have already expressed concern to ComReg that it is not an open platform in the way envisaged. There is no reason to suppose that the AN which is included and has its own backhaul will in fact wholesale this capability to other ANs.

Prior to discussing our specific concerns about the implications of the extent of deregulation and the product offering of Eircom, we thought it might be helpful first to explain in more general terms how we see the challenges of making sub-optimal investment decisions – too little infrastructure put in place or conversely too much and stranded assets arising – can be at least partially mitigated in practice.

BT has considerable technical expertise in network planning and specifically we have given a lot of thought to this matter in the context of access regulation. When Ofcom was proposing to enforce a dark fibre obligation on BT during the 2016 BCMR (WHQA equivalent in UK), BT provided a Paper on this which is available on request and it illustrates some very general points which are also pertinent here.

The general conclusion is that the trade-offs for determining the number and location of aggregation or interconnection points are very sensitive to changes in some underlying

⁸ We recognise that regulators have to 'start from somewhere' and that the existing network of the SMP operator has to play a key role here.

⁹ This is quite separate from whether or not Eircom applies proper imputation tests to itself to comply with the regulation associated with Figure 23 which we also discuss.

key cost parameters, or importantly, upstream price parameters if the assets are not owned. Just for one network operator deciding in isolation where to put electronic equipment is not straightforward at all and in fact it requires some element of 'non-linearity' to get a unique solution. It is quite easy to find that for small changes in key parameters, the optimal outcome can switch dramatically between highly distributed electronic aggregation to fully centralised aggregation i.e. long-haul traffics back to a single point.

For designing an optimal interconnection arrangement for multiple networks which are often inherently different in design (e.g. ring versus hub-and-spoke) there will be even more challenges. We also fully recognise that regulators need a practical solution and the network of the incumbent has to feature fully in this solution.

Our experience in many countries suggests that a mixture of collaboration and regulatory rules on SMP operators will greatly assist in promoting good outcomes and avoiding detrimental ones. These include the following:

- Long-term commitment by the SMP operator on the number, location, and product scope of interconnect points.
- The selection of these interconnect points and the range of products supported by these interconnections should be by mutual agreement by the industry and the convenience to the SMP operator should be only one factor in the selection.
- Any major changes to general interconnect arrangements should be thorough and detailed consultation taking into account the interests of all parties.
- Any specific ad-hoc changes to interconnection should notified well in advance of implementation and should make specific arrangements maintaining existing interconnections.
- The costs of any specific ad-hoc changes made by the SMP operator including consequential costs on the ANs should in general be borne by the SMP operator.
- A track record of compliance with regulatory obligations which gives confidence to the industry on the stability of the investment environment more generally.
- Strong Regulatory Enforcement.

Are the 107 Trunk nodes really competitive?

Prior to discussing our substantive concerns on the implications of Appendices 8 and 9, we first wish to record our serious doubts as to the reliability of the conclusions of the 107 Trunk Nodes. We are investigating this matter and will provide ComReg with further thoughts in due course.

Actual and likely problems in the context of Appendix's 8 & 9

We now wish to turn to address the likely impact of the proposed deregulation bearing in mind the underlying challenges of designing a 'good' set of interconnection arrangements for the industry as a whole. We first record just a few of many possible examples where Eircom fails to follow best practice in establishing stable interconnection arrangements and with products for handover that can be properly integrated across mass market and business services.

We then set out our understanding of how Eircom should apply the non-discrimination obligations associated with Figure 23 to ensure that under both sector regulation and separately under competition law, ANs are not unfairly excluded from both wholesale and retail markets.

The following sets out our understanding of the implicit obligations on Eircom from regulation and the application of competition law with respect to the provision of wholesale and retail services using Figure 23 as the notional benchmark.

Condition 1. Circuits supplied with NGN handover to Trunk Nodes X, R, AGG nodes and Edge Node should all be cost oriented. We set out above our concern of lack of sufficient regulatory oversight here.

Condition 2a current situation. Eircom should impute to itself the regulatory price of circuits to the equivalent of the 20 Trunk X nodes otherwise if the relevant aggregation Node is of the R or S variety then the imputation should always be to the AGG nodes/Edge Node Handoff. This would apply irrespective as to whether one or more ANs had in fact established handover corresponding to Node R or S in Figure 23.

Condition 2b proposal in Figure 23. Eircom should impute to itself the price of Zone B circuits to the equivalent of Trunk Nodes X or Y if parented on these and otherwise to the AGG Nodes or Edge Handover as described above.

We assume that these imputations are not limited to business access but will for example include MNO backhaul provided as part of the Mosaic netshare and we would be grateful for confirmation on this specific matter from ComReg Where Eircom offers any other solutions such as passive services, these will be compliant with competition law. The margin between the charges for Non-Trunk R handover and Agg Node handover will also be compliant with competition law¹⁰. Eircom must also ensure that the self-supplied backhaul plus any other network and retail activities beyond the regulatory domain, comply with cost recovery to ensure that predation is not an issue¹¹.

¹⁰ As a rule we would envisage that a LU LRIAIC value would typically ensure such compliance.

¹¹ Note that the Commission considers that the LRIC cost standard not to be appropriate in network industries and for telecoms, it suggests LRIAIC - see Telecoms Access Agreements Notice OJ 1998 C25/02; 113-115. See Also Article 102 enforcement Priorities guidance.

Annex A Questions for the Workshop

Annex A – Questions – some questions are confidential but given the potential huge upheaval and the potential for significantly damaged investments we still need clarity on these issues.

Questions Relating to Data Clarity

We are struggling to understand the numbers in table 26 of Appendix 8 which is critical to defining the numbers in Appendix 9.

Question 1 - In Table 26 of Appendix 8, is open eir upstream wholesale included in the count of SPs?

Question 2 – In Table 26 of Appendix 8, is eir Managed Network Services included in the count of SPs?

Question 3 - In Table 26 of Appendix 8, when some sites are listed as having '2' SPs, is it possible this is just E-Net C-MAN and therefore it is E-Net plus one other non-Eircom provider?

Question 4 - In the list below of areas outside the greater Dublin area, we highlight those that we have concern regarding the availability of alternative backhaul options. We ask ComReg to confirm that competitive backhaul is available from these locations – considering the notes

✂

Question 5 – Will we have to buy backhaul when handing over from the same node?

Network Changes

Question 6 – We are concerned that the dependence of regulation on a changing eircom network model can add risk to infrastructure investments. What regulation and what action will ComReg apply to create regulatory certainty and to prevent the risk of investment being undermined by eircom network re-arrangements?

Questions relating to the operation of the proposal

Question 7a

Churchfield – This is an example of an exchange in a regulated Zone B area, but where backhaul/some of its customer base is in deregulated Zone A. Can ComReg please advise how this will work? We count 23 such instances within the category of Trunk Nodes. Please See Annex B Clauses B2 and B3.

Question 7b - This is an example of an exchange in a deregulated zone A area, but where backhaul/some of its customer base is in regulated Zone B. BT counts two instances within the category of Non-Trunk Nodes. Please See Annex B Clause B2.

	CSA Count	
	Zone A	Zone B
Churchfield for Access	38	67
Churchfield for Backhaul Desingation	Zone A	
Exchange Location		Zone B

	CSA Count	
	Zone A	Zone B
Cabra for Access	19	70
Cabra for Backhaul Desingation		Zone B
Exchange Location	Zone A	

Question 8: - Can ComReg please confirm how the designation of Trunk and Non-Trunk Nodes was arrived at? Is it a direct application of the TERA algorithm? It surprised us to find exchange CSAs zoned differently for access and backhaul.

Edge Node Handover

Question 9 – What are ComReg going to do to protect the existing multiple year investments in Edge Node Handover services and what compensation arrangements will ComReg be putting in place for the considerable stranded assets that this decisions appears likely to cause.

Annex B – Supporting Evidence

B.1 Supporting Evidence of Eircom NGA and NGN Network Changes



B.2 Supports Question 4 – Exchange CSAs designated with a Different Zone from Trunk/Non-Trunk designation

EXCH_CO	EXCH_NAME	SMALL_AREA	COMREG_ZONE	The 107?
PMK	PORTMARNOCK	267111005	B	Yes
CRL	CRUMLIN	268156008	B	Yes
TRE	TERENURE	268146005	B	Yes
CHF	CHURCHFIELD	048039008	B	Yes
SRD	SWORDS	267135011	B	Yes
CAE	CLANE	087025013	B	Yes
DLA	DUN LAOGHAIRE	267077006	B	Yes
KOK	KILCOCK	087047002	B	Yes
ETY	ENNISCORTHY	247046009	B	Yes
CLT	CLONTARF	268043003	B	Yes
BGE	BRIDGEND	057021003	B	Yes
CTY	CASTLETROY	127026025	B	Yes
MHZ	MALAHIDE	267105020	B	Yes
DNU	DROICHEAD NUA	087034031	B	Yes
TYC	WATERFORD TYCOR	228036006	B	Yes
GRS	GREYSTONES	257039015	B	Yes
PHB	PHIBSBOROUGH	268030007	B	Yes
TWV	TRALEE	077160059	B	Yes
TWV	TRALEE	077160059	B	Yes
EPT	EAST POINT	268108027	B	Yes
CLK	COOLOCK	268077005	B	Yes
RUS	RUSH	267104017	B	Yes
HYD	HETTYFIELD	048013004	B	Yes

EXCH_CO	EXCH_NAME	SMALL_AREA	COMREG_ZONE	The 107?
CAB	CABRA	268036012	A	No
BLR	BLACKROCK	147025010	A	No

B.3 Detail of all CSAs within the Churchfield Exchange Curtilage (classified as a Trunk Node but the exchange building is in Zone B)

EIR_CODE	EIR_NAME	COMREG_SMALL_A	COMREG_Z	Notes
CHF	CHURCHFIELD	48019002	B	
CHF	CHURCHFIELD	48035002	B	
CHF	CHURCHFIELD	48023004	B	
CHF	CHURCHFIELD	48051007	B	
CHF	CHURCHFIELD	48023003	A	
CHF	CHURCHFIELD	47298006	A	
CHF	CHURCHFIELD	48021003	B	
CHF	CHURCHFIELD	48037007	A	
CHF	CHURCHFIELD	48053005	A	
CHF	CHURCHFIELD	47298009	B	
CHF	CHURCHFIELD	48053002	A	
CHF	CHURCHFIELD	47277011	B	
CHF	CHURCHFIELD	48038003	A	
CHF	CHURCHFIELD	48038004	A	
CHF	CHURCHFIELD	47298003	B	
CHF	CHURCHFIELD	48016002	B	
CHF	CHURCHFIELD	47298012	B	
CHF	CHURCHFIELD	48011003	A	
CHF	CHURCHFIELD	48039001	B	
CHF	CHURCHFIELD	47320001	B	
CHF	CHURCHFIELD	47298015	B	
CHF	CHURCHFIELD	48021002	B	
CHF	CHURCHFIELD	48060001	B	
CHF	CHURCHFIELD	48024008	B	
CHF	CHURCHFIELD	48053007	B	
CHF	CHURCHFIELD	48039005	A	
CHF	CHURCHFIELD	48052001	A	
CHF	CHURCHFIELD	48011002	A	
CHF	CHURCHFIELD	48025004	B	
CHF	CHURCHFIELD	48059003	B	
CHF	CHURCHFIELD	48023006	B	
CHF	CHURCHFIELD	48036002	B	
CHF	CHURCHFIELD	48051010	B	
CHF	CHURCHFIELD	48037001	B	
CHF	CHURCHFIELD	48037005	B	
CHF	CHURCHFIELD	48023007	B	
CHF	CHURCHFIELD	48036001	B	
CHF	CHURCHFIELD	48039014	A	
CHF	CHURCHFIELD	48025002	B	
CHF	CHURCHFIELD	48051006	A	
CHF	CHURCHFIELD	48037006	B	
CHF	CHURCHFIELD	48039008	B	CHF Exchange
CHF	CHURCHFIELD	48016004	B	
CHF	CHURCHFIELD	48051005	A	
CHF	CHURCHFIELD	48024003	A	
CHF	CHURCHFIELD	48039004	B	
CHF	CHURCHFIELD	48051002	A	
CHF	CHURCHFIELD	48016003	A	
CHF	CHURCHFIELD	47320002	B	
CHF	CHURCHFIELD	48051008	B	
CHF	CHURCHFIELD	48022002	B	
CHF	CHURCHFIELD	48026002	B	

eir

Market Review:

Wholesale High Quality Access at a Fixed Location

Response to Consultation, Further Consultation and Draft Decision



27 April 2018

DOCUMENT CONTROL

Document name	eir response to ComReg 18/08
Document Owner	eir
Status	Non-Confidential

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'.

Summary remarks

1. eir welcomes the opportunity to comment on ComReg's analysis of and further conclusions on the Wholesale High Quality Access (WHQA) market. In summary;
 - (i) eir is of the view that ComReg's preliminary conclusions on the scope and competitiveness of the market in the Wholesale High Quality Access at a Fixed Location Market review ('The 2016 Leased Lines Consultation')¹ were correct. ComReg has in this Consultation attempted to reverse its previous position but has been unable to objectively counter its own original arguments.
 - (ii) Due to the significant delays by ComReg in discharging its duty to review markets in a timely manner, this competitive market will now continue to be regulated into 2019, a decade after the last market review.
 - (iii) eir does not agree that the modern interface (MI) retail leased lines (LL) market only includes LLs provided over wired networks. eir is of the view that the retail and wholesale markets include LLs provided over both wired and wireless networks.
 - (iv) ComReg's revised conclusion that LLs delivered by wireless point-to-point microwave links (P2P radio links) are not part of the retail or wholesale markets for LLs does not appear to be based on any level of coherent or objective assessment.
 - (v) ComReg has failed to take into consideration passive access remedies (duct and pole access) in the upstream market in its assessment of the wholesale and retail high quality access (HQA) markets.
 - (vi) ComReg's analysis of substitutability appears to be mainly based on the views of 17 interviewed end-users. These are all multi-site LL customers, yet ComReg has stated that it considers the sample of 17 is representative. eir is of the view that this sample is far too small to produce reliable results to infer conclusions about the market as a whole. eir notes that over 1,000 business end-users were surveyed for the purposes of the 2016 Leased Lines Consultation.
 - (vii) eir also considers that ComReg has inappropriately focussed on multi-site LL customers and their stated preferences in its analysis of the relevant MI LL product market definition. While eir acknowledges that multi-site users make up the majority of the market in terms of volume of lines purchased, ComReg has not defined separate markets for multi-site LL customers and single-site LL customers. It is therefore incorrect to define the boundaries of the total market based on the stated preferences of one subset of end-users.

¹ ComReg 16/69

- (viii) eir has a number of concerns in relation to the mapping methodology used by ComReg and Tera to conclude on the geographic scope of the market i.e. the Zone A and Zone B MI WHQA markets. The choice of small areas (SAs) as the geographic unit for analysis in addition to ComReg's choice of competitive criteria has resulted in micro-analysis that has led to a fragmentation in markets.
- (ix) The methodology used by ComReg has also resulted in numerous SAs being identified as Zone B or not competitive when they should be classified as Zone A. This includes for example a number of large hospitals in Dublin and elsewhere as well as a number of transport hubs, third level campuses and bisected industrial estates and business parks that are competitive.
- (x) Given the serious deficiencies in ComReg's analysis, both in terms of the definition of the relevant markets and the mapping exercise used to designate SAs as Zone A or Zone B, eir cannot agree to the obligations as proposed in the draft Decision Instrument.
- (xi) Under the provisions of the Access Directive and the transposing Access Regulations, ComReg is only empowered to impose obligations that are objective, transparent, proportionate and non-discriminatory. The obligations set out in the draft Decision Instrument do not meet these criteria.
- (xii) Even if ComReg had correctly defined the relevant markets and correctly determined that eir has significant market power (SMP), both of which eir strongly refutes, the obligations set out by ComReg in this consultation go far beyond what is necessary or justified in the context of the WHQA market. Most significantly, ComReg was proposing to deregulate this market in 2016 but is now proposing more stringent regulatory obligations than those that exist in any market to date without any objective justification for doing so by reference to the WHQA market. It is also obvious to eir that many of the proposals are seeking to address perceived issues in completely separate markets, which are beyond the scope of this public consultation on the WHQA market and beyond the scope of ComReg's powers.
- (xiii) It is disappointing, over one year on since the first consultation and approaching the 10th anniversary of the previous market review Decision, that the flaws in this current consultation mean that further analysis may be required. ComReg must commit all available resources to ensure this market review is concluded before the end of this year. If ComReg is unable or unwilling to commit to this it must rely upon the provisions of Article 16 (7) of the Framework Directive and call upon the assistance of BEREC and "*[w]ith this assistance, the national regulatory authority concerned shall within six months notify the draft measure to the Commission in accordance with Article 7*".

- (xiv) There is much in this consultation regarding the duty of the SMP operator to meet its regulatory obligations. It is very disappointing that the regulator does not see itself as subject to equivalent accountability in respect of the discharge of its obligations under EU law.

RESPONSE TO CONSULTATION QUESTIONS

Question 1: Do you have any further observations on ComReg's Retail Market Assessment?

2. eir considers that the appropriate starting focal point at the retail level for the assessment of potential product substitutes for retail LLs are LL services provided over an Ethernet interface (whether on a standalone basis or in a bundle with other services). Since the last market review in 2008, there has been mass migration towards Ethernet-based and other modern interface services and such services are now outstripping legacy products.
3. eir also considers that there are likely to be three distinct retail LL product markets, namely the Low Bandwidth Traditional Interface (LB TI) HQA, High Bandwidth Traditional Interface (HB TI) HQA and Modern Interface (MI) HQA markets. In general, products are substitutable where the bandwidth achievable is greater than or equal to the substituted bandwidth, which indicates that the separation of markets by bandwidth, particularly in the business connectivity market, where a price premium is attached to bandwidth, as well as whether the circuits are provided on legacy technologies or otherwise, is logical.
4. However, eir strongly disagrees with the proposed new definition of the MI HQA retail market. In particular, eir does not agree with ComReg's revised standpoint that the MI Retail Market "*consists of all wired retail LLs carried over modern technology interfaces such as Ethernet, EFM, xWDM and other modern high bandwidth interfaces*". eir is of the view that the retail MI LL market includes all wired and wireless MI LLs and ComReg has not put forward adequate reasoning to justify the departure from its previous views in this regard.
5. Since the last market review, the landscape for wireless connectivity has changed significantly and there has been a large increase in the use of wireless P2P to deliver retail LL services. In the past, dedicated internet connections were typically delivered through copper or fibre optic lines all the way to a premise. This could cause a number of issues for many businesses including costly installations due to excess construction charges and extended delivery timelines.

6. The availability of cost-efficient wireless Ethernet technology has had a significant impact on the leased line market. This technology delivers point-to-point symmetrical connectivity at bandwidths comparable to those of Ethernet-based services. For example Host Ireland provides symmetrical wireless services at bandwidths up to 1Gbps in the greater Dublin area.² The potential cost savings associated with wireless LLs has led to the technology being deployed as an access mechanism for data communications networks. Wireless services have been widely deployed to deliver retail and wholesale leased lines across all geographies.³ Indeed, wireless technologies have proved particularly competitive in rural areas because, unlike fibre-based services, their cost does not increase significantly with the distance of the link.
7. ComReg's revised standpoint on the boundaries of the retail MI HQA market does not appear to be based on any level of coherent or objective assessment and eir considers that ComReg's substitutability analysis is inherently flawed. There has been a clear increase in the prevalence of wireless LL provision in Ireland, with a number of operators specialising in wireless LL solutions at both the wholesale and retail level.
8. In its analysis of the level of substitutability between wireless and wired LLs, ComReg states that it has considered the following⁴;
- (i) Product characteristics;
 - (ii) Pricing; and
 - (iii) Intended use and substitution
9. On the issue of product characteristics, ComReg notes at paragraph 3.121 that *"the majority of interviewed multi-site retail LL customers expressed their satisfaction with the quality of wireless LLs... Three interviewees stated that LoS issues were experienced, but two of them noted that these issues were quickly resolved by their SP. Other issues, such as, bandwidth scalability and service disruptions due to adverse weather conditions were also mentioned by interviewees."* In Table 9 of the 2016 Consultation, ComReg set out the key characteristics of the focal product (Ethernet LLs) and various potential substitutes

² <http://www.hostireland.com/our-products/>

³ For example, enet notes on its website that it operates "over 5,000 km of fibre infrastructure, including the Irish State's Metropolitan Area Networks (MANs), as well as one of the largest licensed wireless networks in the country. Taken together, our fibre and wireless infrastructure creates a fully integrated, nationwide network which is truly open access in nature, and enables our carrier customers to deliver world class bandwidth services to their customers throughout Ireland"

⁴ Paragraph 3.119

considered in the assessment of the relevant product market. On the basis of the information therein, a comparison between Ethernet, wireless, xWDM and other MI LLs would indicate that the technical characteristics of wired and wireless MI leased lines are broadly similar, an opinion that ComReg shared at that time.

Table 9: Overview of product characteristics

Product characteristics/LL Type	Ethernet LL		Analogue LL	DWDM and other MI LL	Wireless LL	Business Broadband	EFM	Dark Fibre
Download Speeds	From 64 kbps to over 100Gb/s	From 64 kb/s to 10Gb/s (STM-64)	56Kb/s	1Gb/s to >100Gb/s	Up to 1Gb/s	100Mb/s	20Kb/s	N/A
Upload Speeds	From 64 kbps to over 100Gb/s	From 64 kb/s to 10Gb/s (STM-64)	56Kb/s	1Gb/s to >100Gb/s	Up to 1Gb/s	20Mb/s	20Kb/s	N/A
Service availability	99.95% uptime, or 4 hours downtime per year						N/A	N/A
Contention	Uncontended (NG Ethernet can be engineered to meet customer requirement)					Some bandwidth can be provided with CoS	Can be engineered	N/A
Latency/Jitter	Low –depends on CoS (Class of Service) requested	Specific levels guaranteed	N/A	Low	Low –depends on CoS (Class of Service) requested	Some bandwidth can be provided with CoS	Low –depends on CoS (Class of Service) requested	N/A
Resilience	Can be engineered to meet customer requirement		N/A	Can be engineered to meet customer requirement	Can be engineered to meet customer requirement	N/A	Can be engineered to meet customer requirement	N/A
Synchronisation	Sync E specifications (ITU-T G.8261) comparable to SDH	Supported	N/A	Supported	Supported	N/a	Supported	N/a
Typical Price Range (incl. VAT)	Not publicly available. Typically sold on price-on-application basis.	Not publicly available. Typically sold on price-on-application basis.	Not publicly available. Typically sold on price-on-application basis.	Not publicly available. Typically sold on price-on-application basis.	Not publicly available. Typically sold on price-on-application basis.	€72 - €395 (business)	Not publicly available. Typically sold on price-on-application basis.	Not publicly available. Typically sold on price-on-application basis.

10. In the current iteration of the LL market review ComReg is still of that view and notes at paragraph 3.123 that *“from the perspective of technical overview of product characteristics, wireless LLs are comparable to wired LLs...”*
11. With regard to pricing, ComReg refutes the view of Vodafone and ALTO, of which Vodafone is a member, that the prices of wireless LLs are significantly higher than the prices of wired LLs. In the 2016 Consultation ComReg noted that the pricing of wireless LLs observed from bids for HEAnet contracts appeared to be broadly comparable with those of wired LLs and additionally that the average revenues per LL in an overall context were not substantially different for wired and wireless LLs. In line with its original conclusion, ComReg’s current position as noted at paragraph 3.126 is that *“prices of wireless LL are broadly comparable to prices of wired LLs”*.
12. On the issue of intended use and substitution, ComReg notes at paragraph 3.127 that wireless LLs account for 26.4% of all LLs purchased by 399 end users and 20% of these 399 end users purchased more wireless than wired LLs. These are not insignificant figures. ComReg also notes at paragraph 3.129 that 44% of multi-site LL customers are purchasing wireless LLs. Again, this is not an insignificant figure. Furthermore, ComReg states at

paragraph 3.131 that *“interviews with end-users of LLs indicated that while the majority of interviewees (14 out of 17) are purchasing wireless LLs, only 5 of them noted that wireless LLs are used as primary data connectivity services.”* In relation to the last statement, eir would firstly note that an interview sample of 17 could hardly be said to be sufficiently large, robust or representative of the relevant market. Secondly, even if this small sample were considered to be representative, 14 out of 17 (**82%**) are purchasing wireless LLs and approximately **30%** of all those multi-site firms who were interviewed are using wireless as primary data connectivity services, which is a significant proportion. eir also notes that the majority of those using wireless LLs as primary data connectivity services stated that wireless offered better value in terms of bandwidth and price than providers of wired LLs.

13. As part of the 2016 Consultation, ComReg commissioned Red C to conduct market research ('The 2014 Market Research') with the aim of informing its WHQA market review. The 2014 Market Research examined business attitudes to various issues related to the provision of retail LL, broadband and other services. eir notes that as part of this research 1,000 SME's and 100 Corporates among a nationally representative sample of businesses operating in Ireland were surveyed.
14. As noted by ComReg paragraph 3.42 of the original consultation, the market research *“indicated that there is a noticeable demand for wireless LL among businesses too with 26% of respondents indicating that their LL service is provided over wireless network. Thus, the demand for wireless LL services is not restricted to only a particular set of end-users (e.g. schools) or geographic areas (e.g. rural areas)”*
15. So it seems that, on the issues of product characteristics and pricing, ComReg's view has not materially changed since the 2016 Consultation. The exclusion of wireless LLs from the market appears to therefore be based on the assessment of intended use and substitution in particular, which in this iteration of the consultation is based on the views of only 17 respondents.

The analysis does not support the conclusions

16. eir notes that ComReg's analysis of substitutability between wired and wireless leased lines is mainly based on the views of only 17 interviewed multi-site LL customers yet ComReg has stated that it considers the sample of 17 is representative of the entire relevant market. eir is of the view that this sample is far too small and biased to produce reliable results to infer conclusions about the market as a whole.

17. It would appear that the majority of interviewees have not experienced issues in terms of technical comparability, a point that ComReg notes. However, ComReg also notes that “*end-users perceive wired LLs as having superior quality when compared to wireless LLs and has taken these perceptions into account when assessing substitutability between wired and wireless LLs.*” On the basis of the revised preliminary conclusions that ComReg has now reached, it appears that the stated preference of interviewees has been given greater weight in ComReg’s analysis than the observed behaviour of end-users. eir notes that stated preferences are liable to represent potentially biased perceptions of respondents.
18. In addition, the refreshed SSNIP analysis that ComReg purports to have conducted appears to be only in terms of these 17 respondents. At paragraph A5.26 ComReg states that respondents “*that are currently using wired LLs as primary data connection links were asked whether they would consider to continue purchasing these services or switch to wireless LLs if the price of wired LLs would increase by 5 to 10%*”. However, the copy of the Questionnaire provided in Appendix 1 of ComReg Information Notice 18/28⁵ does not include a question as to how the respondent would react to a 5-10% increase in the price of its LL service.
19. Nevertheless, of those that ComReg states responded to this question, 5 out of 13 noted that they would consider using wireless LLs if service quality and price were comparable to that offered by SPs supplying wired LLs. Close to 40% is a significant proportion of respondents but ComReg appears to simply have dismissed this. ComReg also appears to have ignored the fact that it has stated elsewhere in the consultation that the product characteristics and prices are comparable. **This is seriously flawed economic analysis.**
20. eir also considers that ComReg has inappropriately focussed on multi-site LL customers and their stated preferences in its analysis of the relevant MI HQA product market definition. While eir acknowledges that multi-site users may make up a significant proportion of the market in terms of volume of lines purchased, ComReg has not defined separate markets for multi-site LL customers and single-site LL customers. It is therefore not appropriate in a market review to define the boundaries of the total market based on the behaviour of one subset of end-users, and in fact a very small sample of that subset.
21. eir notes that Service Providers (SPs) supply both types of customers with retail LLs. Some SPs may differentiate service offerings and pricing by providing larger multi-site customers

⁵ ComReg Information Notice 18/28: ComReg Document 18/08 – Wholesale High Quality Access at a Fixed Location Response to Requests for Clarifications

with products that have higher specifications and ancillary services. However, in terms of product characteristics, similar products are offered to both single-site and multi-site customers.

22. Looking at this issue from the supply side, the underlying inputs used to supply leased lines are fundamentally similar regardless of whether that connectivity is eventually offered to a single or multi-site customer. Taking demand and supply-side considerations into account, the leased line market should not be further differentiated by customer type.
23. An economic approach to market delineation should seek to take into account all competitive constraints. Whilst in some cases it may appear self-evident as to what the conclusion of the hypothetical monopolist test (HMT) or SSNIP test should be, the application of the test should be quantitative in nature rather than intuitive or qualitative. As a result end-user surveys need to be designed appropriately and the subsequent analysis of substitutability conducted in a robust manner in order to ensure that the conclusion reached reflects the reality of the market rather than a presupposed outcome.
24. ComReg has failed to take into account all competitive constraints and has oversimplified the manner in which the leased lines market operates and the way in which consumers interact with the market. The conclusions that ComReg has reached are also contrary to the evidence and observable behaviour set out by ComReg itself in the consultation and Draft Decision.
25. Finally, eir considers that the geographic scope of the retail MI LL market is national as per ComReg's preliminary view and the market is competitive as correctly identified by ComReg in the 2016 consultation. However, eir is extremely doubtful that ComReg's conclusion as to the presence of sub-national wholesale MI LL markets, which operate on the basis of derived demand, is appropriate in this context. This is discussed further in the response to Question 2.

Question 2: Do you agree with ComReg's further preliminary conclusions on the definition of the Relevant WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

26. eir does not agree with ComReg's revised preliminary conclusions on the product and geographic definition of the Relevant WHQA Markets, namely that the MI WHQA market does not include leased lines provided over wireless technologies and that the MI WHQA

market is sub-national in scope. The new market definition appears to be designed in such a way so as to ultimately lead to a finding of significant market power (SMP) with little regard for the process for market definition as stipulated by the European Commission. eir remains of the view that ComReg's original conclusions, based on the robust analysis included in the 2016 Consultation, were appropriate. ComReg has not provided any proper reasoning for departing from its views in the previous consultation.

27. As discussed in eir's response to Question 1, the MI WHQA market also includes wireless LLs. eir notes, for example, that wireless has been considered to be part of the market in other recent WHQA reviews, including in Portugal and Finland. eir is also of the view that the ComReg analysis conducted in this regard does not meet the threshold required to make a concrete conclusion in terms of the boundaries of the product market. In any event, were ComReg to conduct sufficient analysis and reach the same conclusion, eir is of the view that ComReg has not considered wireless leased lines at the SMP assessment stage in terms of the indirect constraint they may provide. This is discussed further in eir's response to Question 3.
28. eir also has a number of concerns in relation to the mapping methodology used by Tera and ComReg. The first of these concerns is the choice of Small Areas (SAs) as the geographic unit for assessment. SAs *"are areas of population comprising between 50 and 200 dwellings created by The National Institute of Regional and Spatial Analysis (NIRSA) on behalf of the Ordnance Survey Ireland (OSI) in consultation with CSO"* [Emphasis added]. SAs determined on the basis of the number of residential dwellings, rather than commercial properties, are not an appropriate geographic unit by which to determine the boundaries of the business connectivity market.
29. With regard to the choice of the geographic unit from which an NRA should start its assessment, established practice under Article 7 states that NRAs should ensure that these units are (a) of an appropriate size, i.e. small enough to avoid significant variations of competitive conditions within each unit but yet big enough to avoid a resource-intensive and burdensome micro-analysis that could lead to a fragmentation of markets, (b) able to reflect the network structure of all relevant operators and (c) have clear and stable boundaries over time.
30. eir is concerned that the choice of SAs in this instance in addition to ComReg's choice of competitive criteria has resulted in micro-analysis that has led to a fragmentation in markets. While ComReg notes that *"the use of a geographic unit as small as SAs may result in an absence of contiguity between adjacent SAs"*, ComReg considers that *"the identification of*

the competitive conditions at such a granular level leads to our competition assessment being robust and this benefit outweighs the fact that adjacent SAs can be part of separate markets and thus the geographic markets seem fragmented". eir does not agree that the perceived 'benefit' outweighs a geographic analysis that results in fragmented markets and eir certainly does not agree that any robust competition assessment has been carried out as part of this consultation.

31. The level of granularity proposed by ComReg is unprecedented in the geographic analysis of WHQA markets in Europe. There are 18,641 SAs in Ireland. In other countries that have undertaken geographic analysis the geographic units have been much larger. Portugal uses civil districts of which there are 3,092. The UK uses post code sectors which we understand comprise at least 3,000 premises which are 20 to 30 times larger than the SAs proposed by ComReg. Finland considered 89 municipalities, Austria evaluated 2,350 communes. France also evaluated much larger areas than SAs and Romania conducted its analysis at county level. Put simply, the choice of SA is wrong because the geographic units are too small.
32. eir is also concerned that the SAs used are those as defined in the 2011 census (7 years ago) rather than the most recent SAs from 2016. ComReg has indicated that it *may* refresh its analysis in its final decision in that it will *"examine the use of the updated 2016 Census SAs to support its analysis in the final decision arising from this Further Consultation"*. This clearly adds to the current uncertainty surrounding the geographic boundaries of the MI market and will mean that ComReg has not actually consulted on the SAs that it may ultimately use to impose regulatory obligations on eir.
33. ComReg has also stated that as *"these Small Areas will be in place until the 2021 census they will be stable for the whole of the review period"*. eir notes that the Commission is currently proposing that the market review period will change from three years to five years and that in exceptional circumstances this could be extended by one year upon notification to the Commission. Whatever the outcome of the trilogue negotiations, it is envisaged that the three year market review timeframe will be extended. Given that the SAs will be redefined under the next Census in 2021 and that ComReg is expected to publish its final decision this year, it is entirely possible that the next review of this market will not occur until 2023, which indicates that the boundaries of the SAs will not be stable over the market review period. eir notes that other countries, such as France, will update their geographic market analysis for WHQA annually. ComReg must do the same if it proposes to impose regulatory obligations.

34. In addition, ComReg appears to be prejudging the outcome of the market review exercise in that it is assumed that eir has SMP in a presumed to be uncompetitive sub-national market prior to that same market being defined by ComReg. For example, ComReg states at paragraph 4.154 that it *“has not mapped the Eircom network as it is of the view that due to its extensive duct and pole network, it is considered to have a ubiquitous presence in every SA. As such, it can reach most premises in the State within a reasonable timeframe”*. Firstly, it is inappropriate for ComReg to presume the outcome of market definition and the subsequent assessment of SMP in this manner. Secondly, access to eir’s ducts and poles is regulated in a separately defined market and is available to all operators including eir therefore all operators have the ability to reach those same premises in the State. **ComReg’s reasoning in this regard is seriously flawed.**
35. eir is also of the view that 100m is the incorrect benchmark for network reach analysis. ComReg states at paragraph 4.159 that *“[h]aving examined all of the evidence gathered, ComReg formed the preliminary view that a SP can access customer site in a reasonable timeframe when its network infrastructure is within 100 metres of the relevant premises”*. eir notes that the ‘evidence gathered’ only includes information provided by 5 local authorities that were contacted by ComReg, including Dublin City Council, South Dublin Co. Co., Dun Loaghair Rathdown Co. Co. and Fingal Co. Co. and Cork County Council. The practices of five Councils, four of which are in the Dublin area, cannot be representative of national circumstances.
36. eir notes that ComReg has clarified⁶ that depending on the location and address information available, the 100m distance was either measured from the centre location of a particular premise or the entrance to the premise. eir considers that this approach is inappropriate and notes that standard practice for the provision of LL services would be to deliver to the entry point to the premises and operators generally regard on-site containment and ducting as the end-user’s responsibility.
37. It is also not clear to eir why ComReg has focussed solely on excavation notice periods. As ComReg itself acknowledges⁷ *“the option of using Eircom’s wholesale passive access products are also available to SPs to gain access to customer premises and these could be used to significantly reduce the requirement for major civil engineering activity”*. Consequently the potential reach of ANs in a reasonable timeframe is much greater than 100 metres. In the clarifications ComReg advises that *“In the Further Consultation, ComReg*

⁶ ComReg 18/28

⁷ Paragraph 4.160

noted that regulated upstream wholesale passive access products could be used by SPs to get access to customer premises. ComReg did not comment in the Further Consultation on the efficacy, or otherwise, of Eircom's Duct and Pole offerings. In view of this, ComReg is not commenting further, except to note that the availability or otherwise to regulated wholesale passive access products was not materially relevant to the specific adoption of the 100 metres distance criterion". The clarification suggests ComReg's position is that it has not formed a view on the efficacy of the passive access products and therefore they are irrelevant to the WHQA analysis. There is no logic to ComReg's position.

38. The relevant passive access remedy sits in an upstream market (currently the Wholesale Physical Network Infrastructure Access market per Decision 03/13). ComReg is required to undertake a modified greenfield (MGF) analysis, which means it needs to assess whether the market in question is competitive absent ex ante regulation in that market. In so doing ComReg must take into consideration regulation in the upstream WPNIA market to determine what if any regulation is required in the downstream WHQA market. The passive remedies are directly relevant, in stark contrast to the view expressed by ComReg in the clarification.
39. The duct access product was launched in February 2015 and the pole access product was launched in August 2015. It is surprising that ComReg is unable to offer a view since the first product launched over 3 years ago. In any event ComReg is currently conducting a review of the relevant upstream market (now called Wholesale Local Access) and has proposed to further specify the passive access remedies. We assume, following the conclusion of the WLA review this year, ComReg will be comfortable with the efficacy of the passive access products. ComReg is obliged to take upstream remedies into account in its analysis of the WHQA market now, and certainly no later than the conclusion of the WLA review, and must significantly extend the 100m distance criterion to take into account upstream regulation to ensure the downstream WHQA market is not subject to over-regulation.
40. eir considers that ComReg has approached the application of the competitive criteria in the incorrect order. Economic theory would suggest that the correct approach would be to consider demand in the first instance and subsequently examine supply side conditions. The application of Criterion 1, i.e. identifying whether a SA has two or more alternative networks (ANs) present within it or intersecting it has resulted in only 4,752 SAs of the 18,641 in the State being considered for Criteria 2a and 2b. However, ComReg has confirmed that in calculating the distance from a relevant premise to ANs, this includes ANs that are present

both within the SA in question and in adjacent SAs, i.e. the boundaries of the SAs have been disregarded.

41. This would suggest that those SAs that have been excluded from the analysis on the basis that they have failed to meet Criterion 1 should be assessed in the same manner as it is entirely possible that although there may be insufficient AN presence in those SAs, relevant premises within them are still within reach of AN infrastructure in an adjacent SA.
42. The methodology used by ComReg has resulted in numerous SAs being identified as Zone B or not competitive when they should be classified as Zone A. For example a number of large hospitals in Dublin and elsewhere have been classified as Zone B (See Table 1).

Table 1. Examples of Zone B Hospitals

Name	Zone
Beaumont Hospital	Zone B
Bon Secours Hospital Dublin	Zone B
Children's University Hospital, Temple Street	Zone B
Cork University Hospital	Zone B
Croom Hospital	Zone B
Kerry General Hospital	Zone B
Letterkenny University Hospital	Zone B
St Colmcille's Hospital, Loughlinstown	Zone B
The Mater Hospital	Zone B
St. Luke's Hospital, Kilkenny	Zone B
Our Lady of Lourdes Hospital, Drogheda	Zone B
National Rehabilitation Hospital, Dun Laoghaire	Zone B
Tralee General Hospital	Zone B
St. Vincent's University Hospital	Zone B
Mercy University Hospital, Cork	Zone B
Rotunda Hospital	Zone B

43. Looking at some of these in further detail on the map showing the Zone A MI WHQA Market and Zone B MI WHQA market, it would appear that the hospitals are either adjacent to numerous competitive SAs or are partially within a competitive SA (See Figures 1, 2 and 3).

Figure 1. Kerry General Hospital

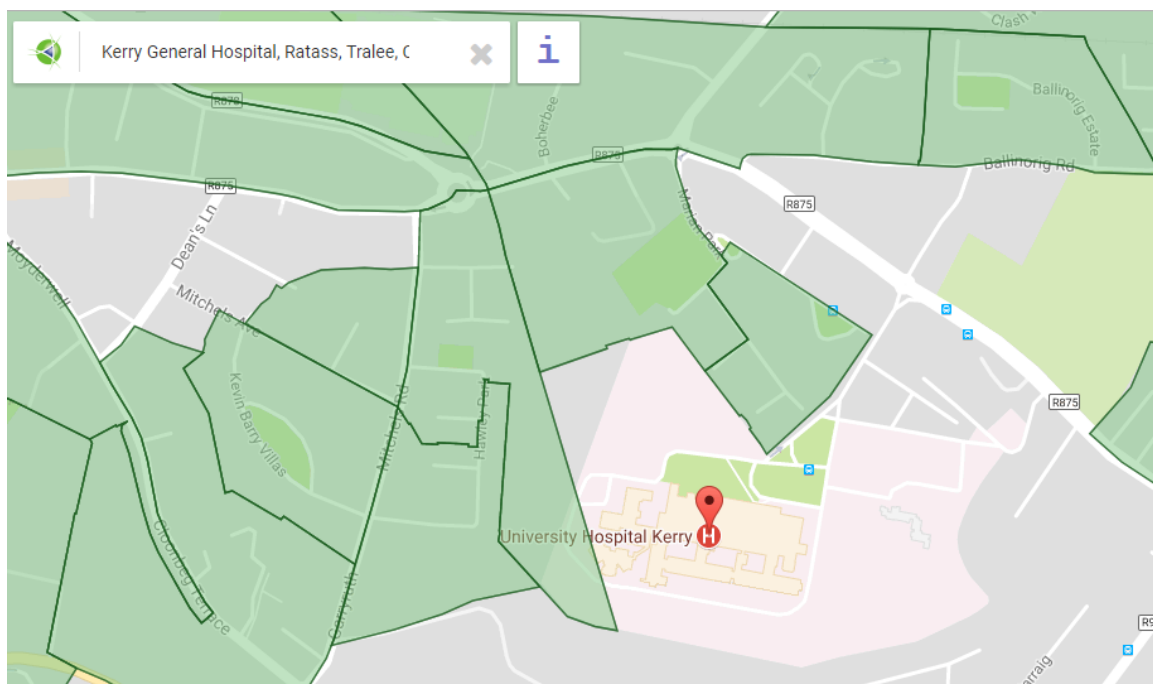


Figure 2. St. Colmcille's Hospital, Loughlinstown

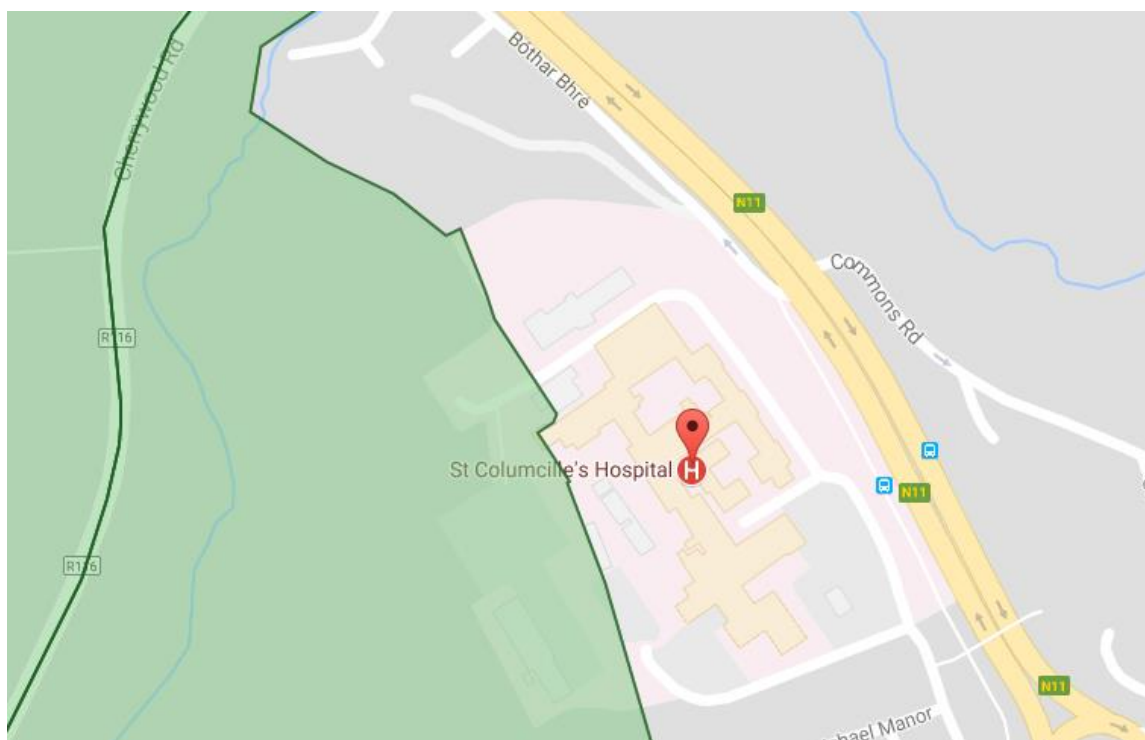
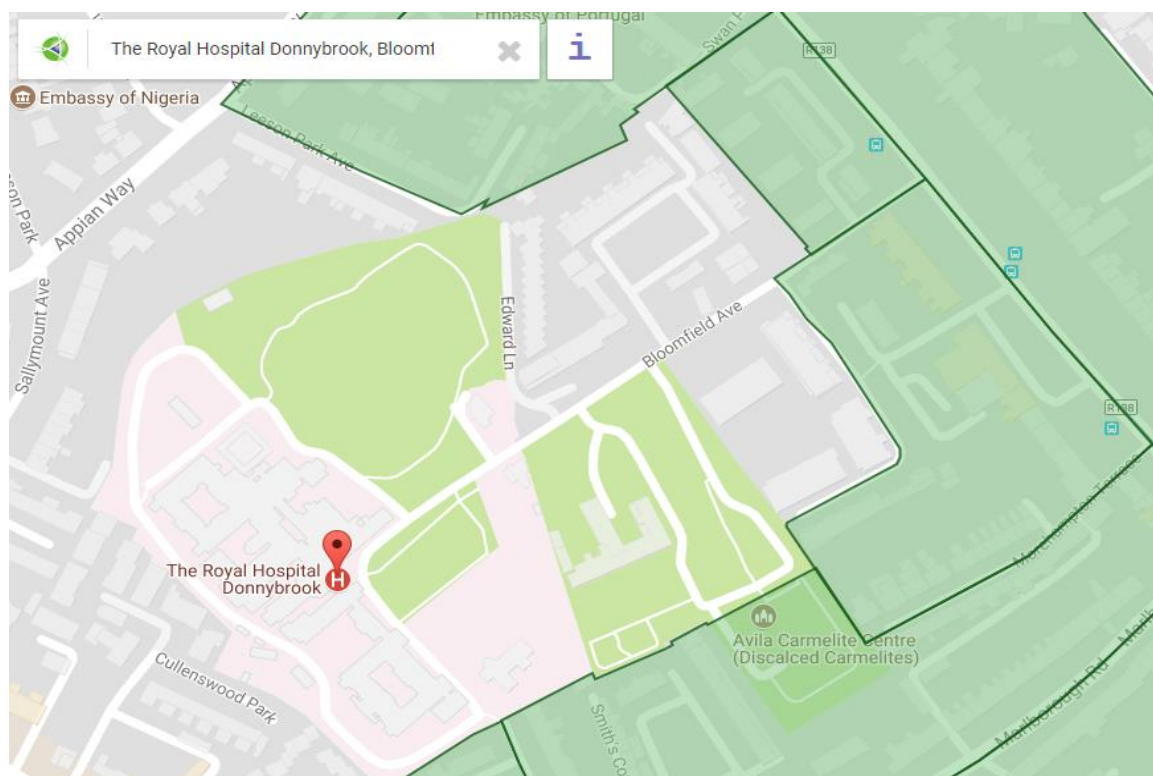


Figure 3. The Royal Hospital, Donnybrook

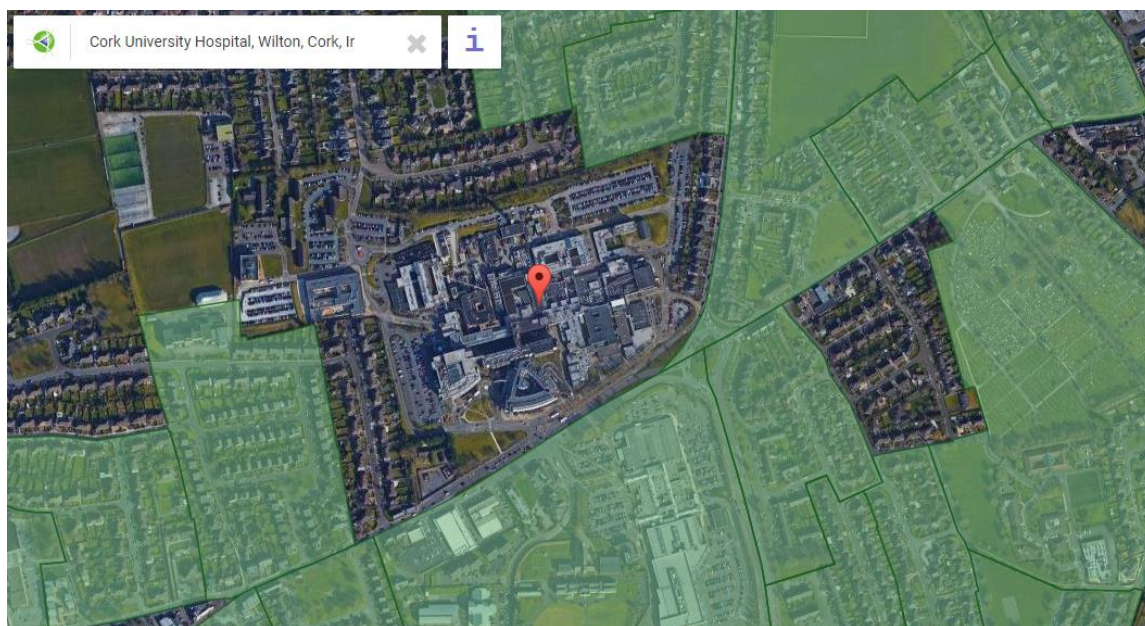


44. Mercy University Hospital in Cork for example appears to be bisected potentially on the basis of separate postal addresses for the hospital and the foundation, which has resulted in one SA containing the hospital being included in Zone B but completely surrounded by Zone A (See Figure 4). eir notes that according to AirSpeed's website, Mercy University Hospital is currently a wireless LL customer and "AirSpeed Telecom designed and provisioned a new licensed wireless network to connect Mercy's main building and its remote sites" which has "transformed its telecoms infrastructure, replacing a combination of aging technologies with a cost-effective, secure, flexible licensed wireless network which provides a minimum 100Mbps access for each of Mercy's key remote sites". Meanwhile, Cork University Hospital is in Zone B, but a number of SAs surrounding it, which appear to contain mainly residential estates, are in Zone A (See Figure 5).

Figure 4. Mercy University Hospital, Cork

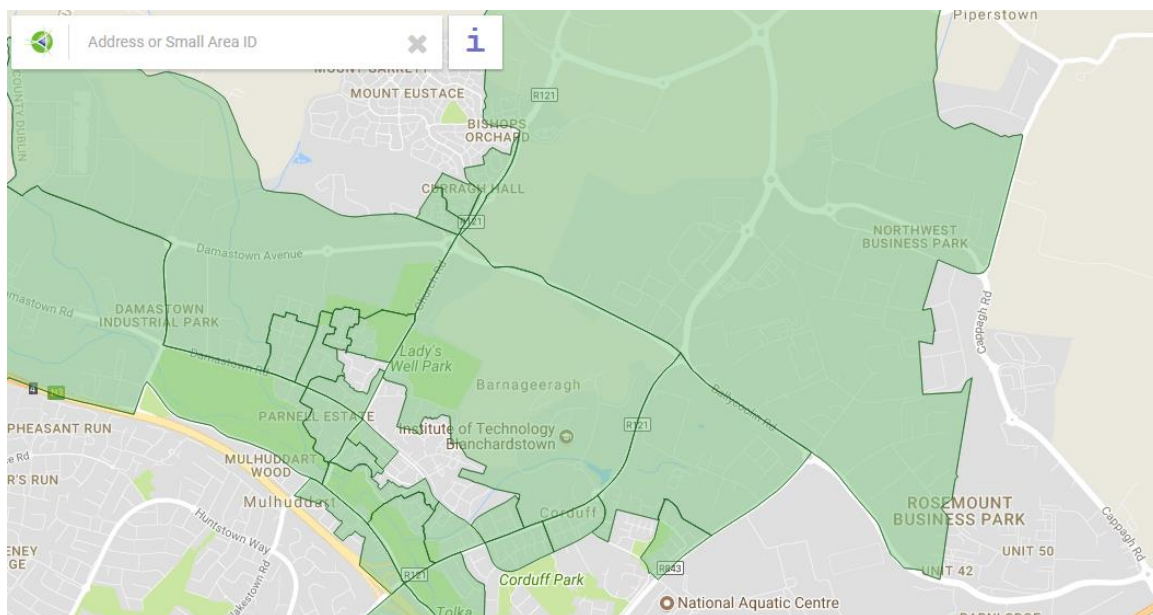


Figure 5. Cork University Hospital



45. A similar issue has arisen in the case of a number of industrial estates. For example, Rosemount Business Park is in both Zone A and Zone B (See Figure 6).

Figure 6. Rosemount Business Park



- 46. Ballymount Cross Industrial Estate, Clondalkin Industrial Estate, John F. Kennedy Industrial Estate and Dublin Airport Logistics Park, to name but a few, are all bordered by other industrial estates which are in Zone A SAs (See Figures 7,8 and 9).

Figure 7. Ballymount Cross Industrial Estate

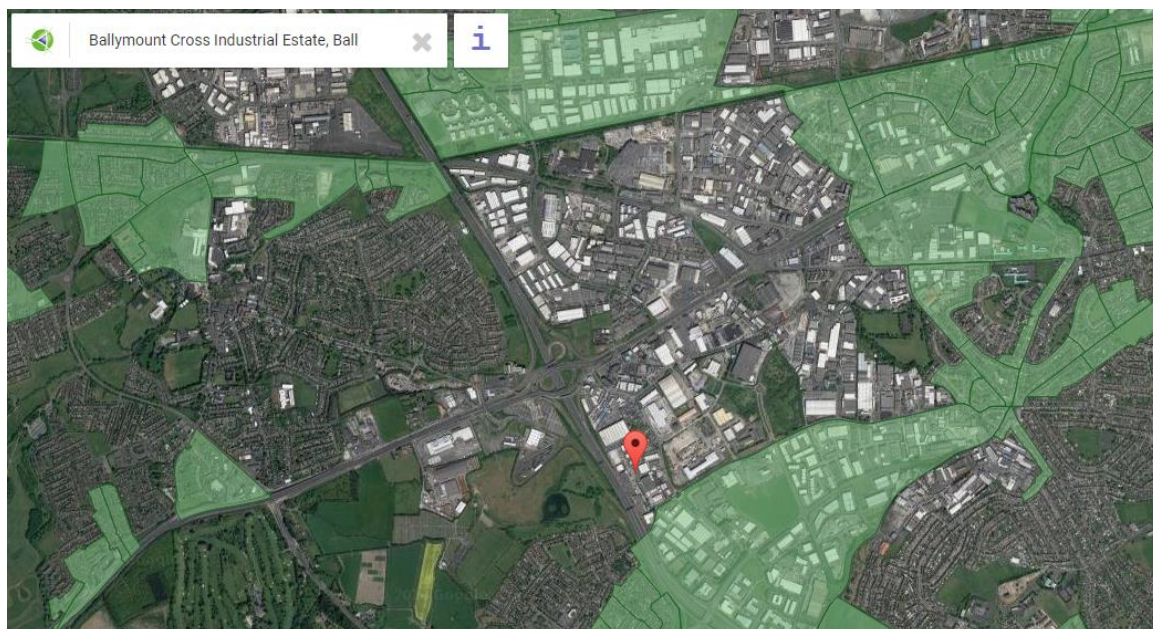


Figure 8. Dublin Airport Logistics Park

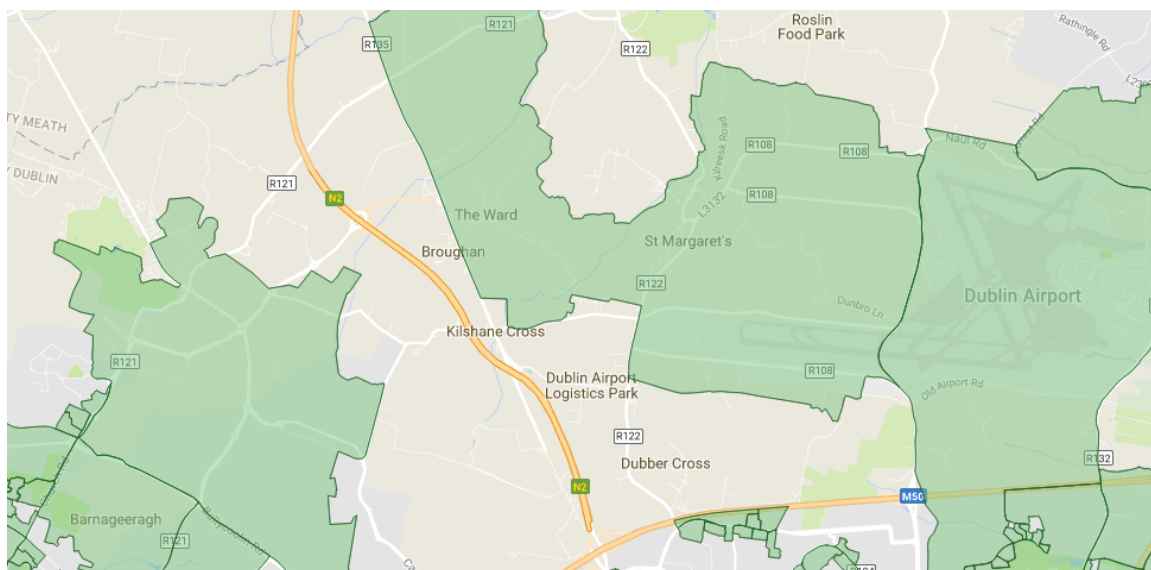
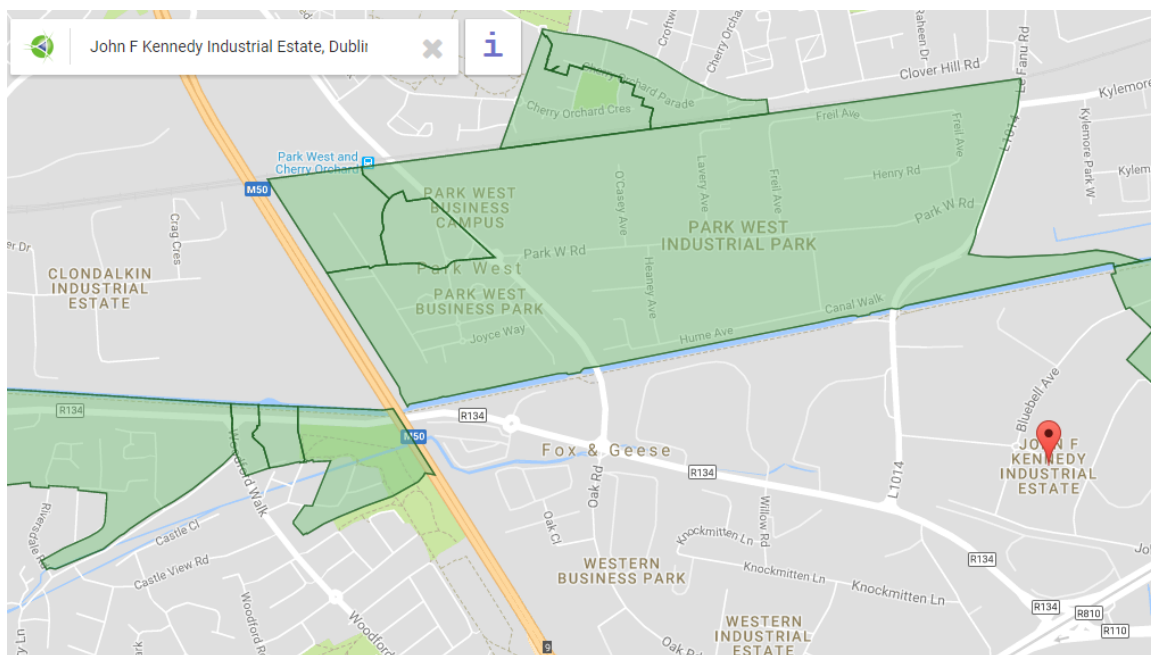
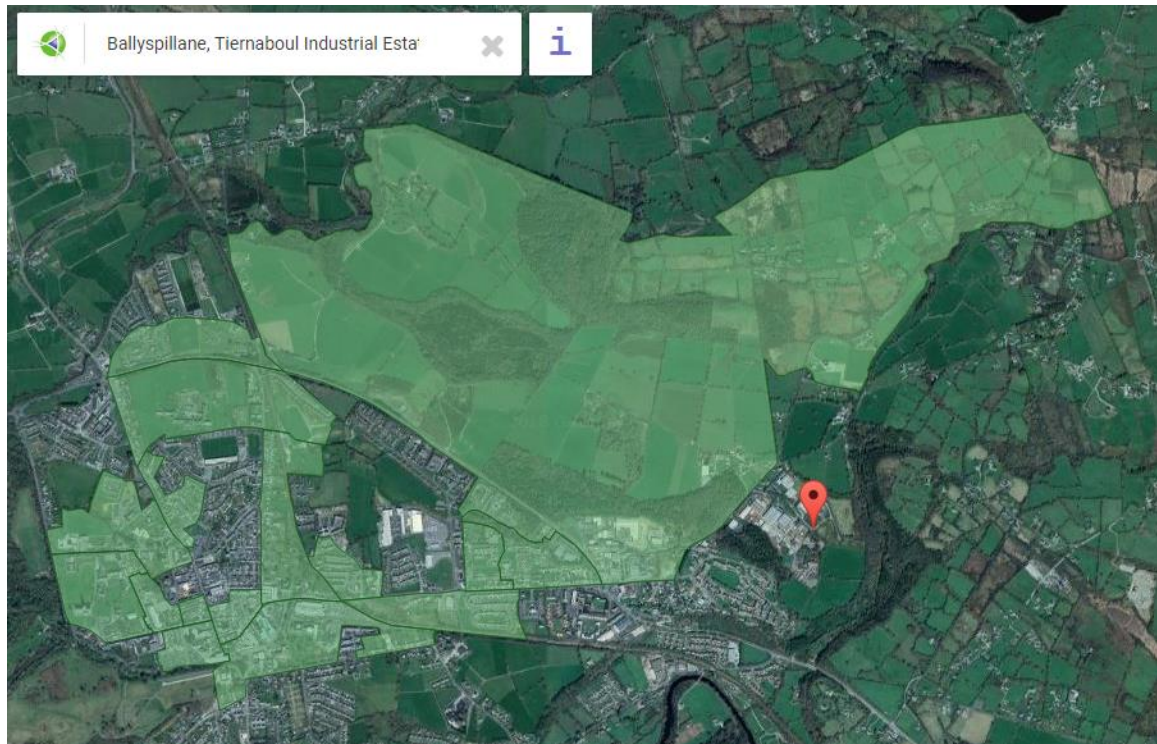


Figure 9. Clondalkin and John F. Kennedy Industrial Estates



- 47. Ballyspillane Industrial Estate is in Zone B, while what appear to be fields located across from the industrial estate are in Zone A (See Figure 10).

Figure 10. Ballyspillane Industrial Estate



48. eir would seriously question the rationale of and logic underpinning a methodology which suggests that fields are competitive for the purposes of leased lines provision while industrial estates are not or indeed one that suggests that half of an industrial estate or neighbouring industrial estates experience significantly different competitive conditions from each other.
49. eir also notes that Heuston Train Station is included in Zone B, despite both enet and BT being present in the SA. The fact that both BT and enet are present demonstrates that this is in fact a competitive area yet ComReg has classified it as uncompetitive. **These issues call into question the reliability of ComReg’s entire mapping exercise.**
50. The mapping methodology used by ComReg and Tera that underpins a conclusion of “*subnational geographic markets for the provision of MI WHQA products*” is extremely flawed. In addition to those detailed above, there is a substantial list of SAs that are currently or prospectively competitive but have been included by ComReg in Zone B as a result of this flawed mapping methodology. We have included with our response an Excel file listing the significant number of SAs that we believe have been incorrectly characterised. This list is not exhaustive. In circumstances where a market review has not taken place since 2008 (some 10 years ago), we are disappointed at the poor quality of the analysis carried out by ComReg.



Question 3: Do you agree with ComReg’s further preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, including the proposed designation of Eircom as having SMP, as appropriate? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your view.

51. eir does not agree with ComReg’s preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, as it pertains to the proposed designation of eir as having SMP in the Zone B MI WHQA market.
52. Notwithstanding eir’s view that the MI WHQA market includes all leased lines provided over wired and wireless networks, eir considers that ComReg has also failed to consider the indirect constraint imposed by wireless in relation to the Zone B MI WHQA market. ComReg in its assessment of indirect constraints has merely stated that *“Even though they are external to the relevant MI WHQA markets, ComReg considers that they may act as a weak competitive constraint on a monopolist for some demand in the Zone B MI WHQA market. However, for the majority of demand, these services are unlikely to act as a strong enough constraint to significantly affect the market power of a monopolist in the Zone B MI WHQA market”* and *“As such, indirect constraints were identified as not being a consideration for the SMP assessment in the Zone A MI WHQA Market. ComReg maintains this view”*.
53. In order to assess the effect that indirect constraints may have in preventing eir from imposing a profitable small but significant non-transitory increase in price (SSNIP), ComReg should have considered the following factors;
- (i) How a SSNIP would be likely to affect the retail market in terms of wholesale price increase pass through (i.e. the dilution ratio)
 - (ii) What response in retail demand would be required to make the price increase unprofitable (i.e. the critical loss test)
 - (iii) Whether the strength of indirect constraints would be weakened by retail customers switching to eir’s own retail arm
54. ComReg has failed to conduct any such analysis and in doing so has failed to accurately categorise the level of indirect constraint that wireless leased lines may provide in terms of the wholesale MI WHQA market.

Question 4: Do you have any further observations on this Section 6 concerning competition problems in the LB TI WHQA Market?

55. eir maintains its view that, while there remains an installed base of TI LL services, in a declining market such as the LB TI WHQA market, vertical leveraging concerns in relation to downstream and adjacent markets as well as foreclosure concerns are unlikely to arise.
56. These TI lines are outdated in terms of the bandwidth they deliver and are not considered cost effective business transmission solutions. They are retained at present largely due to customer inertia and because customers are not ready to update internal networks and customer premises equipment (CPE). Over time eir expects to see more customers making the decision to migrate away from such legacy services.
57. However, eir welcomes the recognition by ComReg that the risks it foresees in relation to this market will lessen over time and that it therefore *“takes account of this in the context of the nature of the remedies that it intends to impose in the LB TI WHQA Market”*.

Question 5: Do you have any further observations on this Section 7 concerning obligations in the LB TI WHQA Market?

58. For the record, contrary to the view expressed by ComReg at paragraph 7.26 eir did not disagree with the proposed access remedies.
59. eir welcomes ComReg’s confirmation that *“ComReg will continue to monitor the situation and KPIs will be interpreted having regard to their statistical significance as the market evolves.”*⁸
60. In response to the 2016 Consultation, eir set out its views on the appropriate approach to wholesale price setting in a declining market. In the interest of promoting efficient incentives and administrative efficiency we proposed that a safeguard price cap should apply. We welcome ComReg’s *“preliminary position that maintaining existing prices for regulated LB TI WHQA is the most prudent approach to ensure regulatory certainty for both wholesale and retail customers for the review period”*⁹.

⁸ Para 7.91

⁹ Para 5.50

Question 6: Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

61. eir does not agree that the competition problems and the associated impacts on competition and consumers as identified by ComReg are those that could potentially arise in the Zone B MI WHQA market.
62. We note that some respondents have raised concerns regarding the availability of backhaul services if the MI WHQA market is de-regulated. Specifically ComReg states it has considered this in the context of enet and has designated some of the enet MANs as UMANs¹⁰ for the purpose of market definition. *“ComReg investigated refreshed data provided by Enet and clashed this against other SP network mapping and circuit information and also met with other relevant stakeholders. ComReg calculated that [] MANs were so dependent. Enet’s refreshed data demonstrated that it typically required a minimum of [] for backhaul connectivity to its ‘isolated’ MANs which indicates that wireless technology is not capable of meeting these demands”¹¹.*
63. ComReg does not provide any substance in terms of the analysis it carried out to identify the UMANs. In particular it would be instructive to understand what factors are hindering enet from investing in its own infrastructure and climbing the ladder of investment. Would a less intrusive regulatory approach foster competition? Recital 19 of the Access Directive notes *“The imposition by national regulatory authorities of mandated access that increases competition in the short-term should not reduce incentives for competitors to invest in alternative facilities that will secure more competition in the long-term”*. ComReg does not answer these questions and instead proposes an approach that results in over-regulation of the access market by excluding UMAN areas from the Zone A market definition. This approach is wrong and contrary to the principle of minimum necessary regulation.
64. If there are legitimate concerns in relation to the availability of backhaul services then this should be addressed by a specific backhaul product as the downstream input, facilitating competition in the access market to the maximum extent possible. Given ComReg’s proposal that open eir will continue to be mandated to provide backhaul services, including

¹⁰ “State owned open network access network which are partially or wholly dependent on Eircom for backhaul”

¹¹ Paragraph 4.82

WDM backhaul, there is no valid justification for the so-called UMAN areas to be excluded from the competitive market for access.

Question 7: Do you agree with ComReg's approach to imposing access, non-discrimination, transparency, price control and cost accounting and accounting separation remedies in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

65. The following comments are without prejudice to eir's position that there is no justification for the imposition of obligations on open eir in the MI WHQA market for the reasons set out earlier in this response.

Access Remedies

66. ComReg, through the definition of MI WHQA proposes that open eir be subject to an obligation to provide access to Ethernet First Mile (EFM). This obligation is not appropriate. open eir does not offer an EFM wholesale product. We understand that other operators develop their own EFM services using unbundled copper which open eir is obliged to make available in the Wholesale Physical Network Infrastructure Access market. As such reference to EFM should be removed from the Decision Instrument.

67. ComReg proposes that obligations are imposed on open eir to offer a number of additional facilities in relation to back-haul and co-location. It is surprising that ComReg is proposing additional access obligations in the context of an increasingly competitive market. The proportionality of ComReg's additional proposals are therefore questionable. If the additional obligations are justified on the basis of the 'development of competition' then ComReg must commit to review geographic market definitions on at least an annual basis in order that competitive developments can be recognised.

WDM Interconnection Service

68. ComReg proposes that open eir be subject to an obligation to provide access to Interconnection based WDM Uncontended bandwidth services. ComReg states in footnote 685 that these services are intended to replace the current 'end to end' WUP and LLU backhaul services. Noting that WUP are end to end services, open eir requested clarification from ComReg as to its rationale for the proposal. ComReg responded only to say that it

intended the “*end-to-end product is replaced with an uncontended Wavelength Division Multiplexing (‘WDM’) Wholesale High Quality Access (‘WHQA’) that can be considered as two segments of a WDM WHQA circuit*”. It is disappointing that ComReg has not responded fully to our requests for clarification. In particular ComReg has failed to explain the rationale for its proposal or provide examples from other countries if this has been demonstrated to be technically and economically feasible.

69. eir notes that xWDM products are targeted at different use cases to the access/interconnect model used for IP and Ethernet-based products. The access/interconnect model is particularly suited where an operator needs to aggregate large numbers of low bandwidth connections from end-users; connections that are used to access a higher-level service such as internet or IP/Ethernet VPNs. This allows the operator to combine large numbers of low-speed accesses and use statistical multiplexing to efficiently utilise a relatively small number of high-speed handoffs towards a service layer.
70. In contrast, WUP services are typically used for infrastructure purposes where the end-user is effectively the operator themselves. There is no statistical multiplexing benefit to aggregating these accesses into a single point for handover. In fact, the opposite is true in that the service would be negatively impacted by having what is naturally a point-to-point connection brought in and out of a central handoff point. This is because xWDM transmission is effectively an analogue technology and therefore subject to distance limitations. It is very important that xWDM circuits take the shortest possible path in order to maximise performance and minimise cost.
71. Since there is no statistical multiplexing in operation, the full bandwidth of each WUP is dedicated to the operator who purchased it. As such there are no cost saving benefits to a centralised handoff model either and no apparent benefit arising from ComReg’s proposal. The range of comparable Interconnection connectivity services already exist within the MI WHQA market and are capable of supporting interconnection for Operators using CSH, ISH, IBH and ENH. These services are already facilitating product innovation and differentiation between operators, therefore an imposition of the obligation to provide a WDM interconnection is without merit.
72. WDM is used by operators where there is a need for a secure, dedicated point-to-point high bandwidth service, currently at 1Gb/s or 10 Gb/s where infrastructure is not shared. NGN services unlike WDM utilise an NGN packet switched network core and nodes. open eir has received no requests from an operator for aggregation services using WDM or for an access product that could interconnect at the optical layer of the open eir network. eir is concerned

that ComReg's proposed obligation for WDM interconnect will be technically challenging and may be very expensive to implement if it is found to be feasible to offer an end to end service as two segments. The proposed obligation is not proportionate and ComReg has failed to properly consider the factors required under Article 12(2) of the Framework Directive.

Interconnection Sharing

73. ComReg proposes that open eir should be subject to an obligation to facilitate two or more access seekers to share a WEIL. ComReg notes that open eir is able to facilitate such sharing for companies under common ownership to suggest that the proposed obligation will not be burdensome. However ComReg's simple observation ignores the fact that the current facility is implemented manually and is only suitable in cases where the relationship of the operators involved is static (through common ownership). The facility cannot be managed dynamically on a site by site or operator by operator basis. We do not consider ComReg's proposed obligation to be reasonable or proportionate.

Co-location Resource Sharing

74. ComReg proposes that open eir should be subject to an obligation to provide access to Co-location Resource Sharing. In effect one Access Seeker could sub-lease space in an open eir exchange to another operator. This represents an unacceptable dilution of open eir's property rights. The proposal would be unworkable unless both Access Seekers enter into co-location arrangements with open eir. However, open eir will not be in a position to bill each party for services consumed, such as power, without incurring additional, unnecessary expense to install additional power metres. Security may also be a concern where one operator's staff could be working on another operator's equipment. ComReg has failed to properly assess the proposal.

Co-location rack interconnection

75. Rack interconnection as a proposition is without merit, because operators already have IBH and ISH notwithstanding the ability to also share ISH chambers providing a means for interconnection between operators at a trunk node already. An obligation to support rack interconnection would be an unreasonable imposition and only serve to deliberately undermine investment by open eir and increasing risk of damage to equipment within Exchanges.

76. A rack interconnection product would introduce additional requirements and protocols to the current RAP product set and service operations teams who will potentially need additional site visits where access may be secured by the operator to their rack, requiring more than one visit to clear a fault. Rack interconnection would most likely be an unmanaged service which has a high probability to trigger a significant number of non-faults to open eir. It is an unreasonable obligation to expect open eir to manage infrastructure between operators where the ownership and ability to complete a fault diagnosis is ambiguous.
77. A rack interconnection product would not be an enhancement to the current product but a new product development. Co-location rack interconnection is an erroneous term because it presumes rights on operators that supersede our own. Exchanges, racks and chambers are Points of Interconnect used to facilitate operators to interconnect with open eir close to the open eir network, it is not a low cost facility to be used for operators to connect with each other and bypass the open eir network which has deployed significant investment.
78. The rack interconnect capability could potentially have scalability issues where access to racks over cable tray, or high duct utilisation may require additional investment by open eir or the operator, in some older buildings this may not be cost effective.
79. The imposition of the proposed additional obligation is not proportionate given that the desired outcome can already be achieved under current arrangements. ComReg has failed to properly consider the factors required under Article 12(2) of the Framework Directive.

Cessation of service

80. eir notes "*ComReg's preliminary view, a five years notification period prior to closure of an MDF, ODF or the relocation of Aggregation Nodes would be appropriate and proportionate.*"¹² It is not clear how ComReg has arrived at this position as no supporting analysis is presented. We do not believe it is appropriate or proportionate to prescribe minimum notification periods for withdrawal of a service or facility in the absence of consideration of the specific circumstances. As such we welcome the text in section 14.5 of the Decision Instrument which does not seek to prescribe timelines.

¹² Para 9.125

Product development

81. In section 14.3 of the proposed Decision ComReg is seeking to impose obligations in respect of the timeliness of product development. ComReg seeks to justify its approach on the basis that¹³ “ComReg has concerns regarding undue delays being experienced by Access Seekers at this point in the product development process, in relation to product development in other markets” and¹⁴ “that Eircom has a single product development process which is used in the development of all RAPs, across all regulated Markets”. As noted in the Further Consultation¹⁵ “the proposed obligations are modelled on the timelines for product development as proposed by ComReg in its Consultation on its market analysis for the WLA/WCA Markets, having taken account of Respondents views.” ComReg has unfortunately not provided any detail on how it has taken into account the views of respondents to the WLA/WCA consultation. Respondents are therefore at a disadvantage in terms of the reasoning behind ComReg’s current thinking and are therefore not in a position to comment effectively.
82. eir assumes it is ComReg’s intention that any comments on the proposals in this Further Consultation will feed through to the outcome of the WLA/WCA review so that the obligations are consistent. Thus at a point in time, subject to the actual timing of the conclusion of each of the market review projects, the product development obligations in the WLA, WCA and WHQA markets may be consistent. This is not appropriate. EU law requires that obligations imposed by ComReg must be based on the nature of the problem identified, proportionate and justified. It follows therefore that obligations imposed in the WLA/WCA markets must be based on problems identified in those markets as part of the market reviews. Similarly, obligations imposed in the WHQA market can only be based on problems identified in that market. A ‘one size fits all’ approach is a clear breach of ComReg’s obligations under EU law and is open to challenge.
83. It is correct that open eir operates a single product development process for RAP developments and detailed information has been provided to ComReg as part of the RGM review. It is not appropriate that RGM discussions are now being included in a public consultation on a particular market.

¹³ Para 9.185

¹⁴ Para 9.199

¹⁵ Para 9.199

84. eir shares ComReg's view¹⁶ that *"A properly functioning product development process is particularly important for ensuring the development of effective competition in downstream markets and to allow Access Seekers to plan for and provide innovative services to downstream customers, including End Users. Uncertainty with regard to the content and timing of product updates creates uncertainty in the market and can potentially lead to increased costs across the industry and to concerns regarding the availability of information to Eircom's downstream arm in advance of competing retail operators."* This is why open eir has over the years developed and continues to evolve a highly transparent and structured product development process as highlighted in our response to the WLA/WCA consultation. Since that consultation in 2016 open eir has continued to enhance the RAP development process in terms of the format of the Customer Requirements Document, to encourage requestors to provide sufficient and clear information including material relevant to prioritisation, and enhancing the transparency of the prioritisation process.
85. Notwithstanding the preceding paragraphs, in this response eir will endeavour to comment on the latest iteration of the product development proposals. However, as noted above, our ability to effectively do this is hampered because ComReg does not elaborate on how it has considered points raised in the previous consultation. Nor does ComReg present any justification for the proposed deadlines in section 14.3. This is a concern we raised in WLA/WCA consultation which has not been addressed. The consultation process is consequently deficient.
86. eir has compared section 14.3 of the proposed WHQA Decision with section 8.10 from the WLA/WCA proposals. The opening paragraph of section 14.3 includes additional text requiring open eir to take due of account of its other obligations including non-discrimination. The principle of non-discrimination is enshrined in the open eir RAP development process.
87. ComReg has increased the deadline to achieve the second milestone (section 14.3 (ii)) by 5 working days relative to the WLA/WCA proposals. We agree with this change for the reasons outlined in our response to the WLA/WCA consultation. ComReg has amended the wording of section 14.3 (ii) to require that open eir confirms that a request is for a new product / service or for an amended product / service. open eir already does this so it seems that ComReg is hard coding open eir's voluntary practice into the proposed obligations. Regulatory intervention to impose obligations in circumstances where there is clearly no

¹⁶ Para 9.184

market need is entirely disproportionate and is overreaching by ComReg in terms of its statutory powers and EU law obligations.

88. The deadline for the third milestone (section 14.3 (iii)) has increased by 5 working days consistent with the change to the second milestone. This milestone requires open eir to confirm that it has received sufficient information from the Access Seeker to process the request. ComReg has proposed a mechanism whereby the deadline may be extended upon request of open eir and the Access Seeker, subject to ComReg consent. open eir does not object to the extension mechanism. However, the underlying reasonableness of the obligations in section 14.3 (iii) is questionable. ComReg is placing an obligation on open eir, the compliance with which is reliant on the actions of other parties. For example, open eir is required to confirm it has received sufficient information regarding *“the Access Seeker’s view on the priority of the request relative to other requests pertaining to the Zone B MI WHQA Market that have already been submitted by that Access Seeker”*. If the Access Seeker does not provide sufficient information open eir will not be able to issue the necessary confirmation to comply with the obligations in section 14.3 (iii). We request ComReg to clarify how compliance will be enforced in respect of this obligation where the lack of action of an Access Seeker means there is insufficient information. We also note that at paragraph 9.186 ComReg states its view that Access Seekers should *“have adequate input into the prioritisation of product developments (including relative to those product developments which appear to be related to and which emanate from Eircom’s downstream arm)”*. This is different to what is proposed in section 14.3 (iii) which asks the Access Seeker to rank the relative merits of the requests it has submitted.
89. open eir operates a non-discriminatory product development process and we do not accept the apparent negative bias in ComReg’s views expressed in paragraph 9.186. In any event open eir does not declare the identity of the requestor on the basis of confidentiality and we do not believe that practice should be changed.
90. The deadline in section 14.4 (iv) has been extended to 85 working days although no explanation has been given by ComReg. However, we welcome ComReg’s recognition, consistent with our previous representations that the product development process is dynamic and outputs can be subject to change during the process. As such, eir has no objection to the proposed obligation to *“fully explain (i.e. objectively justify)¹⁷ to the relevant Access Seeker(s) why a particular development, which it previously considered was*

¹⁷ In the interest of brevity the obligation could be expressed as ‘fully explain’ or ‘objectively justify’. We do not see the need for both expressions of the same thing.

reasonable and that it had previously agreed to develop, requires amendment or cannot progress to completion". open eir already provides explanations in a transparent manner to all Access Seekers not just the requesting Access Seeker.

91. eir notes that there is no equivalent in the proposed WHQA Decision to section 8.2 which proposed that requests should be delivered concurrently. We agree that section 8.2 was not appropriate for the reasons set out in our response to the WLA/WCA consultation and welcome its removal from the product development obligations.

Service Level Agreements

92. As with the proposals in respect of product development, we find ourselves with proposed SLA obligations that are based on proposals consulted on in the WLA/WCA consultation in late 2016 which were based on obligations imposed in the FACO Decision in mid-2015. ComReg has amended the 2016 proposals but has provided no explanation as to how it has taken into account the views of respondents. The consultation process is flawed.
93. Notwithstanding our position that the process is flawed and a 'one size fits all' is a clear breach of ComReg's EU law obligations, the following comments are made in addition to those submitted in response to the WLA/WCA consultation. eir notes ComReg's view at paragraph 9.137 that "*Ultimately, the proposed SLA obligations are designed to ensure fair competition in the provision of MI WHQA products, services and facilities by allowing Access Seekers to compete on a level playing field with Eircom (and its wholesale customers) in downstream markets.*" It is surprising ComReg makes this statement given that open eir is subject to strict non-discrimination requirements, monitored through transparent KPIs that ensure equivalent levels of service are provided to all access seekers. Similar to our observations at paragraph 89 ComReg appears to be expressing an unconscious bias against eir.
94. At paragraph 9.145 ComReg seeks to unfairly blame open eir for delays in SLA development as justification for the proposed SLA obligations. open eir agrees with the observation by ComReg that open eir proposed a modification to NGN Ethernet delivery SLA in August 2017. The SLA development was on-going at the PPC/LL Industry Forum on 17 January 2018 because of a lack of engagement by operators and significant delays in responses to actions by BT which ComReg has failed to mention. Operators were required to review and comment on the open eir proposal by 19 September 2017 (Forum action 1709.2), unfortunately BT waited until 24 October 2017 to respond to the proposal. Currently open

eir's SLA BAFO has been put on hold for another 8 weeks while BT awaits availability of 'key personnel'. It is disingenuous for ComReg to suggest that open eir needs an incentive to progress negotiations when it is reliant on proper engagement from Access Seekers to progress matters in good faith.

95. In our response to the WLA/WCA consultation eir proposed that:
- (i) The SLA negotiation period commences when OAOs submit a clear set of requirements and rationale for adjusting existing SLA or introducing new SLA metrics.
 - (ii) ComReg should confirm at this stage whether what is submitted is clear and is fit for purpose.
 - (iii) A six month period of negotiation at the end of which open eir will provide an updated new draft of SLA document which effectively be the Best and Final Offer (BAFO) if earlier agreement has not been reached.
 - (iv) The draft SLA document would then be notified to ComReg and published in accordance with the specified timelines.
 - (v) The notified document will include an expected launch date. The launch date for the new or amended SLA will be dependent on whether there are any development requirements to introduce the SLA
 - (vi) Once an SLA is launched the SLA cannot be reopened for discussion for a period of at least 24 months without the agreement of both open eir and ComReg. This will provide a minimum period of time during which the reasonableness of the SLA can be assessed.
96. eir remains of the view that these are fair and reasonable proposals and ComReg has failed to explain why it has not taken them on board. Our response to the WLA/WCA consultation also raised concerns regarding how the ComReg proposals in respect of SLAs for new products could negatively impact product development timelines. Delays in the launch of new products/services or product/service enhancements could negatively impact on innovation and competition in the market. ComReg has also failed to address these concerns in the current proposals or explain why it does not consider the concerns raised to be valid.
97. ComReg has amended the text in section 15.2 (v) relative to the earlier text proposed in section 8.2 (vi) of the WLA/WCA draft Decision. The additional text is highlighted: open eir shall *“ensure that SLAs specify the circumstances that trigger the payment of Service Credits, such as, but not limited to, a failure by Eircom to achieve committed service levels,*

or the occurrence of certain specified events (such as, but not limited to, incidents of service outage or deterioration), and/or other such criteria as appropriate.” ComReg’s inclusion of the highlighted text appears to unreasonably broaden the scope beyond the scope of SLAs.

98. The purpose of an SLA is to specify service levels and provide for credits where those specified service levels are not met and there should be a clear methodology for calculating same set out in the SLA. There is no justification for any proposal beyond this and eir does not accept ComReg’s proposals. We also note that what has been suggested above is not appropriate in the context of the WHQA market.
99. eir notes that the proposed section 8.3 (v) in the WLA/WCA consultation has not been carried across to the draft WHQA Decision. This is appropriate given that section 8.3 (v) was duplicated in section 8.3 (viii) which now appears as amended section 15.2 (vii). eir objects to the obligations proposed in section 15.2 (vii). As stated above, the purpose of an SLA is to specify service levels and provide for credits where those specified service levels are not met. Therefore, service credits will only be “triggered” by a failure to meet a specified performance standard and the methodology to calculate that credit will be as set out in the SLA. There is no justification for any proposal beyond this and it is not accepted by eir. We also note that ComReg’s proposal in terms of calculating loss on an individual basis each time there is a failure to meet a relevant standard is completely unworkable and does not provide for any legal or regulatory certainty. We further note, as indicated above, that the SLA proposed is completely inappropriate for the leased lines market where the SLA penalties for non-compliance are fixed amounts, for example €200 per process point missed. ComReg is consulting on the Wholesale High Quality Access at a Fixed Location market and the proposals set out in this consultation should therefore only relate to that market.
100. ComReg proposes to add an additional obligation in section 15.2 (viii) requiring open eir to “ensure that the application of Service Credits, where they occur, shall be applied automatically and in a timely and efficient manner”. ComReg has not explained why it proposes to add this to the SLA obligations (i.e. what issue (if any) it is seeking to address). It can be timely and efficient for SLAs / Service Credits to be processed manually. Consequently we do not believe a requirement to automate processes can be justified and ComReg does not have any legal basis for same. eir does not accept this disproportionate proposal.

Non-Discrimination

101. Notwithstanding eir's position that the consultation is seriously flawed and the market should be deregulated, eir agrees with ComReg's view¹⁸ that the EoO standard is appropriate for MI WHQA type products. eir notes that appropriate KPIs and transparency can assist in monitoring compliance with non-discrimination obligations. We provide detailed comments on the KPI proposals later in this response.

Transparency Remedies

Notification periods for pricing and product change

102. ComReg proposes to maintain the advance notification periods for product and price changes to Industry at 3 months. eir considers this is appropriate recognising the increasingly competitive nature of the Irish market-place with substantial network roll-out programmes already underway by alternative fixed and wireless operators such as enet, Siro and Imagine, and in recognition of the other ANs in the WHQA market. There is a fine balance to be found between promoting transparency for Access Seekers on the open eir network and disclosing commercially sensitive information to direct competitors of open eir. It would be appropriate for ComReg to similarly lower the notice periods in the WLA / WCA market.

KPIs

103. eir currently publishes KPI's on a quarterly basis and welcomes the proposal to remove the obligation to publish KPI's for the HB TI WHQA market. The draft decision sets out that KPI's should be reported in terms of Zone A and Zone B. However, there is no justification for the publication of KPIs for Zone A in which ComReg has defined as no operator having SMP and hence no operator can be subject to ex ante regulatory obligations. eir does not have an obligation to report on matters that are deemed to be outside the regulated market and to request this from open eir is discrimination against open eir by the regulator. The purpose of publishing KPIs is to demonstrate open eir's compliance with its non-discrimination obligations i.e. the equivalent treatment of wholesale customers and eir's downstream arms in a regulated market. eir cannot accept that it should be subject to SMP obligations in a market where it does not have SMP. ComReg knows this as illustrated at paragraph 10.17

¹⁸ Para 9.216

which clearly states: “*In Section 5 of this Further Consultation, ComReg set out its preliminary view that no SP is likely to hold SMP in the Zone A MI WHQA Market. In view of this preliminary finding, ComReg is obliged to remove existing SMP based regulation in this market”.* [emphasis added]

104. Notwithstanding the issues already set out in relation to identifying the areas as Zone A or Zone B, the KPI proposal as currently set out cannot be reported on using our current methods and systems as the co-ordinates of the customer site are not recorded. However open eir proposes that we can report based on serving exchange which in principle could be defined as either in Zone A or Zone B. If in the future Eircodes are widely adopted by Industry and used for all ordering we could possibly review how we report these KPI's.
105. Development would be required to generate the new reports to capture and categorise the serving exchange into the appropriate zone to enable the KPI reports to be presented in this manner. It is estimated that this development would take 6 months following the end of the quarter in which the decision is published. However, we are not prepared to undertake any development whatsoever in circumstances where the mapping exercise used to determine the zones is seriously flawed and cannot be relied upon.

Product development

106. open eir does not object in principle to an obligation of transparency in respect of product development more generally. However, we find the manner in which ComReg has approached the specification to be objectionable. As noted earlier in this response, open eir has over the years developed and continues to evolve a highly transparent and structured product development process as highlighted in our response to the WLAWCA consultation (which should be read in conjunction with this submission). The process is very transparent and presents Access Seekers with opportunities to engage with open eir through product development workshops and through bilateral engagement. All RAP developments can be tracked through open eir's online portal which is accessible to Access Seekers. Since the consultation in 2016 open eir has continued to enhance the RAP development process in terms of the format of the Customer Requirements Document, to encourage requestors to provide sufficient and clear information including material relevant to prioritisation, and enhancing the transparency of the prioritisation process.
107. The current manifestation of the product development process has been developed over time by open eir and may develop further over time depending on technological

developments and the needs of open eir and industry. It is therefore objectionable that ComReg is seeking to limit open eir to what it has currently developed and freeze the process in time by making the current process a regulatory obligation. Both industry and open eir will be stuck with this until the next market review, which, based on experience, could be 10 years from now. The fact that open eir has developed and continues to develop a very transparent process clearly demonstrates that detailed specification by ComReg is unnecessary and unjustified. Regulatory intervention to impose obligations in circumstances where there is no issue is completely disproportionate and eir does not accept ComReg's proposals.

108. Without prejudice to the foregoing, we have the following comments on the proposed specification of the obligation.
109. The wording of section 17.21 (v) needs to be amended to aligned with section 14.3 (iii), discussed above, which makes it clear that the Access Seeker is to offer a view on the priority of its request relative to other requests that have already been submitted by that Access Seeker.
110. In section 17.22 (iv) ComReg proposes that *"Eircom shall, in addition, within eighty five (85) working days, identify the degree of priority relative to all other developments, including Access requests and amendments proposed by Eircom, of regulated products, services or facilities in the Relevant Market that it proposes to assign to each proposed development."* The proposed obligation on priority is fundamentally different to the prioritisation model operated by open eir. The open eir model is applied for the assignment of potential bottleneck resources for IT development (at the gates before entering the assessment stage and subsequently the development stage). The open eir prioritisation model is applied to all RAP developments that are ready to be considered when an IT gating decision is to be made. All of the product developments under consideration at that time are ranked relative to each other irrespective of which relevant market they are in. open eir does not ring-fence RAP development resources for each relevant market and we do not believe there is merit in forcing open eir to do so, nor do we believe that ComReg has any legal basis to do this. As noted earlier in this response, it is questionable whether product development obligations can be imposed in this manner. Rather, the subject should be approached through a separate exercise that applies to all RAP developments as is currently being discussed through the RGM review. The proposed obligation in section 17.22 (iv) is of no value, for the reasons outlined above, and should be dropped. We note that paragraph (vii) appears to duplicate (iv) and should be deleted also.

111. The proposed obligation in section 17.22 (ix) appears to unnecessarily duplicate the proposed obligation in section 17.21.

Accounting Separation

112. It appears to eir from the current market review proposals that there is no change required in terms of how we treat Wholesale Leased Lines in either the HCA Separated Accounts or in the Additional Financial Statements (AFS). We would be obliged if ComReg could confirm that this is the intention. Paragraph 9.398 states:

“ComReg also proposes to include an obligation for Eircom to provide a statement within the AFI portfolio of reports (if and when required by ComReg), outlining the total revenues realised from wholesale MI product being in the Zone B MI WHQA Market. This will be used by ComReg to inform a later assessment of appropriate accounting separation obligations for MI LL products in the Zone B MI WHQA Market and assist with any ex-post reviews. It is also proposed that other AFI reports relating to MI Interconnection facilities such as WEILs will still remain an obligation.”

113. As the number of SAs in both market segments is significant and coupled with the fact that these SAs have different boundaries to eir’s exchange footprints it would be highly speculative to allocate costs and revenues between Zone A and Zone B. Any allocation requirement maintains the difficulties of recognising contracts spanning multiple Zones and encapsulates the complexity which ComReg used as a contributory reason for the removal of the margin squeeze test requirement going forward. Therefore, we consider that any Additional Financial Information (AFI) seeking sub-geographic allocation of revenues or costs would not be proportionate.

114. In a separate but related matter, the FY17 AFI highlights the immaterial nature of the WEIL products in terms of both revenues; costs and mean capital employed:

[X]

115. eir submits that this AFI is no longer required. Should ComReg require this information, at a later date, it could be obtained using ComReg’s formal powers under section 13D (1).

116. In addition, we note that this AFI is included in the recent draft set of remedies include in the Wholesale High Quality Access market review. As above, we do not consider it proportionate given the current immateriality of the WEIL product.

Price control

Margin Squeeze Test

117. In response to the 2016 consultation eir welcomed ComReg's proposal to withdraw the obligations in respect of MST. The withdrawal of the MST is long overdue in the WHQA market. In response to this Further Consultation we continue to welcome the proposed withdrawal of the MST obligation and hope that will not have to look forward much longer for the change to happen. ComReg's rationale for the proposed withdrawal of the MST obligation differs between the consultations. In the 2016 consultation the proposal was, correctly, justified on the basis of full de-regulation of the MI WHQA market. In the current consultation the proposal is justified, also correctly, on the basis "*that the presence of an effective cost orientation obligation, the risks to effective competition in the retail MI LL market from price discrimination are likely to be negated*"¹⁹ and "*in the presence of an effective cost orientation obligation, the risks to effective competition in the retail MI LL market from predatory pricing are likely to be negated.*"²⁰ Either way the removal of the MST obligation is justified.
118. We note ComReg's further explanations in paragraph 9.334 including the observation that "*The effective application of a Margin Squeeze Test is most efficient when its operation is based on the delineation of a market where an SP has SMP in a national market or where the geographic market boundaries are well defined ... As such, given that supply and demand for MI WHQA will occur in a mix of two geographic markets, ComReg is of the preliminary view that a Margin Squeeze Test is not considered appropriate.*" We agree that a MST obligation risks contaminating the competitive markets particularly given the issues highlighted earlier in this response regarding the definition of geographic market boundaries. A proposal to impose a MST obligation would require careful scrutiny to ensure it does not give rise to unintended consequences.

¹⁹ Paragraph 8.36

²⁰ Paragraph 8.37

Cost Orientation

119. In the event that ComReg can justify the definition of a MI WHQA market where an operator has SMP then it may be appropriate to impose an obligation of cost orientation using the BU-LRAIC+ cost methodology in order to promote the correct build / buy signals. ComReg further proposes the prices offered in the regulated market should be calculated using the Revised Copper Access Model and the NGN Core Model. We welcome ComReg's recognition that these models will "*require further processing by Eircom to development a comprehensive list of tariffs for the large range of product variants which exist in the MI WHQA market ... the finalisation of the NGN Core network cost model in the context of the consultation in Markets 3a and 3b, may result in delays in the completion of the suite of reference cost models*"²¹. Consequently we consider ComReg's proposal to maintain existing wholesale tariffs for MI terminating segments and ancillary services pending the completion by eir of the update of a new schedule of cost oriented tariffs to be appropriate and balanced.

Statements of Compliance

120. The Statement of Compliance (SoC) obligation as currently defined in other markets requires that eir demonstrate its compliance with its non-discrimination obligations only. ComReg is proposing that eir should be required to submit to ComReg written SoCs demonstrating its compliance with all of its regulatory obligations i.e. including but not limited to access, pricing, transparency, accounting separation and non-discrimination in the MI WHQA markets. We note recital 28 of the Authorisation Directive which states "*Subjecting service providers to reporting and information obligations can be cumbersome, both for the undertaking and for the national regulatory authority concerned. Such obligations should therefore be proportionate, objectively justified and limited to what is strictly necessary. It is not necessary to require systematic and regular proof of compliance with all conditions under the general authorisation or attached to rights of use.*" ComReg's proposals in respect of the SoC are not appear to be consistent with this.
121. The enhanced SoC would be required to cover:
- (i) Pre-provisioning, provisioning and service assurance for MI WHQA products services and facilities in Zone B.

²¹ Paragraph 9.385

- (ii) Product development including product enhancements, and pre product development screening of Access requests.
 - (iii) Product prioritisation and investment decisions.
 - (iv) Access to shared resources including IT and product development resources.
 - (v) The management of information, both Structured information and Unstructured information, in conformance with regulatory requirements.
 - (vi) The preparation and submission of bids in response to a commercial or government request for a proposal or tender
 - (vii) Other categories as reasonably required by ComReg.
122. ComReg has not pointed to any issue in the WHQA market that would justify the above proposals. According to ComReg's proposals, the SoCs would need to be signed by a Director or Directors and, as well as detailing the initial risk analysis used to generate controls and the governance measures and controls in place to ensure compliance and auditing of those controls, the SoCs would need to be published on eir's website and updated as required.
123. In addition to providing the enhanced SoCs annually, ComReg's proposals require that SoCs must be provided within 6 months of the effective date of this decision or in the case of a new Zone B MI WHQA product, service or facility or a change to an existing Zone B MI WHQA product, service or facility, 7 and 3 months respectively in advance of the new product and/or change being made available. ComReg may also request a SoC as required.
124. ComReg is also of the preliminary view that, based on its opinion that eir's investment decisions can affect the ability to develop and make available regulated wholesale products and maintain the quality and availability of regulated products, the process employed and information relied upon by eir in order to make investment decisions should be subject to risk analysis.
125. The proposals to expand the SoC beyond the form specified in D03/13 are an unreasonable burden and are completely disproportionate in this circumstance. It is also not something ComReg has the power to impose in the context of a market review of WHQA and it is not something that eir will agree to. ComReg proposes that the SoC will include an obligation on eir to undertake risk assessments on investment decisions. The potential scope of what should be considered under this proposed obligation is not clear. If it is a question of ensuring the allocation of capital resources between RAP developments in the Zone B market are done in a non-discriminatory manner, this is already addressed through the RAP

prioritisation process and the proposed obligation is unnecessary. If it is a question of how eir more generally allocates its capital resources, then eir objects wholeheartedly to the proposal as such a requirement is over-stepping ComReg's powers.

126. At present a SoC contains a comparison of the product development, pre-order/order, provisioning and service assurance process for Wholesale Customers versus downstream business. These are detailed documents that describe the process, risks and associated controls. Provision of information regarding the use of shared resources etc. is not something that is directly comparable and is of little value when determining if an equivalent service is provided to all.
127. The obligations will be highly resource intensive due to the resources required and need to demonstrate compliance with all regulatory obligations as well as defining all the additional controls that ensure such compliance. This is in contrast to ComReg's unsubstantiated claim that it "*it should not be unduly burdensome on Eircom to provide the required SoC*". In order to meet the obligations eir will have to employ additional resources to complete the additional auditing and publication obligations.
128. Notwithstanding the challenges of the availability of Directors to sign off the SoC on a timely basis, the current process utilises a person of appropriate seniority and expertise who is familiar with the products and process and signs the SoC which in eir's view is a pragmatic approach. eir believes that the current process is a better approach.
129. eir does not agree with ComReg's proposal that the SoCs should be published. ComReg seeks to justify the proposed obligation on the basis²² "*that the provision of the SoC to Access Seekers gives greater visibility to Access Seekers of the processes Eircom has put in place to ensure it complies with its regulatory obligations in the Zone B MI WHQA Market. This has the potential to improve Access Seekers confidence that they are receiving the same wholesale product or service that Eircom is supplying to its downstream arm, for example, and this is beneficial to providing regulatory certainty, competition and ultimately to End Users*". This is not a valid justification as evidence of equivalence is adequately addressed through the publication of KPIs and the proposal to publish the SoC amounts to over-regulation. To the extent that Access Seekers need confidence in the operation of the regulatory framework they should seek this through engagement with ComReg.

²² Paragraph 9.422

130. The proposal to publish the SoC is unduly invasive. ComReg recognises that much of the information contained within the SoC may be deemed by eir as being confidential in nature and as such eir can request not to publish aspects of the SoC to Access Seekers. However, this appears to be at ComReg's discretion and when assessing such requests ComReg will apply its rules relating to the publication of confidential information. This could unintentionally reveal significant commercially sensitive information on eir's operational processes exposing eir to a potential loss of intellectual property, malicious attack or security breaches of the network and information systems as well as risking a loss of any competitive intellectual property advantage.
131. eir also objects to an obligation to publish the SoC in an environment where it receives no feedback from ComReg on whether the SoC is deemed acceptable. ComReg does not appear to currently assess the SoCs in any detail or indeed provide any feedback or sign off on same (for example, as to whether ComReg agrees that a stated difference is justifiable or a relevant control put in place is appropriate). eir is of the view that there should be ComReg sign off particularly if the obligation is imposed that an eir Director or Directors sign the SoC. ComReg cannot reserve its rights to take action at a later stage in relation to SoCs that have been submitted to it for review. This is simply unreasonable and lacks transparency. Furthermore absent a proper review process by ComReg, the publication of SoCs will lead to eir being open to 'trial by industry'. It is the view of eir that this approach by ComReg is inappropriate and unfair, it is inefficient and potentially destructive. The SoCs are prepared for the purpose of demonstrating to ComReg, as the national regulatory authority, that eir has complied with its obligations, therefore there is no objective basis for their publication. eir has no obligation under the regulatory framework to report to Access Seekers or other operators who are direct competitors in this manner, nor does ComReg have the power to impose this obligation under the current regulatory framework.
132. The SoC process is front loaded, with all the work being required in advance of notification which removes agility, together with the need to redact the document in order to meet the proposed publication obligation, will increase workloads. This significant draw on resources in the development cycle will create additional tasks and controls which will delay and impede development and stifle innovation in the early stage of development where speed, creativity and efficiency are most important in responding to market demands. The retail and wholesale markets are more competitive than 2008 indicating that there is no major regulatory issue that needs to be addressed by placing more obligations on eir. Indeed the reverse should be the case with regulatory obligations being reduced in light of the competitive market.

Question 8: Do you agree with ComReg's draft Decision Instrument set out in Appendix: 4, in particular, that its wording accurately captures the intentions expressed in this Section 9? Do you agree with ComReg's Definitions and Interpretations as set out in Part I of the Draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers in the Draft Decision Instrument to which your comments refer.

133. Given the serious deficiencies in ComReg's analysis, both in terms of the definition of the relevant markets and the mapping exercise used to designate small areas as Zone A or Zone B (explained in more detail in other parts of this response), eir cannot agree to the obligations proposed in the draft Decision Instrument and is prepared to challenge ComReg should it proceed with the Decision Instrument as set out.
134. eir believes that it is also important to note that, under the provisions of the Access Directive and the transposing Access Regulations, ComReg is only empowered to impose obligations that are objective, transparent, proportionate and non-discriminatory. The obligations also must be based on the nature of an identified problem in the market. This is expressly set out under EU and Irish law and if these criteria are not met then ComReg is going beyond its statutory powers and is open to challenge. Given the flawed and apparently biased analysis carried out by ComReg and the stated basis on which ComReg has proposed the far reaching regulatory obligations set out in the draft Decision Instrument it seems clear to eir that ComReg is acting in breach of its legal obligations as NRA.
135. Even if ComReg had correctly defined the relevant markets and correctly determined that eir has SMP (both of which we strongly refute), it seems clear to eir that the obligations set out by ComReg in the draft Decision Instrument do not meet the above criteria, go far beyond what is necessary or justified and are not based on any problems identified in the context of the WHQA market. Most significantly, it is obvious to eir that some of the proposals are seeking to address perceived issues in completely separate markets or issues that are being addressed in the context of the RGM review process, which are beyond the scope of this public consultation.
136. No evidence has been put forward by ComReg to demonstrate that the proposed remedies in this consultation are necessary to address the WHQA market. It also cannot be the case that far more stringent obligations are justified and proportionate in circumstances where ComReg was proposing to deregulate the market less than two years ago. eir will resist any attempt to impose inappropriate remedies as part of this consultation.

137. Considering that a market review has not been carried out by ComReg for 10 years at this point, the poor quality of the economic analysis and the apparent lack of legal basis for ComReg's proposals is very disappointing.
138. Notwithstanding the above, eir's concerns in relation to the specific obligations proposed by ComReg are already set out in other parts of this response document. eir does not propose to repeat these here.

Question 9: Do you agree with ComReg's approach on the withdrawal of all existing obligations in the HB TI WHQA Market and the Zone A MI WHQA Market and withdrawal of the obligation to provide WLLs in the LB TI WHQA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

139. In response to the 2016 consultation eir argued that there should be no sunset period as the consultation gave Access Seekers notice of change. ComReg dismisses this on the basis that no decision had yet been made and not having a sunset period would suggest a pre-determined outcome of the consultation process. It is now over a year and a half since the 2016 consultation and still no Decision has been made. However, Access seekers would have been cognisant of the ComReg proposals during that period and would have contingency plans in mind when placing orders for circuits in the event that open eir would behave irrationally in a competitive market post de-regulation.
140. The ComReg Annual Action Plan originally stated that ComReg would issue a Decision in Q2 2018. The current action plan (updated in April 2018), states that ComReg will now issue a Decision in Q4 2018. This would mean it would be over two years since the 2016 consultation signalled change. Irrespective of the position taken on the geographic scope of de-regulation, a significant portion of the market was competitive in 2016 when ComReg previously consulted and continues to be competitive in 2018. Yet nearly two years on from the 2016 consultation ComReg has revised its proposal for the de-regulation of the MI WHQA competitive market such that the sunset period during which unjustified regulation will be maintained has increased from a proposed 6 to 9 month period to a proposed 12 month period. The competitive market in 2016 will continue to be regulated into 2019, a decade after the last market review due to the significant delay of ComReg in discharging its duty to review markets in a timely manner and in breach of the EU law obligations. This would be a risible situation if it were not for the fact that eir is being damaged by over-regulation. There is much in this consultation regarding the duty of the SMP operator to meet its regulatory

obligations. It is very disappointing that the regulator does not see itself as subject to equivalent accountability in respect of the discharge of its EU law obligations.

141. It is concerning that over one year on since the first consultation, and approaching the 10th anniversary of the previous market review Decision, the flaws in this current consultation mean that further analysis may be required. ComReg must commit all available resources to ensure this market review is concluded before the end of this year. If ComReg is unable or unwilling to commit to this it must rely upon the provisions of Article 16 (7) of the Framework Directive and call upon the assistance of BEREC and “*With this assistance, the national regulatory authority concerned shall within six months notify the draft measure to the Commission in accordance with Article 7*”.

Question 10: Do you agree with ComReg’s preliminary conclusions on the Regulatory Impact Assessment for the MI WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

142. The Regulatory Impact Assessment (RIA) contained in Section 11 of the Draft Decision document 18/08 is not fit for purpose and is deficient in a number of important areas.
143. The proposals contained in the original Draft Decision 16/69 are materially and fundamentally different to those currently being put forward in Draft Decision 18/08. In particular, the market which ComReg had previously defined as “*the MI WHQA Market*”²³ has now been redefined geographically as two separate markets – “*the (Relevant) Zone A MI WHQA Market*”²⁴ and “*the (Relevant) Zone B MI WHQA Market*”²⁵.
144. The changes in approach on the part of ComReg are explained in the Consultation paper and the degree to which ComReg has revised its thinking on the matter is reflected in the fact that (despite the fact acknowledged by all stakeholders that the need for an updated market review by ComReg was acute and long overdue), there was still an 18 month gap between ComReg publishing 16/69 (in August 2016) and publishing 18/08 (in February 2018).

²³ ComReg 16/69, Draft Decision Instrument, Para.4.2 (iii) (Page 349)

²⁴ ComReg 18/08, Draft Decision Instrument, Para.4.2 (iii) (Page 454)

²⁵ ComReg 18/08, Draft Decision Instrument, Para.4.2 (iv) (Page 454)

145. In spite of this delay and significant change in approach to the proposals, ComReg largely relies on the RIA set out in 16/69 to cover the current Draft Decision. This is neither adequate nor acceptable.
146. The proposed geographical splitting of the original (16/69) “MI WHQA Market” into Zones A and B is based on extremely granular “Small Areas” (of which there are almost 19,000) is hugely significant, and will be extremely difficult (and costly) for eir to implement, for ComReg to oversee, and for other customers and stakeholders to understand. Yet, ComReg does not address the regulatory impact of this initiative in its RIA. This omission alone means that the RIA is not fit for purpose
147. 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 examination of costs, benefits and impacts on stakeholders as well as consideration of the use of alternatives to regulation. ComReg feels that the current set of regulatory proposals does not constitute such a scenario as to justify conducting a cost-benefit analysis.

“11.8 In determining the impacts of the various regulatory options, current best practice appears to recognise that full cost-benefit analysis would only arise where it would be proportionate or in exceptional cases where robust, detailed and independently verifiable data is available. Such comprehensive review may be undertaken by ComReg when necessary and appropriate.”

148. Although it may not be proportionate to conduct a full cost benefit analysis, there has not been enough assessment by ComReg in terms of the impacts of the proposed regulatory regime. To state that additional costs will be “relatively contained” (paragraph 11.67) or “minimal” (paragraph 11.80) does not provide any indication as to the level of such costs and the burden they are likely to impose on eir. Simply stating that they are such and dismissing them on this basis is a fundamental flaw in the analysis. No objective standards or benchmarks have been established as to how costs and benefits should be assessed.
149. ComReg’s assessment is cursory in nature and does not address the burden that will be placed on eir in terms of continued compliance costs. Benefits and costs associated with regulatory regimes should be quantified where possible. On a forward-looking basis and in terms of future RIAs it may be useful to consider that where there is difficulty in monetising the effects, multi-criteria analysis can provide a useful tool with which to look at benefits and

costs from a cumulative perspective and determine how well each option meets the most important criteria identified. This has been recognised in the 2009 Revised RIA Guidelines²⁶.

150. In addition, ComReg references consideration of other options which in actuality do not appear to have been assessed in the course of the RIA.

11.10 ComReg now conducts its RIA having regard to its proposed approach to impose (or not) regulatory remedies identified in this Further Consultation, along with a consideration of other options.

151. “Other options” could be taken to refer to the geographical splitting of the “MI WHQA Market” into Zones A and B. The method of splitting is described in Section 4 of 18/03, but it is presented more as a “fait accompli”, than as a proposal from ComReg that is included in the scope of the public consultation. In the first instance, ComReg does not consider the impact of using an alternative basis to “Small Areas” for the geographical aspect of the market definition. Then, even if we accept Small Areas as the basis, ComReg makes no attempt to quantify the impact of the two criteria it selects to assess if a particular Small Area falls into Zone A or Zone B. In paragraph 4.151, ComReg presents these two criteria

- (i) **Criterion 1:** A Small Area has two or more Alternative Networks present (in addition to Eircom); and
- (ii) **Criterion 2:** 75% of current or potential demand must be within 100 meters of two or more Alternative Networks

152. As regards Criterion 1, has ComReg considered the presence of just one Alternative Network, and the impact that this might have? In the case of Criterion 2, has ComReg considered alternative percentages (70%), or alternative distances (200m)?

153. “Alternative options” might also be taken to mean options such as self-regulation and co-regulation. However neither of these options, or similar, is discussed in any measure. Although it may be necessary for ComReg to apply at least one of the regulatory measures described (Access, Non-Discrimination, Transparency, etc.) in the case of SMP being established within a particular market, it would appear that insufficient consideration has

²⁶ See “Revised RIA Guidelines: How to conduct a Regulatory Impact Analysis”, June 2009, available from: http://www.taoiseach.gov.ie/eng/Publications/Publications_Archive/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf.

been given as to how one or more of these measures may work in conjunction with alternative measures or the effect of applying only one of them.

154. In addition ComReg has not given due consideration to the likely impact of ex-post competition law in achieving the same objectives.
155. RIAs should seek to identify any negative impacts of regulation and therefore seek to minimise unintended consequences, e.g. promotion of the use of legacy technologies at the expense of MI penetration. Real market impacts should therefore be assessed.
156. The RIA is neither comprehensive nor thorough and merely represents a subjective and qualitative assessment of costs.
157. The RIA does not sufficiently address relevant costs and benefits in a manner that identifies the potential burdens on eir's business and as such ensures that they do not appear to be onerous. The measure(s) chosen to address the issues identified should be the least intrusive means possible which places the minimum burden on eir, so that the least burdensome effective remedy that best meets the objectives can be selected. In terms of ComReg's analysis, it does not appear that it has aimed to identify the measure which best meets these criteria. Instead, it has simply either kept to the status quo or in many cases layered on additional intrusive obligations.

Reservation of Rights

158. With the foregoing concerns as to validity of the process, as well as the more specific grounds of concern noted through our responses, eir fully reserves its rights to continue to raise all concerns and objections raised in this response or otherwise, including in any ultimate event of eir being forced to object to any ultimate Decision adopted by ComReg, particularly based around the positioning and pre-determined approach displayed in this Consultation. eir must also fully reserve its rights to seek an indemnity against losses caused by ComReg or by the State as a result of it proceeding with any aspect of this proposal that is unlawful and any losses caused by further delay in concluding the review of this market.
159. eir fully reserves its rights to comment further on any and all issues, including any not raised in this response, in the next stage of consultation and any failure to comment on specific aspects of this document should not be taken as implicit acceptance of specific assertions in the document. eir also fully reserves its rights to raise further concerns, including ones

similar to those that may be raised by such other operators in their responses which equally impact upon the position of eir and the industry more generally, including in the event of eir objecting to any ultimate Decision adopted by ComReg.

160. eir notes ComReg's request to provide "*....all relevant factual evidence supporting your position...*". Further to the flaws and issues indicated throughout our response, we believe that it is impossible to provide all such items at this present time, as much of this consultation is affected by the lack of evidential material, applicable justification, improper reasoning or by other information which should have been provided by ComReg in support of its' proposition and conclusions. eir should not be prejudiced by this failure, or inferred to be incapable of providing further support of its position, and thus entirely reserves its position to supply further evidential materials behind our position at a later stage.

Wholesale High Quality Access at a Fixed Location

Response to ComReg Document 18/08

by



27th April 2018

Overview of enet's consultation response

enet welcomes the opportunity to respond to ComReg's Consultation Document on Wholesale High Quality Access (WHQA) at a fixed location (ComReg document 18/08), in which ComReg outlines its response to the 2016 consultation on this topic, undertakes a further consultation on key issues relating to WHQA and sets out its Draft Decision pursuant to its updated market review.

As ComReg will be well aware, enet was – in common with many other users of Eircom's regulated WHQA inputs – strongly opposed to ComReg's initial plans, which it set out in its 2016 Consultation Document, for almost total deregulation of WHQA service provision by the ex-monopoly incumbent operator. enet argued that ComReg's initial 2016 proposals risked the re-monopolisation of large tracts of the market for retail leased line services. This was because alternative operators, enet included, remain highly dependent on gaining access to Eircom's regulated WHQA inputs in seeking to put in place leased line solutions for retail customers.

enet is pleased to note that ComReg's updated market analysis provides a more realistic assessment of leased line provision within the country at the present time. enet welcomes ComReg's revised assessment of the substitutability of fibre-based leased lines for wireless-based services and we fully support ComReg's revised conclusion that wireless leased lines should be excluded from the relevant market.

enet is also pleased to note ComReg's recognition of the importance of multi-site retail leased line customers and its acceptance of the fact that service provision to such key customers is so dependent on access by retail service providers to WHQA inputs from Eircom.

enet is also relieved to note that ComReg has shelved its original plans for the lifting of almost all existing regulatory obligations that Eircom faces as the operator designated with Significant Market Power (SMP) in the provision of wholesale leased line services. In particular, enet welcomes ComReg's preliminary proposals not to deregulate completely Eircom's provision of Modern Interface (MI, i.e. Ethernet-based) WHQA services.

That said, enet continues to have significant concerns about ComReg's decision to push ahead with the deregulation of that part of the MI WHQA market where it believes that, due to the existence of alternative network infrastructure that is

capable of being used to provide MI WHQA services in competition with Eircom, no operator holds a position of SMP (i.e. the 'Zone A' sub-national market for MI WHQA services).

enet's fears with ComReg's proposals in this regard are that it is placing far too much store on possible sources of alternative supply of MI WHQA services. In enet's view, such a conclusion is simply not in accordance with market realities. While alternative sources of supply for WHQA services do exist in some instances, they are not always available to Access Seekers, in particular where the network operator in question is also aiming to provide retail leased line services to a particular end-user or, indeed, where it is already the sole network provider of leased line services to an end-user. It is also the case that no comprehensive map of alternative operator networks exists and so even if an alternative operator has a network presence in a particular area, this information may not be readily available to Access Seekers. By concluding that WHQA services are available in every instance on every alternative network, ComReg is making a significant miscalculation and it is on this fallacy that its entire proposals for Zone A deregulation is based.

ComReg's preliminary conclusions also part company with market realities in its assumptions about the ease with which alternative network operators are able to put in place new customer connections. A key assumption made by ComReg – that such connections involving dig distances of less than 100 metres are capable of being deployed with ease – is, as we outline in this response, simply incorrect and is completely at odds with the very challenging environment facing operators seeking to deploy new customer connections in urban areas. This incorrect assumption is a major factor in ComReg's delineation of the Zone A and B sub-national markets and so it follows that this delineation is without validity.

In summary, while there is much to be welcomed in ComReg' updated market review – and enet appreciates the considerable effort expended by ComReg in re-doing its market analysis – enet is still fearful that ComReg's plans for partial deregulation of the WHQA market go too far. If ComReg proceeds to implement these revised proposals, significant parts of the country are in danger of reverting to monopoly supply of retail leased line services, with a deregulated Eircom – which will no longer be obliged to offer any access to WHQA services in the Zone A area – the de facto monopoly retail leased line provider for many end-customers.

In enet's view, ComReg needs to undertake a further re-assessment of its plans for deregulation. In particular, it needs to look again at the key assumptions underpinning its proposed delineation of the Zone A and B sub-national markets.

A more appropriate division of these sub-national markets, which would best be done on a building-by-building basis and would involve significant shrinkage in the areas where leased line supply would be deregulated, could go a long way towards ensuring that ComReg's plans align better with real-world realities relating to the supply of retail and wholesale leased line services.

Responses to Consultation Questions

Q1: Do you have any further observations on ComReg's Retail Market Assessment?

enet acknowledges the significant effort expended by ComReg in re-considering competitive dynamics within the market – at retail as well as wholesale – for leased line services, arising from the feedback received from industry following its 2016 market analysis and its own further detailed analysis contained in its Consultation Document. enet is pleased to note that, arising from its re-consideration of the market, ComReg has now altered its position on a number of key issues in relation to the provision and use of leased line services and that these changes mean ComReg has scaled back significantly its original plans for almost complete deregulation of WHQA services.

Notwithstanding this, however, enet remains concerned about aspects of ComReg's revised proposals as set out in its consultation, which lead us to conclude that ComReg's current plans for partial deregulation of the market are still set to go too far. If ComReg proceeds to implement these plans, enet fears that it will result in the re-monopolisation of part of the market for retail leased line services, specifically in those areas (i.e. the proposed Zone A MI WHQA market) where ComReg has reached the preliminary conclusion that Eircom no longer holds a position of SMP.

While enet's fears about a significant reduction in retail competition for the provision of leased line services does not extend to all retail leased line end-users – and it is clear that ComReg's current proposals are less damaging in this respect than its original 2016 plans were – it will still be the case both in relation to those customers for whom Eircom remains the only potential infrastructure provider and also where competing infrastructure is in place but is not available for access on a wholesale basis by other third-party providers. As was the case with its 2016 proposals, ComReg appears to be moving ahead with plans for deregulation without giving sufficient weight to the very real concerns that exist about the likely unavailability of WHQA inputs post-deregulation and the consequent re-monopolisation of supply for many customers, depending purely on where their business happens to be located.

enet welcomes in particular two key preliminary conclusions made by ComReg in its updated market analysis. These are:

-
- ComReg’s preliminary assessment that wireless leased line services do not reside in the same retail product market as fibre-based services;
 - ComReg’s recognition that multi-site retail leased line customers have a high dependence on Eircom and can only be serviced by competitors using Eircom WHQA inputs.

In its response to the 2016 consultation, enet argued it was not customers’ experience that **wireless leased lines** were a direct substitute for fibre-based bandwidth services and so that wireless-based services should not be included in the upstream WHQA market. We are glad to note that ComReg’s in-depth analysis on this issue has now confirmed enet’s position that wireless leased lines may not be seen as a like-for-like substitute for fibre-based leased lines. Wireless services play an important role in the provision of retail leased lines, in particular in areas of the country that are poorly served by fibre-based connections, but, as ComReg’s analysis in the current consultation demonstrates, this role is complementary to rather than as a direct competitor of fibre-based bandwidth services.

enet also pointed to the importance of multi-site leased line customers, and the consequent need for WHQA services to be available to non-incumbent competitors to Eircom, within the overall leased line market. We note ComReg’s conclusion in its updated market analysis that even though there are a relatively small number of multi-site leased line customers, such customers account for the bulk of retail leased line connections and revenues.¹ We also note ComReg’s acceptance that competing operators are reliant on WHQA inputs from Eircom in providing retail leased lines services to multi-site customers.²

While enet is glad to note that the experience and purchasing preferences of multi-site retail leased line customers appear to have influenced ComReg’s thinking in terms of its planned deregulation of the MI WHQA market segment, we believe that, despite this, ComReg still has failed to give sufficient weight to this important factor in its deliberations. In particular, as we argue in our response to Q2 below, it is enet’s opinion that ComReg has not made an appropriate delineation of the proposed Zone A and Zone B MI WHQA markets. The net result of this is that, as would have been the case under ComReg’s original 2016 proposals, many multi-site retail leased line customers, for example branches of retail supermarkets, will continue to be based in locations that can only be

¹ Consultation Document, Para. 3.66.

² Consultation Document, Para. 3.68 to 3.77.

serviced by Eircom's infrastructure and so where competing operators will continue to be dependent on Eircom's WHQA inputs. As we argued in our response to the 2016 consultation, the unavailability of WHQA services from Eircom at just one location could invalidate a bid by a competing operator to provide leased line services to a multi-site customer.

A related point in this regard is that ComReg's analysis of the reach and availability of alternative fibre networks appears to overstate greatly the competitive impact of such alternative infrastructure. While it is certainly the case – as ComReg demonstrates in the Consultation Document – that competing infrastructure to Eircom's ubiquitous incumbent network has considerable reach, it cannot be concluded from this that this privately-owned infrastructure – owned and operated by a number of different providers – will always be made available on a wholesale basis to Access Seekers.

ComReg appears to take the view that the mere existence of alternative infrastructure equates to parallel network infrastructure that is available to Access Seekers on a wholesale basis in every instance, in the way that Eircom's WHQA services currently are. This is not the case at all. While some operators of competing infrastructure may (and do) make their networks available to Access Seekers on a wholesale basis, they are under no obligation to do so. Moreover, it is enet's experience that such access only tends to be facilitated where the operator in question has no interest itself in selling leased line services to the retail customer the Access Seeker is aiming to connect. For example, although alternative operators have sold wholesale leased line services to enet (in cases where we needed to put in place an end-to-end wholesale solution for our operator customers) this has tended to happen in instances where these operators were not aiming to provide their own retail services to the same the end-user. In other instances, though, for example where operators who sell commercial WHQA services are competing to win contracts to supply particular retail leased line customers, wholesale leased line services are typically not made available on a commercial basis to Access Seekers who are aiming to win the same contract and who need WHQA inputs in order to bid for this business.

In addition, it is frequently the case that alternative operators have established their own dedicated connections into particular customers and have no interest in diluting the resultant commercial advantage they enjoy by offering wholesale services to others over such end-user connections. Furthermore, no comprehensive maps of alternative networks exist and so even if a particular operator has a network presence in an area that might of interest to an Access Seeker, there is no way to check or confirm this.

The bottom line in the Irish leased line market is that, aside from Eircom via the suite of regulated wholesale products it supplies pursuant to its designation as an operator with Significant Market Power (SMP), it is only enet that makes its MAN network available at all times to any Access Seeker looking for wholesale leased line services.³ This market reality should have been factored into ComReg's analysis and, had this happened, it would have had a profound impact on the conclusions drawn by ComReg about competitive and non-competitive market segments for WHQA services.

enet agrees with ComReg's preliminary conclusion that a single national market exists for retail leased line services but that separate markets, including a sub-national one for MI WHQA services, exist at the upstream wholesale level. As we explain in more detail in our response to Q2 below, however, enet does not agree with ComReg's proposed delineation of the Zone A and Zone B MI WHQA markets.

enet also acknowledges the point made by ComReg concerning redacted information in its original consultation. enet was one of the respondents to that consultation to make the point that the volume of redacted information made it difficult to respond meaningfully to much of ComReg's analysis in the consultation. While we continue to believe that this is the case, enet does nonetheless recognise that many operators do not want certain information relating to leased line provision to be published and we further recognise that it would in some instances not be appropriate for this information to be made publicly available, due to commercial sensitivities. As such, we recognise that ComReg must balance the need for transparency on the one hand and the requirement to respect commercial sensitivities with regard to data provided to it.

Q2: Do you agree with ComReg's further preliminary conclusions on the definition of the Relevant WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

³ The important distinction between enet's ability (and obligation) to offer WHQA access on the MANs to operators and its far more restricted ability to offer backhaul access should be noted. enet faces no obligation to offer wholesale backhaul capacity from the MANs, capacity which it itself leases from other providers.

There are elements of ComReg's preliminary conclusions that enet agrees with but we still have major concerns about ComReg's plans for significant deregulation of WHQA services, which, in this consultation, come via the definition of a sub-national Zone A MI WHQA market.

The parts of ComReg's WHQA market definition with which enet agrees are as follows:

- **The exclusion of wireless WHQA services from the relevant product market:** as we have already stated in response to Q1 above, we welcome and support ComReg's updated analysis which concludes that wireless and wired leased lines, both downstream retail circuits and upstream WHQA services, reside in different product markets;
- **The existence of sub-national markets for MI WHQA services:** enet sees merit in ComReg's preliminary conclusion that separate sub-national markets exist for the provision of MI WHQA services and we agree that competitive conditions within these two sub-national markets are likely to be different. While enet agrees that a sub-national market exists, in which competition is trending towards effective and so no operator holds SMP (ComReg's proposed Zone A market), we do not accept that the delineation of the Zone A market is correct. We set out our concerns on this point in more detail in the remainder of our response to this consultation question.⁴

As noted above, while enet agrees with the definition of separate sub-national markets above, it does not agree with the proposed delineation of the sub-national Zone A (where multiple competing networks capable of supplying MI WHQA services are in place) and Zone B (where limited or not networks capable of supplying MI WHQA services are in place) markets.

enet's opposition to ComReg's proposals is based both on its choice of geographic unit and the criteria adopted for assessing conditions of competition in the these units. We discuss both aspects below.

⁴ As was noted in its response to the 2016 consultation, enet operates primarily in the part of the market where MI Ethernet-based services are provided. As such, enet's comments in this response are restricted to the MI-WHQA market segment and, as a result, the use of the term 'WHQA' in this response may be taken to mean the MI-WHQA segment of the market, except where otherwise indicated.

Choice of Geographic Unit

Put simply, enet does not agree that the CSO Small Area (SA) geographic unit is the appropriate basis for delineating the Zone A market.

While the SA unit has a number of theoretical advantages (as ComReg sets out in Para. 4.141 to 4.150 of the Consultation Document) it equally has significant real-world drawbacks. As we pointed out in our response to the 2016 consultation, leased line customers in all parts of the country – including the middle of Dublin – may find themselves in locations where Eircom is the only possible supplier of leased line services and, hence, using an MI WHQA input is the only way in which competing operators may be able to supply these customers with an alternative leased line service.

Customer locations and the possibility of competitive leased line supply to them do not fit neatly into SA units and ComReg's attempt to shoe-horn one into the other will simply mean that many retail customers – including multi-site customers, the importance of which ComReg acknowledges in the current consultation – will, post-deregulation, risk being reduced to monopoly supply, despite ComReg having deemed that their business location is one in which multiple competing networks are in place.

enet believes that a greater level of granularity is required to draw the boundary between areas where competing networks exist and those where they do not. The following examples support the need for a greater degree of granularity:

[3<

- [REDACTED]

[Redacted]

[Redacted]

□ [Redacted]

○ [Redacted]

■ [Redacted]

⁵ Para. 4.159 of the Consultation Document. ComReg forms the preliminary view here that in the DCC area operators are capable of accessing customer sites located less than 100m from their networks “in a reasonable timeframe”.

[Redacted text block]

[Redacted text block]

[Redacted text block]

The above examples are no more than a snapshot of the types of problems faced all over the country by operators seeking to establish new end-user connections in urban areas. Time and again, enet has been faced with onerous civil works restrictions (up to and including downright refusal for the proposed works), protracted delay and enormous cost when seeking to put in place customer connections in parts of the country that ComReg proposes to include in Zone A, on the basis that alternative infrastructure is easily accessible by those demanding leased line connectivity. Seen in this light, it is clear to us that there is

a significant disconnect between ComReg's view of what is possible in relation to establishing new connections for customers using alternative networks and the reality in doing so faced by operators.

While it is for ComReg in the first instance to come up with a workable delineation for its proposed sub-national markets, one that has a clear basis in reality, enet believes – based on the kinds of problems detailed above that it has encountered - there may be no option but to do this on a building-by-building basis. This measure would accord far better with reality on the ground and the real choices facing end-users and the competing operators who seek to offer an alternative leased line service to them. All the more so given that, if ComReg proceeds with its plans to deregulate WHQA provision in its proposed Zone A, the negative impacts will be felt on the ground by end-customers of leased line services and the access seekers attempting to secure WHQA inputs in order to provide leased line services to them.

Criteria for Assessing Conditions of Competition

enet disagrees with ComReg's proposed criteria for assessing conditions of competition and, hence, for deciding which areas reside in Zone A or Zone B.

In the first instance, as noted above, enet does not agree with the choice of SAs as the relevant geographical unit from which Zones A and B are constructed.

In relation to the two criteria used, enet's comments are as follows:

Criterion 1: SA has two or more alternative networks in it or touching it

ComReg proposes that the existence of two or more alternative networks, or a publicly-owned enet MAN with backhaul connectivity independent of Eircom, in an SA is suggestive of competitive conditions that are different from those SAs where such alternative network infrastructure is not present.

This means, however, that ComReg is equating – erroneously – the existence of an alternative network in a particular SA to the availability in every instance of alternative WHQA services from that operator. But, as we have already pointed out, network operators who themselves are seeking to supply retail leased line services to particular customers will never offer WHQA inputs to access seekers who are competing for the same retail business. Indeed, it will more often than not be the case that Access Seekers will simply not know the location of alternative operator infrastructure, as no comprehensive maps of such infrastructure exist.

[REDACTED]

In light of the fact that all operators of privately-owned infrastructure (apart from enet) take the same stance in relation to provision of commercial WHQA services for third parties on their networks, it follows that using the presence of such networks in a given SA as a measure for the amount of competition in and availability of alternative WHQA on such networks is wholly erroneous. Such a conclusion points to a competitive market situation, which, in actual fact, does not exist in reality.

enet believes that ComReg – perhaps unwittingly – stumbles part of the way in its analysis towards what might be an acceptable stance on assessing competitive conditions for the purposes of delineating sub-national markets for WHQA services. The analysis done for it by TERA puts forward the notion that the existence of a publicly-owned enet MAN with backhaul connectivity independent of Eircom should equate, for analytical purposes, to two alternative networks.⁷ This demonstrates a belief by TERA, which ComReg would appear to share, that access to a MAN for WHQA is somehow superior to commercially-available equivalents.

This, of course, accords 100% with reality. enet’s service offerings are unique, in that they are made available to all authorised operators (Eircom included) on a wholesale-only, open access basis pursuant to the Concession Agreement with the DCCA. Even if Eircom’s WHQA services were to be deregulated, enet’s services would remain available on the same terms. [REDACTED]

⁶ [REDACTED]

⁷ But note the point made in the previous footnote that all backhaul capacity used by enet is leased from other suppliers and, hence, not under enet’s full control.

Seen in this way, it is clear that WHQA services provided over enet's MAN infrastructure offer the only guaranteed alternative option for bandwidth connectivity for Access Seekers. Unlike owners of privately-run networks, enet faces no conflict in relation to provision of retail services to end-users and, as such, it will never refuse to provide WHQA (or any other desired service) to an operator seeking to provide retail leased line services.

It follows, then, that the presence of enet's MAN network in a particular local area (which enet believes should be delineated street-by-street rather than via SAs) is the only factor that should be taken into account by ComReg when assessing the existence of alternative infrastructure. All other privately-owned networks should be disregarded for this purpose, as no Access Seeker can be guaranteed of being able to secure WHQA services when they need them on these networks. Including them merely skews the analysis towards a conclusion that competition in the provision of leased line services is stronger in a particular area than it really is.

Criterion 2: distance and proportionality

In relation to the distance from an alternative network to an end-user, ComReg takes the view that access within a reasonable timeframe is achievable when the distance involved is 100 metres or less. As we have already pointed out earlier in this response, this conclusion does not accord with the reality in urban areas, in particular in Dublin city centre but in other places too. [3<

The above examples demonstrate that, at a practical level, it can be extremely difficult – as well as enormously costly (a factor that ComReg fails to take into account at all) – to put in place customer connections in urban areas. In some instances, we have found that it is nothing short of impossible to do so. It simply is not the case, as ComReg concludes for the purposes of this criterion, that a 100m end-user connection can be put in place quickly, easily and in a way that makes sense economically. In other words, this criterion, while fine in theory, does not have any relationship with what happens in practice.

As regards the proportionality criterion, ComReg opts to use 75% purely on the basis that it “was considered to be the most reasonable”. The percentage chosen bears no relevance to the actual topography and location of potential leased line customers in any SA. Instead, it merely inserts another layer of theoretical justification on ComReg’s proposed deregulatory course of action, thus further divorcing it from reality.

As noted above, a far bigger criterion in determining whether or not a particular customer is accessible from an alternative network is the cost facing the operator in putting in place the end-user connection. In many places, this cost is simply prohibitive – as noted above, [REDACTED] yet ComReg does not take this factor into account at all. The net result is that ComReg’s chosen algorithm yields large areas – in enet’s opinion, the bulk of the proposed Zone A – where it has been determined that MI WHQA competition is effective when, in actual fact, this simply is not the case. If ComReg proceeds with deregulation on this basis, it is end-user customers, faced with no choice for leased line services bar Eircom, who will pay the real-world price for these theoretical assumptions.

Conclusions on ComReg’s approach to defining sub-national markets

It is not necessary to dwell at length on the remainder of ComReg’s analysis in defining the Zone A and B sub-national markets for MI WHQA services (which is covered in Paras. 4.166 to 4.227 of ComReg’s Consultation Document and in the TERA report). enet’s position on this market definition issue, as set out above, is that (1) SAs are not the appropriate geographic unit to use; (2) aside from enet’s own network, all alternative networks should not – by virtue of the fact that MI WHQA services are always made available on them to third-party access seekers – be included within ComReg’s analysis as networks capable of providing a competitive alternative to Eircom in the provision of MI WHQA services; (3) ComReg’s distance and proportionality analysis is a theoretical construct that bears no relation to reality, in particular to the difficulties of undertaking civils works in urban locations and (4) ComReg has failed to factor in the high cost of putting in place end-user connections in urban locations such as Dublin.

Taking the above four points into consideration, it follows that enet rejects the validity of ComReg’s analysis and the conclusions drawn by it as to where the boundaries for the Zone A and B sub-markets should be drawn. enet does not dispute that Zone A and B markets of the kind envisaged by ComReg might exist but they certainly do not do so in the manner delineated by ComReg in this market analysis.

In the real world of leased line provision, for the vast bulk of the country – including within urban areas – the relevant market remains one in which most business customers do not enjoy any choice of infrastructure provider. ComReg’s conclusions on market definition should be aligned with and fully cognisant of this basic fact. enet is greatly concerned that still appears not to be the case.

Comments on ComReg’s proposed changes to trunk/terminating WHQA market boundaries

At the end of its market definition analysis, ComReg adds another item to its deregulatory list, i.e. by proposing changes to the trunk/terminating boundaries, pursuant to its identification of the Zone A and B sub-national markets, the effect of which would be to extend the trunk leased line market and to shrink the size of the market(s) for terminating segments of leased lines.

As enet is opposed to the market definition conclusions drawn by ComReg it follows that we are also opposed to ComReg’s wholly unnecessary proposal to revisit the issue of the trunk/terminating markets boundary. Under ComReg’s plans the trunk/terminating boundary would be extended from the current 20 routes of STM-1 bandwidth (or higher) it had identified, where three or more operators provide connectivity, to 107 Eircom aggregation nodes, where, with no minimum bandwidth criteria being used, three or competing MI WHQA operators are present.

enet also opposes this change for another important reason. [§< [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

]

Q3: Do you agree with ComReg's further preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, including the proposed designation of Eircom as having SMP, as appropriate? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your view.

enet agrees with ComReg's preliminary conclusion that Eircom holds a position of SMP in the LB TI WHQA market.

While enet does not favour deregulation within the HB TI WHQA market, it can see the rationale in ComReg's position, i.e. that demand for circuits in this market segment is declining and so that it is unlikely monopolisation of the market would be worthwhile. As such, enet would not object to a finding that no operator holds a position of SMP in the HB TI WHQA market.

enet also agrees with ComReg that Eircom holds a position of SMP in the Zone B MI WHQA market. For the reasons set out in our response to Q2 above, however, enet does not agree with the proposed delineation between Zones A and B and so does not agree with ComReg's preliminary conclusion that no operator has SMP in the Zone A market. While it may be possible that such a finding may be made in a much more tightly-defined Zone A market, the one defined by ComReg – which, as we have discussed, is based on theoretical assumptions rather than real-world facts – is not a valid economic market and so it is not possible for ComReg to undertake a valid competition analysis on this flawed construct.

In particular, enet re-iterates its position that the networks of non-incumbent operators do not constitute credible alternative sources of supply of MI WHQA services for Access Seekers. ComReg claims that such network operators "supply MI WHQA services to Access Seekers" (Para. 5.105) when, in reality, they often refuse to do so, in particular for connections to end-users in instances where they are also bidding to supply retail leased line services to these same customers. Similarly, ComReg claims in its CBP assessment (Paras. 5.118 to 5.125) that purchasers of WHQA services have "a credible threat to switch to an alternative supplier" (Para. 5.120) but such a threat only has real credibility if alternative supply is available in every instance. This is not the case in practice and so in many instances the threat by Access Seekers to switch to an alternative supplier simply is not a credible one.

For these reasons, combined with enet's view that the Zone A and B market boundaries need to be redrawn to align better with market realities, enet does not

support ComReg's preliminary conclusion that no operator holds a position of SMP in the Zone A MI WHQA market.

Q4: Do you have any further observations on this Section 6 concerning competition problems in the LB TI WHQA Market?

enet has no further observations to make in relation to ComReg's discussion of the competition problems in the LB TI WHQA market. enet agrees with ComReg's analysis and preliminary conclusions on this issue.

Q5: Do you have any further observations on this Section 7 concerning obligations in the LB TI WHQA Market?

enet has no further observations on ComReg's analysis of the obligations it proposes to impose on the SMP operator in the LB TI WHQA market. enet agrees that ComReg's proposed list of remedies is reasonable and proportionate in light of the competition problems it has identified.

Q6: Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

enet agrees that the competition problems and associated impacts on consumers identified by ComReg are those that could potentially arise in the Zone B MI WHQA market. enet notes, however, that exactly the same competition problems are likely to arise, with the same deleterious impact on end-user customers of leased line services, in those parts of the proposed Zone A MI WHQA market where Eircom remains the sole possible provider of WHQA services. As enet has argued in its responses to Q1 and Q2 above, ComReg has not taken due account of the many instances where these problems are likely to occur. enet is greatly concerned that if ComReg proceeds with its plans to deregulate the Zone A area then this is likely to lead directly to consumer harm due to lack of choice of provider for many leased line customers within this area.

Q7: Do you agree with ComReg's approach to imposing access, non-discrimination, transparency, price control and cost accounting and accounting separation remedies in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

enet agrees with the imposition of access, non-discrimination, transparency, price control/cost accounting and accounting separation remedies on the SMP operator in the Zone B MI WHQA Market. For the reasons outlined above in this response, enet also takes the view that these obligations need to be extended to those parts of the proposed Zone A market where, due to location, there are no alternative networks within easy reach where MI WHQA services are available at all times to access seekers, meaning end-user leased line customers have no choice of supplier other than the SMP operator. In such circumstances, Eircom remains the sole supplier of MI WHQA services to other operators and should also remain the designated SMP operator for the provision of MI WHQA services in these areas.

enet also believes that, from a transparency point of view, ComReg should look at facilitating the publication of maps of all alternative infrastructure, both in the Zone B and Zone A areas, so that, when seeking to obtain WHQA services from network providers, Access Seekers have full knowledge of all possible networks over which such access might possibly be available to them.

Q8: Do you agree with ComReg's draft Decision Instrument set out in Appendix: 4, in particular, that its wording accurately captures the intentions expressed in this Section 9? Do you agree with ComReg's Definitions and Interpretations as set out in Part I of the Draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers in the Draft Decision Instrument to which your comments refer.

enet has no observations to offer on ComReg's draft Decision Instrument.

Q9: *Do you agree with ComReg’s approach on the withdrawal of all existing obligations in the HB TI WHQA Market and the Zone A MI WHQA Market and withdrawal of the obligation to provide WLLs in the LB TI WHQA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.*

For the reasons set out earlier in this response, enet is greatly opposed to the proposed withdrawal of all existing obligations on Eircom in relation to the provision of wholesale services in the Zone A MI WHQA market. enet does not accept that this market has been defined correctly and that, if ComReg proceeds with deregulation on this basis, it will lead to end-user consumer harm due to the elimination of competition for retail leased line services for many customers.

enet would therefore appeal to ComReg not to proceed with its plans to deregulate the MI WHQA market based on the preliminary conclusions it has drawn in this Consultation Document. Instead, ComReg needs to look again at its proposed delineation of the Zone A and B sub-national markets for MI WHQA services and to restrict its plans for deregulation to those areas where effective competition exists, based on the reach of alternative networks offering competing WHQA services to access seekers in response to each and every request for such access.

[Redacted]

[Redacted]

[Redacted]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Q10. Do you agree with ComReg’s preliminary conclusions on the Regulatory Impact Assessment for the MI WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

enet has no comments to offer on ComReg’s Regulatory Impact Assessment, except to note that it does not accept the conclusions drawn by ComReg and the deregulatory actions it proposes to take in the MI WHQA market. As ComReg’s RIA does not factor in the likely consumer harm arising from its plans to deregulate the provision of MI WHQA services in the proposed Zone A sub-

national market, this impact analysis, along with ComReg's market analysis, is flawed in relation to its treatment of MI WHQA services.

Verizon Response to ComReg’s “Market Review - Wholesale High Quality Access at a Fixed Location: Response to Consultation, Further Consultation and Draft Decision”

Introduction

1. Verizon Ireland Ltd. (“Verizon Ireland”) welcomes the opportunity to respond to ComReg’s “Market Review - Wholesale High Quality Access at a Fixed Location: Response to Consultation, Further Consultation and Draft Decision”, consultation reference 18/08 (the “Consultation”).¹
2. Verizon is the global IT solutions partner to business and government. As part of Verizon Communications – a company with nearly \$131 billion in annual revenue – Verizon serves 98 per cent of the Fortune 500. Verizon caters to large and medium businesses and government agencies and is connecting systems, machines, ideas and people around the world for altogether better outcomes.
3. Please note the views expressed in this response are specific to the Irish market environment and regulatory regime and should not be taken as expressing Verizon’s views in other jurisdictions where the regulatory and market environments could differ from that in Ireland.

Response to consultation

General comments

4. Firstly, we are pleased to see that ComReg has undertaken further analysis and reconsidered its proposals for regulation in this market. This demonstrates that ComReg has taken account of important stakeholders concerns.
5. We would like to further recommend that ComReg considers best practice from other EU countries where competition in business connectivity markets has flourished such as in the UK and the Netherlands (with deregulation only when and where competition develops sufficiently). While we believe the regulatory approach

¹ <https://www.comreg.ie/publication/market-review-wholesale-high-quality-access-consultation/>

in Ireland broadly goes in the right direction, we believe that there is further work to do to reach the level seen in these other EU countries.

6. Verizon, as a pan-EU communications provider, sees how the European framework is implemented and has, to that end, aimed to provide below some examples of good and bad practice below to further inform ComReg's market review.

Modern Interface market

7. We would hope that the new freedom which ComReg is proposing to give to Eir through the deregulation of parts of these markets, combined with the more flexible interconnection regime, will allow Eir and other operators to be more innovative in its product offering. For example, virtual backhaul allowing for national coverage could be facilitated provided that there is no requirement for access seekers to be physically present at all locations – this is available in other countries such as the Netherlands, and has made a significant difference to our ability to offer cost-effective and innovative services to our customers.
8. **[CONFIDENTIAL]**
9. However, ComReg needs to ensure that the remedies imposed do not become undermined through the remedy design. For example, this was the case in Belgium where the regulated offer was based on a requirement for access seekers to be physically present in all regions across Belgium. However, a commercial offer which did not require this extensive physical presence was developed which was ultimately cheaper and better met demand (albeit without the additional regulatory safeguards built into the SMP conditions). As a result, few, if any, access seekers made use of the regulated product rendering it redundant.
10. Furthermore, we have some concerns about the practicalities around the proposals for the Modern Interface (MI) market and the proposed geographic split between Zones A and B. These relate to:
 - Addresses and identification of relevant Zone;
 - Billing; and
 - Reference Offer clarity and simplicity.

Addresses and identification of relevant Zone

11. While we recognise the extensive work that has been undertaken to identify the two geographic MI zones, the outcome appears far from simple. This is particularly illustrated by the interactive map provided in the consultation showing which Small Areas are in Zones A and B.²
12. While the Small Areas identified in ComReg's analysis do provide a high level of granularity, there is a risk that this is too granular and may become impractical from an implementation perspective due to the patchy nature identified, even within urban areas. For example, there are areas in Dublin centre where one street is in Zone A while the adjacent street is in Zone B. For example, compare South St Georges Street and Drury Street in Dublin.
13. This combined with the limited use of postcodes in Ireland and lack of any equivalent unique codes or identifiers for premises (as there is in the UK), will make it hard for access seekers to identify whether they will be able to obtain a product on regulated terms. Indeed we would suggest that it will also be challenging for ComReg to monitor and enforce compliance with the regulation on such a granular basis. There is also a concern that such detailed data based on Small Areas will become out of date quickly – it would be helpful if ComReg could clarify whether the Zones will be fixed for the duration of the remedies.
14. The effect of the above means that there would be significant challenges to the operations of an access seeker which relies on automation to process thousands of quotes each month both internally and to external customers.
15. In this sense, it may be more effective to designate more general, practical blocks for Zones A and B – for example, inside the Dublin ring could be one block – to ensure that the regulation is actually useable in real-world situations rather than just in a theoretical approach. This approach is adopted for example in the UK Business Connectivity Market Review 2016³ which uses postcode level data to conduct its analysis of competitive areas and then designates larger blocks for the practical implementation of that remedy. Note at paragraph 4.320 that Ofcom broadly explained their thinking:

We explained that the purpose of geographic market definition was to determine areas with competitive conditions that are clearly distinct from the surrounding area, and broadly homogeneous within. We identified such areas primarily on the basis of an analysis of

² <https://siteviewer.comreg.ie/ComReg1808b>

³ <https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2016>

variations in the extent of rival infrastructure. We noted that it would be neither practicable nor proportionate to attempt to deal with all geographic variations in competitive conditions by defining distinct geographic markets, and that variations in competitive conditions within markets could be taken into account as part of our remedy assessment.

16. In addition, there is also a concern if it is only Eir that will identify or hold the information as to whether or not a customer's premise falls in the relevant Zones and therefore whether or not a regulated offer is available. Verizon notes that there has been non-compliance by Eir in relation to address matching in the past in other markets,⁴ and there is the potential for a similar issue to arise in this market. Verizon assumes that ComReg expects this kind of market power is addressed through the non-discrimination obligations⁵ regarding information but would urge for clarity or strengthened conditions or guidance from ComReg on this point. It is vital that Eircom is subject to pro-active transparency requirements which enable other providers to quickly and easily establish the regulatory status for any premise where access is sought.

Billing

17. In terms of practical implementation of this change in the regulatory regime, we consider there would need to be separate billing elements for these components e.g. physical and virtual elements split out for both the local access and backhaul elements. We would welcome clarification if this is what ComReg intends to happen with the proposed transparency obligation regarding the unbundling of the Leased Lines Reference Offer (LLRO) at Condition 10.3 of the Draft Decision Instrument.⁶ If it is not, then we urge ComReg to clarify this in its final statement.

Reference Offer clarity and simplicity

18. We also have other practical concerns around the clarity and ease of use of the LLRO documentation. Given the more segmented nature of the market under the

⁴ See ComReg "Notification of finding of non-compliance issued to Eircom Limited for breaches of its non-discrimination obligations regarding address matching" reference 17/14, <https://www.comreg.ie/publication-download/notification-finding-non-compliance-issued-eircom-limited-breaches-non-discrimination-obligations-regarding-address-matching>

⁵ For example, obligation 16.1 of the Draft Decision Instrument, page 469 of the consultation.

⁶ Page 458 of the consultation.

new proposals, the documentation needs to be as accessible and practical as possible in order for it to be most effective and for access seekers to make full use of the benefits of the proposed regulatory regime.

19. For example in the past, Eir has issued extremely long and complex documents which serve only to dissuade or confuse competitors such as its Ethernet Pricing document which was over 160 pages long. We urge ComReg to consider how it can control for this through its proposed SMP conditions (under the transparency or non-discrimination conditions) – for example, setting out requirements for the format of the LLRO, and/or a requirement for Eir to consult on the format of the pricing and other information with access seekers. In considering this, we would recommend that ComReg consider best practice such as KPN in the Netherlands which produces concise user-friendly pricing documentation – we have attached a publicly available example at Annex 1.

Low Bandwidth Traditional Interface market

20. With regard to the Low Bandwidth Traditional Interface (LB TI) market (<2MB/s), we broadly agree with ComReg’s proposed approach.
21. We note that ComReg has proposed a process by which Eir can request ComReg to allow the retirement of legacy leased lines services in the LB TI market during the course of the market review.⁷ We disagree that the decision to remove the access and other SMP conditions on a service should be conducted bilaterally between regulator and SMP provider on an ad hoc basis. It is entirely inappropriate that such a decision, in this or any other similar situation, should be made in such an opaque way between a regulated incumbent and the regulator.
22. We consider such an analysis should be carried out in the course of a full market review including a relevant SMP assessment and a transparent consultation process. Such an ad hoc process creates uncertainty in the market for both access seekers and customers, and serves to erode confidence in the regulatory regime. We therefore urge ComReg not to allow for such a “clarification” of the access conditions in the LB TI market.

High Bandwidth Traditional Interface market

⁷ See paragraph 7.22 of the consultation.

23. For the High Bandwidth Traditional Interface (HB TI) market (>2MB/s), while we note ComReg finds no SMP, as we discussed in our response to the 2016 consultation,⁸ we do not agree on a principle basis that a market which has a low number of circuits being purchased is not “worthy of monopolisation as any supra normal profits potentially earned through attempted monopolisation are likely to be relatively low”.⁹ Indeed, the fact that such customers have remained on legacy products indicates that they have little option or desire to migrate (particularly given that there are few options for SDH to SDH migration) and may therefore have minimal buyer power.

Price controls

24. We agree that in light of the analysis conducted by ComReg it is appropriate that cost-orientation obligations should apply to Eircom in the markets where it has SMP. We consider that without this remedy it is highly likely that access costs will rise, the market will become less competitive and end users will be harmed. However, we note that despite the cost orientation remedy that is currently in place in this market, wholesale input costs are still generally above the equivalents in other European countries such as the UK and the Netherlands. This demonstrates the need for careful scrutiny of Eir’s cost inputs to ensure that charge controls are appropriately set.

25. **[CONFIDENTIAL]**

Addressing Styles

26. At the time of writing, we are still waiting to see what the next steps will be in the review of Eir’s regulatory governance model (RGM) and how the concerns of the Styles reports will be fully addressed.
27. In advance of this, it appears that ComReg has tried to address some of the concerns and issues raised in the course of the RGM work.
28. For example, we fully support the helpful detail included in the requirement to “negotiate in good faith” under the access obligations in the MI Zone B market. It is clear here that ComReg is serious about ensuring that Eir engages in genuine

⁸ See paragraphs 8-11 of Verizon’s response to the 2016 consultation. A non-confidential version can be found at: <https://www.comreg.ie/publication/market-review-wholesale-high-quality-access-fixed-location-non-confidential-responses-received-comreg-document-1669/>

⁹ Paragraph 5.45 of the consultation.

negotiations,¹⁰ something which is wholly appropriate in the context of a market review and provides more clarity to industry on how this obligation will be interpreted.

29. That said, we believe that the remedies inevitably arising from the RGM work need to be considered as part of a separate project and be consulted upon. For example, the Statement of Compliance documents may seem reasonable on the face of it under this market review process, yet, when considered alongside the serious compliance issues identified in the RGM project, it is clear that operators need greater reassurance. For example, one of the recommendations from the two reports as part of the RGM project was for an independent compliance Board within Eir – if this recommendation were to be implemented, then there should be a role for such a Board in the sign-off process of the Statements of Compliance.
30. We see a risk that, by trying to pre-empt the outcome of the RGM project through SMP conditions in discrete markets, ComReg is risking creating a patchwork of inconsistent remedies that do not address the larger issues within Eir’s governance at all levels and all markets.
31. Furthermore, we are concerned that there may be a softening or watering down of compliance documents in anticipation of the RGM project remedies.
32. Alternative operators and access seekers require as much transparency as possible and simple “yes/no” statements of compliance do not meet these needs. ComReg should aim for maximum transparency and granularity. Although not directly part of this market review we would ask ComReg to provide some transparency on the status with respect to the project work being undertaken within ComReg with respect to Styles, and an assurance that we will see concrete outputs soon on this.

Verizon Enterprise Solutions

April 2018

¹⁰ See for example paragraphs 9.11 to 9.118 of the consultation which complement Condition 14.5(i) in the Draft Decision Instrument (page 466).



**Vodafone Response to ComReg Document 18/08: Wholesale High Quality Access
at a Fixed Location**

Confidential Version



Introduction

Vodafone welcomes the further proposals from ComReg with respect to the LL consultation. At the outset Vodafone commends ComReg on its detailed analysis of this important market and the careful consideration of the issues involved.

While Vodafone appreciates the consideration given by ComReg to the issue of multisite customers and the amendment to the proposed total deregulation we are of the view that deregulation of parts of the wholesale market carries a significant risk and should not be undertaken until all conditions required for competitive access are in place.

We believe that a number of factors need further consideration before a final decision is taken. We set out our concerns in summary below and will elaborate further in the appropriate sections.

- The assessment of the level of competition in the trunk and terminating segments appears to be entirely based on the presence or not of competing infrastructure i.e. fibre cables. The analysis does not appear to take into account the capacity, competence and desire by the infrastructure owners to offer service to other wholesale operators. From Vodafone's experience not all SPs, especially vertically integrated operators are willing to sell WHQA to competitors at a competitive price. This applies to both backhaul and access.
- The ability of wholesale operators to reliably gain access to customer sites is critical to success in winning bids and subsequently providing connectivity to sites. While the process for applying for road openings has improved somewhat, we believe that there is still a wide range of variance in road opening permissions throughout the country. ComReg's analysis of the planning process consisted only of 5 councils and could not be considered a comprehensive survey of an important aspect of competitiveness in the market.
- In Vodafone's view, should ComReg decide, incorrectly in our view, to proceed with the proposed deregulation of the Zone A MI WHQA Market, ComReg should give careful consideration to drafting detailed remedies to eliminate any risk of delays or suboptimal wholesale offerings being put in place by eircom. While not a direct remedy, Vodafone do not consider the current version of Pole and Duct Access to be fit for purpose and believe that the market should not be deregulated until a fit for purpose wholesale passive access product set is developed and launched by eircom. Additionally, any proposed sunset clause should not commence until all required revisions to eircom's wholesale product offerings are in place.
- We also have concerns with regard to the proposal to only impose Equivalence of Outputs as a non-discrimination remedy and the proposed SOC regime. Given the interdependence of Zone A and Zone B in serving multisite customers, robust controls are required to ensure eir retail do not have access to information, systems or processes which provide them with an advantage over competitors in bidding for large corporate contracts.



- In addition, given the added complexity caused by the proposed geographic zones in terms of eircom's wholesale prices we believe that the sunset period needs to be carefully considered to allow sufficient time for SPs to plan and implement any changes in interconnection arrangements resulting from the proposal.

Responses to individual questions

Question 1: Do you have any further observations on ComReg's Retail Market Assessment?

Vodafone broadly agrees with ComReg analysis and proposal in relation to the retail market namely:

- i) The focal product having an Ethernet interface,
- ii) The definition of the MI and TI markets,
- iii) The retail market is national,
- iv) Wireless leased lines, dark fibre/passive access and business broadband service should be excluded from the product definition.

Vodafone also notes ComReg's confirmation of the prominence of multi-site retail customers (3.66), the relatively high dependency on eircom's WHQA products in such cases (3.70), the strong preference for wired leased lines (3.71), the preference for contracting with a single supplier (3.73), and the likely advantage that eircom is likely to have over its competitors due to the ubiquity of its network (3.75).

Question 2: Do you agree with ComReg's further preliminary conclusions on the definition of the Relevant WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Vodafone notes ComReg's comments from Sections 4.68 to 4.124 and is broadly supportive of its views namely that: i) wireless leased lines are not an effective substitute for wired leased lines ii) asymmetric broadband services with the exception on EFM are not an effective substitute for wired leased lines and iii) dark fibre is not a substitute for leased lines and all such services should be excluded from the product market definition for WHQA. (with the possible exception of VEA see paragraph below) Vodafone is also broadly supportive of ComReg's views in relation to the chain of substitutability in TI and MI WHQA markets and that leased line used for mobile backhaul services are captive. Finally, Vodafone support ComReg's assertion that self-supply of WHQA should be included in the relevant product market.

We are however concerned that the eircom VDSL Ethernet Access product has not been fully assessed (4.103). While ComReg formed the view that the product characteristics did not match those available on leased lines, no detail on this assessment was provided. Nor is it clear that leased line user's views were obtained to support this view. In particular, many multisite customers have different requirements



with regard to product characteristics across different sites including as to QOS and service levels. We also note that in March 2014 ComReg conducted a quantitative SSNIP test to ascertain substitutability between products including between broadband and Leased Lines. (4.108) This test did not include the VEA variant and we are of the view given the characteristics of the VEA product that end users may consider it to be an effective substitute for particular circumstances. We are of the view that ComReg should carry out further analysis on this product before excluding it from consideration in the market.

Vodafone agrees with ComReg's view (4.125) that the TI markets are national in scope.

Vodafone notes ComReg's comments in relation to the Geographic Scope of the MI WHQA market from Section 4.126 to 4.231, however Vodafone has a number of concerns in relation to same:

- i) Vodafone considers the use of SAs as being too small as a means of delineating areas of similarity of competition conditions. Vodafone considers that they are not "big enough to avoid a resource intensive and burdensome microanalysis that could lead to a fragmentation of markets" (4.141). Vodafone consider that eircom exchange areas may provide a more suitable mechanism as they are "small enough to avoid significant variations in competitive conditions (4.141)", are well understood by SPs and are aligned with many SPs topologies already (e.g. Vodafone's backhaul for its VUA services uses a significant amount of WSEAs and WEILs that follow the eircom topology). Indeed, Vodafone has invested in VUA in those exchange areas that reach a critical mass in terms of customers reached. ComReg itself recognizes that the use of SAs in the analysis may lead to an absence of contiguity between adjacent SAs (4.145). However, ComReg does not elaborate on the consequences of this. Vodafone are of the view that sub-dividing an eircom exchange area into Zone A competitive and Zone B non-competitive creates unnecessary complexities for SPs and eircom with respect to pricing of wholesale services. Eircom's current pricing is based on different tiers e.g. Same Node, Same Region, Different Region. An SP who has established a WEIL into a particular eircom exchange may now find that a large part of the reach of that WEIL is now deemed competitive. Eircom will no longer be obliged to provide services in these areas. The disaggregation of exchanges areas will require operators (and eircom) to understand the boundaries of Zone A, Zone B at a granular level when pricing alternative suppliers as an input to a market bid. This will add a significant burden to SPs and possibly to eircom. The current pricing model is already quite complex and increasing the number of variants will make it more so.

Additionally, the lack of contiguity between Zone A and Zone B may create uncertainty as to whether an operator choosing to use Pole and Duct Access to build access to a customer in Zone B can do so from their own cables in Zone A. This point can perhaps be addressed in the proposed remedies.



- ii) Vodafone is concerned with ComReg's statement in 4.157 that SAs with [redacted] [redacted]] This is effect means in the absence of eir providing WHQA in these areas E-Net will become the sole provider. Whilst E-Net's access prices are controlled, Vodafone would argue that its backhaul prices are not. In addition, E-Net is not, to our knowledge, obliged to provide colocation or points of interconnection at its own premises.
- iii) Vodafone is concerned with ComReg's statement in 4.159 that a notice period of only 7 days is required for permission for excavations (less than 100m) from Dublin County Council and its implication that it will apply elsewhere. Vodafone notes that ComReg only surveyed four County Councils in Dublin and one in Cork and would argue that 7 days' notice is not reflective of actual experience nationwide. In addition, Vodafone assumes that DCC needs to positively approve excavation permissions as distinct from approval being given by default in the absence of positive (or negative) permission within 7 days.

Vodafone is of the view that the size and scope of digs will be dependent on the particular situation at hand. Apart from anecdotal evidence, it is evident from "The Guidelines for Managing Openings in Public Roads" September 2015 Edition ("the Purple Book") as published by the Department of Transport, Tourism and Sport that different notice periods apply depending on the length and type of dig required. The types of build which can be undertaken are classified as T1, T2 and T3 in descending order of size of build. It indicates a T2 notification for a "Length of excavation of e.g. 100 to 200m" is up to 28 days. Indeed our reading of the document is that a T2 cannot be submitted prior to a T1 which has up to 3-month notification requirement. In addition, for national roads under the jurisdiction of the NRA, up to an additional 21-day notice on top of T1, T2 and T3 notification periods will apply. Consideration also needs to be given to local authority restrictions related to Protect Periods and Protected Engineering Assets and the potential impacts on certainty around notification timelines. This shows in Vodafone's view that the choice of 100 metres as boundary for competitive geographic areas is unsafe. The source material itself suggests that at 100m a 28-day notice period at a minimum may apply. In Vodafone's view, the approvals and subsequent build process is not simple or straightforward and there is a lack of certainty as to how quickly the approvals process can operate in the majority of cases, even those under 100m in length. In contrast, eircom already has duct or pole access to the vast majority of customer premises and curtilage. This gives eircom an advantage and greater certainty in terms of speed and costs in a bidding situation in its ability to guarantee and meet customer installation requirement timelines mandated by tender documents.

ComReg in our view, has seriously underestimated the difficulties and cost faced by operators in building networks on public roads and in business parks. Wholesale network build to customer premises is largely predicated on success in retail bids. Speed of



connectivity is a key feature of responses to tenders and day to day bids for business. A customer's premises that is not close to an alternate AN, cannot, in many cases, be reached reliably in sufficient time to allow a plausible and competitive bid to be made by an SP. SPs can and do make judgement calls regarding how long it will take to build to individual sites and may not need to guarantee lead times in all circumstances. However, for bids for large multi-site networks, the amount of such off net sites can be significant thereby increasing the financial and reputational risk associated with bidding for large networks. As ComReg in its analysis has shown, such customer networks are a significant part of the retail market and by implication the wholesale market.

We therefore, for these reasons, urge ComReg to review their assumptions on the ease of building access to customer premises and revise their assessment based on more comprehensive information.

- iv) ComReg's assertion that SPs can use eircom's pole and duct access product in 4.160 is concerning, particularly given that to date the recommendations made regarding this important remedy in Market 3 have not been implemented. Indeed, Vodafone would suggest that ComReg examine eircom's own performance when rolling out its NGA and 300k FTTH network when compared to service provided to access seekers. As will be seen later in Vodafone's response, the introduction of a fit-for-purpose pole and duct access product that is being actively used in the market should be one of the pre-requisites prior to de-regulating the WHQA market.

- v) ComReg's assertion in 4.172 that route widths are assumed to be 20m, in our view, reduces the accuracy of its reach analysis. We recognize the reason for doing this however it may have unintended consequences. It could be the case that an AN route is on the far side of the road to a customer's premises, making it much more difficult to reach than would be the case if it was on the same side. Road crossings in towns and national roads, in particular, cause serious delays in obtaining "dig" licences and while we appreciate the level of detail ComReg has used in its analysis, this 20m "wobble" factor may have caused a large overstatement of the reach of alternative networks. In addition, premises which are actually up to 110m from a cable may be included in a "catchment" area, assuming 10m is added to either side of the cable. ComReg should, in our view, introduce a safety margin into the "distance from" measure and reduce it considerably, that way ensuring a higher probability of a licence to dig being granted within 7 days and a higher probability of a successful build in a reasonable time frame.

This would require ComReg to redo its assessment of the SAs however, we are of the view that, as the "7 days" licence is based on 100m and is unproven to exist throughout the



country, a significant reduction in distance is warranted. The shorter the distance the greater the certainty of an AN being able to build access to a site quickly and cost effectively.

- vi) In relation to ComReg's statement in 4.173 and 4.174 Vodafone assumes that ComReg has confirmed that local access breakout in addition to access to backhaul is available from the ANs in the ensuing analysis.



- vii) Vodafone considers that the set of candidate SAs as identified in 4.198 and 4.199 is potentially overstated. While ComReg recognized that breakout was not possible at all locations along railway lines it incorrectly assumes that cables running alongside one side of a carriageway can be connected to a premises at the far side within a reasonable timeframe. While we recognize that the list of SAs reduces as the analysis is completed, the initial set of candidates is overstated in our view.
- viii) Vodafone is concerned that ComReg has used an arbitrary measure of potential demand to classify SAs as meeting Criteria 2a, as described in 4.203 to 4.206. If a particular site is not connected with a leased line to an existing network, it may never be. The site may not need the functionality of a leased line and in many cases may already be served by other products, for example broadband. While the point is moot if demand never arises it is none the less may unnecessarily extend the range of Zone A and limit the potential for SPs to compete for demand should it arise.
- ix) Likewise, in relation to 4.207 to 4.208 Vodafone would question ComReg's assertion that SAs that contain no relevant premises have similar competitive conditions to that which persists in the SAs with 2 or more ANs and 4 or more existing premises and in our view should be classified as Zone B.
- x) In relation to 4.223 ComReg indicates that no SP has a market share greater than 45%. Vodafone suggest that this might be indicative that eircom's market share might be



approaching 45% in Zone A areas and could give rise to consideration as to the existence of SMP. Consequently, in relation to 4.233 c) and d), Vodafone does not agree with ComReg's views in relation its proposals to use SAs and the criteria to identify all of the 3,048 SAs that can be considered to be competitive. Indeed, at a push, Vodafone would be of the view that only 394 SAs (3048-817-1837) might be considered competitive.

Vodafone is broadly supportive of ComReg's views as outlined in section 4.233 a) and b).

With respect to the assessment of the trunk market in 4.234 to 4.259 Vodafone is concerned that ComReg's approach relied heavily on the presence of cables within reach of eircom exchanges and did not apparently analyse whether the SPs owning the infrastructure are actively engaged in the merchant trunk market. Presence of a cable alone does not indicate a competitive constraint. Neither is it clear that on specific routes an SP seeking trunk capacity would have sufficient choice. In Vodafone's experience, certain vertically integrated leased line operators are not willing to offer competitive "trunk capacity" as this would undermine their own retail arm's efforts to win retail business. In addition, as stated above, Enet are not required to provide backhaul at maximum prices, therefore counting Enet as 2 SPs for the purposes of trunk competition is inappropriate. Trunk demand is typically required in a point to point configuration or multiple point to point configurations. The set of individual nodes listed as being competitive does not have multiple providers between all possible point to point routes. Therefore, the approach overstates the competitive nature of particular routes. Choice is also limited by the fact that SPs may be using the same cables as their competitors. Where demand for leased line trunk capacity is driven by retail tenders for multisite networks, potential suppliers are often requested to provide geographic maps of their infrastructure. Many of the SPs in Ireland rely on the same underlying infrastructure thus limiting the competitive constraint imposed by those operators.

As was pointed out in the paragraphs above proximity to within 100m does not of itself ensure that an SP can build in response to a request from a potential wholesale customer. In addition, historically the establishment of colocation facilities within an eircom exchange is a slow and expensive process. Those SPs who have, for other reasons, built colocation facilities may decide to sell spare capacity to other SPs on their own backhaul and this is likely to be a better indication of the reach of the trunk market.

Vodafone agrees with ComReg that the MI WHQA trunk market should not be delineated by bandwidth (4.252-4.253) and broadly agrees with its assertions in 4.254 to 4.259 having due regard to Vodafone's previous statements on SA size suitability and comments on the number of SAs deemed to be competitive.

Vodafone agrees with ComReg's view in 4.261 that all circuits within the LB TI WHQA and HB TI WHQA can be considered terminating segments.

Question 3. Do you agree with ComReg's further preliminary conclusions on the assessment of competition within the Relevant WHQA Markets, including the proposed designation of Eircom as having SMP, as appropriate? Please explain the reasons for your answer, clearly indicating the



relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your view.

Vodafone agrees with ComReg's analysis and assertion in 5.52 that no operator has SMP in the HB TI WHQA market.

Vodafone agrees with ComReg's analysis and assertion that eircom has SMP in the LB TI WHQA market (5.54) with the withdrawal of regulatory obligations for analogue leased lines, end to end leased lines (WLL) and channelised E1 services (5.48) and the maintenance of existing charges for LB TI WHQA (5.50).

With respect to the assessment of competition in Zone A MI WHQA, by definition the market ostensibly appears to be competitive. The definition of the market is in effect a tautology. However, Vodafone as pointed out above have grave concerns with regards to the assumption that SPs who have network within 100M of a customer's premises can readily connect to that customer site. Vodafone requests that ComReg revisit this parameter in order to ensure that the proposed boundaries truly reflect a competitive market.

Vodafone notes ComReg's comments in 5.73 in terms of eircom and other SPs reach to multi-site customers. Whilst eircom can potentially reach up to 100% of sites no SP can reach more than 40%. Given multi-site customers preference for dealing with a single SP for its entire service, provision to these customers would require integration with at least 3 SPs to achieve the same reach. This is likely to be costly in operational and IT terms and multiple vendor management terms giving eircom a significant cost and simplicity advantage.

Vodafone has concerns in relation to ComReg's comments in 5.111 to 5.113. ComReg makes the point that all the main SPs provide services at the retail and wholesale level. Vodafone would suggest that some SPs that are competing in retail leased line and broadband markets may be incentivised to deny or delay access or to provide capacity at a price premium thus creating uncertainty and/or raising costs in the market. Indeed, Vodafone has anecdotal experience of some of this activity from at least 1 vertically integrated SP in the market. These comments also apply to ComReg's comments in 5.124, 5.125 and 5.127.

Vodafone largely agrees with ComReg's assessment of competition in the Zone B MI WHQA market, although based on our arguments presented above the Zone B area should increase in size. We do however have some concerns with parts of the analysis.

ComReg asserts that, since the removal by eircom in January 2017 of the restriction on use of passive infrastructure for leased lines, SPs are not using Duct and Poles from eircom on an extensive basis. This may be because it is more cost effective and timely to use eircom's WSEA products to access customer sites. Neither have all of the proposed remedies in the WLA/WCA consultation being implemented and the current restrictions in terms of ingress and egress for example, may render passive access unusable for delivery to customer sites. Deregulation of Zone A may remove the possibility of using WSEA as an



access solution in Zone A and in that regard it is vital that a fit for purpose and cost effective Pole and Duct Product is available before any such deregulation occurs.

In relation to 5.166 to 5.168, Vodafone requests that ComReg review eircom's performance in relation to the use of eircom's pole and duct access compared with the performance of its own network build for NGA and 300k FTTH. It should be a pre-requisite that eircom's wholesale behaviour and performance in relation to its treatment of other access seekers should be consistent with its own build performance and that the remedies as outlined in the 2017 WLA/WCA market review are fully implemented prior to any consideration to deregulation of the Zone A WHQA market.

Vodafone agrees with ComReg's assertion in 5.184 in relation to its Overall Preliminary Conclusion on SMP assessment on the Zone BMI WHQA Market – i.e. eircom be designated as having SMP.

Vodafone agrees with ComReg's assertion in 5.188 in relation to eircom being designated as having SMP in the LB TI WHQA market.

Question 4: Do you have any further observations on this Section 6 concerning competition problems in the LB TI WHQA Market?

Vodafone broadly agrees with ComReg's preliminary position with respect to this market.

Question 5: Do you have any further observations on this Section 7 concerning obligations in the LB TI WHQA Market?

Vodafone agrees with ComReg's assessment with respect to this market.

Question 6: Do you agree that the competition problems and the associated impacts on competition consumers identified are those which could potentially arise in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Vodafone agrees that ComReg has identified potential competition problems that could arise in the Zone B MI WHQA market. We note in particular the concerns raised in with respect to the impact of deregulation of Zone A and the potential leveraging behaviours that could occur absent appropriate regulation. We remain unconvinced however that the proposed remedies will be sufficient of themselves to prevent these problems occurring.



Question 7: Do you agree with ComReg's approach to imposing access, non-discrimination, transparency, price control and cost accounting and accounting separation remedies in the Zone B MI WHQA Market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views.

Vodafone broadly agrees with the Access Remedies proposed in 9.42 to 9.203. We would however note the following:

However, Vodafone notes ComReg's comments in 9.46 and 9.47 as to the suitability of ex-post and competition law to the resolution of denial of access, especially as regards the length of time it takes to resolve such cases.

Vodafone are concerned with ComReg's proposal to mandate EoO as a proposed standard of access for the MI WHQA Zone B market. Given that Zone A and Zone B are strongly interrelated and many customer contracts will straddle both zones it is imperative that Access Seekers can be assured that eircom retail cannot gain an unfair advantage. In its recital of potential competition problems in the previous section ComReg has clearly identified the risks arising with respect to horizontal and vertical leveraging, the possibilities of information asymmetries and pricing. Given this and the experience with eircom's RGM Vodafone are disappointed that ComReg has not proposed an EOI obligation. The justification put forward is that to implement EOI would likely to be a substantial investment and would not be proportionate at this time. However, eircom's NGN network and operational support systems are relatively new systems and apart from ensuring eir retail have access to the same facilities as a competing wholesale operator it is difficult to envisage this cost as an impediment to EOI. ComReg do not appear to have assessed this cost in the context of a deregulated Zone A market and the impact of this on competition in Zone B.

ComReg appear to be relying on the Statements of Compliance process as a means of "plugging" the gap. Vodafone consider this to be overly optimistic in terms of its effectiveness particularly given the history of eircom's RGM. Arguably the cost of managing the proposed SOC model over a period of years might well be avoided by an upfront investment in an IT solution to provide MIWHQA on an EOI basis.

Vodafone welcomes ComReg's proposals mandating provision of Interconnection Sharing, Colocation, Colocation Resource Sharing, Colocation Rack Interconnection and Shared Services within or between Colocation racks. However, Vodafone suggest that full product development and launch of these products, designed to meet the needs of access seekers, together with appropriate SLAs should be completed and launched prior to the proposed de-regulation of Zone A MI WHQA areas. Additionally, Vodafone would suggest this development be completed and launched prior to commencement of any proposed sunset period. The availability of these access remedies prior to deregulation will facilitate access seekers making alternative arrangements for backhaul and access in a timely and efficient fashion. Otherwise Vodafone is of the view that eircom will not be incentivised to provide a fit-for-purpose range of colocation and interconnect services as soon as possible.



Vodafone agrees with ComReg's analysis and preliminary conclusion on the non-discrimination obligations outlined in 9.211 to 9.222. It particularly welcomes publication of KPIs of Zone A versus Zone B MI WHQA performance.

Vodafone agrees with ComReg's analysis and preliminary conclusions on transparency obligations outlined in 9.223 to 9.306. With respect to price and publication of same Vodafone suggest that eircom should be obliged to publish all current prices in a document or spreadsheet which is separate from the historic records of price changes.

Vodafone welcomes ComReg's proposals to include KPIs for comparing order, delivery and assurance performance provided to Access Seekers to that provided to eircom's downstream arm in Zone A and Zone B WHQA areas.

Vodafone agrees with ComReg's analysis and preliminary views in 9.307 to 9.391 on

- i) using cost orientation as the form of price control,
- ii) LRAIC+ as the form of cost methodology to be used,
- iii) on the current cost approach as the most cost relevant cost base to be used,
- iv) on the scorched node BU should be used in the developing the most appropriate costs models,
- v) the cost models to be used,
- vi) the period of cost control and
- vii) retaining the existing tariffs as per the existing LLRO price list pending completion of a revised list of tariffs developed by eircom and approved by ComReg.

However, Vodafone has serious concerns with ComReg's proposal in 9.78, namely, the use of ex-post regulation to gauge eircom pricing behaviour in the Zone A market. Given the importance of multisite customers and the likely large proportion of customer headquarter sites in Zone A areas, Vodafone has serious concerns that eircom will have a considerable advantage in multi-site tenders in and that it can reduce price below cost in Zone A areas. Given ComReg has already called into question the usefulness, timeliness and burden of proof relating to Competition Law remedies (c.f. 8.16), Vodafone is extremely concerned that the "damage will have been done" by the time relevant body rules against eircom on an ex-post basis. Vodafone strongly asserts that alternative SPs will lose market share to eircom and the penalties in the case of an adverse finding may be too light and too late. As many contracts for leased line networks are of long duration (or have a long average life) the incentive for eircom to aggressively sell Zone A components of large networks below cost is high. Revenue from such contracts may not become "winnable" for competing operators for a number of years, thus foreclosing market share gains.

ComReg's proposals with respect to Accounting Separation Remedies as described in 9.397 and 9.398 need in Vodafone's view to be strengthened. At a minimum ComReg should prescribe and document in advance of deregulation the "price floor" calculation metrics and methodology it will use to inform its decisions when reviewing eircom's accounts. ComReg should also ensure that eircom put in place appropriate internal bid and price control structures to ensure that aggressive sales practises are not allowed "free rein" in eircom retail. To this end Vodafone suggest that ComReg require eircom to put in place a modified margin squeeze test as a form of internal price control for bids straddling both Zones. The total price for a network crossing both Zones should at minimum be equal to the total sum of all



wholesale components in Zone B plus retail margin in Zone B plus a positive price for the elements in Zone A. At a minimum the total price for such a network should never be less than the Zone B part of the network.

Vodafone is in broad agreement with ComReg's analysis and preliminary proposal in 9.399 to 9.499 in relation to eircom's requirements to produce a Statement of Compliance and the activities therein to ensure it is compliant with its obligation in the Zone B MI WHQA market.

Vodafone would also suggest, in light of its concerns in relation to ComReg's proposal to apply ex-post remedies for Zone A as outlined in 9.78, that eircom be required to demonstrate what controls it operates to ensure that it does not engage in below cost selling in Zone A areas (particularly in the context of paragraph 9.387).

Question 8: Do you agree with ComReg's draft Decision Instrument set out in Appendix: 4, in particular, that its wording accurately captures the intentions expressed in this Section 9? Do you agree with ComReg's Definitions and Interpretations as set out in Part I of the Draft Decision Instrument? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers in the Draft Decision Instrument to which your comments refer.

Vodafone is in general agreement with the draft remedy in so far as it attempts to address the potential problems identified in section 8. We have expressed our reservations with respect to these and believe that ComReg should review their proposed remedies in light of the potential competition problems highlighted.

A number of other issues may need clarification namely:

- The term Small Area has not been defined.
- An exact definition of the boundaries of Zone A may be required particularly with respect to customer premises which may straddle Zone A and Zone B boundaries. While the map may show the boundaries this issue has not been addressed.
- A methodology for updating Zone A Small Areas has not been defined, perhaps this will require a further market assessment in future with the boundaries being revised as necessary.
- To avoid any doubt as to the use of Passive Access Infrastructure (PAI) remedies in this market, we believe the remedies should be included here. Additionally, the remedy should also include a requirement for eir to provide access to PAI from points of interconnect in Zone A for the purposes of serving customers in Zone B.
- In Appendix 9 Practical Applications of Remedies in the Zone B MI WHQA market ComReg identifies the circumstances where eircom should be obliged to provide access tails in Zone B depending on the delineation of the Aggregation Node as being Trunk or not. Given the



importance of this clarification Vodafone queries whether it should also be included or described in the access remedies.

Question 9: Do you agree with ComReg's approach on the withdrawal of all existing obligations in the HB TI WHQA Market and the Zone A MI WHQA Market and withdrawal of the obligation to provide WLLs in the LB TI WHQA market? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your views

Vodafone agrees with ComReg's proposals in this regard.

Question 10: Do you agree with ComReg's preliminary conclusions on the Regulatory Impact Assessment for the MI WHQA Markets? Please explain the reasons for your answer, clearly indicating the relevant paragraph numbers to which your comments refer, along with all relevant factual evidence supporting your position.

Vodafone has no further comments to make with respect to the proposed remedies nor the assessment of their impact.



Zayo's response to:

ComReg's Response to Consultation,
Further Consultation and Draft Decision
on the Wholesale High Quality Access at a
Fixed Location Market Review

April 2018

Contents

1	Introduction	3
2	Background	4
3	Product market definition for MI WHQA services	5
4	Geographic market definition for MI services	9
5	SMP analysis and remedies for the MI markets	12

1 Introduction

- 1.1.1 Zayo Group is a global provider of communications infrastructure services, including Dark Fibre, Wavelength, Ethernet and IP services. Zayo operates in the United States, Canada, France, Germany, Netherlands, Belgium, Switzerland, Italy, Ireland and the United Kingdom. Zayo was founded in 2007 and is headquartered in Boulder, Colorado, with European headquarters in London and Paris.
- 1.1.2 Zayo entered the Irish leased lines market in 2016 through the acquisition of Viatel infrastructure in Dublin. At the time of the Viatel acquisition, Zayo already offered international connectivity between Dublin and the UK on two subsea cables: The EBFL cable, a joint 50/50 venture between Zayo and ESB; and the EirGrid cable which Zayo has the exclusive right to commercialise. Zayo has been offering connectivity on the two subsea cables since 2013.
- 1.1.3 Zayo's Irish network consists of ownership and operations of the Dublin T50 Network, spans 7,200km of fibre strands and has access to 18 data centres along the outer Dublin route. Zayo provides customers with dedicated fibre connections, Wavelength, WAN & IP services utilising a combination of on-net, new construction and off-net leased fibre. Zayo extends its network to customer premises with a combination of leased and purchased dark fibre as well as self-installed new-build fibre.
- 1.1.4 Zayo has an ambitious investment plan in its Irish infrastructure over the next 3 years estimated to be in excess of €10M+ (2018 to 2020).
- 1.1.5 Zayo would welcome the opportunity to meet ComReg to discuss this response. The response document is relatively short and presents our high level views and arguments, but Zayo would be pleased to present more granular analysis, should ComReg consider this helpful.

2 Background

- 2.1.1 This response covers the market for Ethernet-based services only, as Zayo is not present in the market for legacy TI services.
- 2.1.2 ComReg is consulting on the future regulation of the leased lines market in Ireland. This consultation follows an initial consultation in 2016 (the initial consultation), in which ComReg had proposed that no provider had SMP in any parts of the market (whether in terms of geography or product). To ComReg's credit, it has taken onboard comments received on that initial consultation and amended its proposals to finding that eircom has SMP in the market for Ethernet leased lines outside major conurbations¹.
- 2.1.3 In its previous leased lines market review (completed in 2012), ComReg found that eircom had SMP across all leased lines markets, so the move to remove the SMP designation in some parts of the country is significant, in that it demonstrates the impact of competitive investment in the Irish leased lines market and it removes not only consumer protection regulatory remedies, but also any remedies to prevent anticompetitive behaviour by the SMP provider towards competing OAOs.
- 2.1.4 In another market (Market 3b - Wholesale Central Access), ComReg has mandated access to eircom's ducts and poles and eircom changed its duct and pole reference offer in January 2017 to remove any usage restrictions, making it possible to use the duct and pole product for the provision of leased lines.

¹ More precisely, ComReg proposes that eircom has SMP in locations where two or more commercial network providers have network presence within no more than 100 meters from 75% of businesses, or where 1 wholesale only provider (which is subject to state aid conditions and therefore has to offer access to the network on reasonable and non-discriminatory terms) has that level of network presence.

3 Product market definition for MI WHQA services

- 3.1.1 Zayo and other OAOs build new fibre infrastructure to serve users of high speed leased lines services. The costs for the initial investment is substantial and the pay-back period is often close to 10 years. As is witnessed by the substantially higher OAO market share in very high bandwidth services² across Europe, the higher speed, higher price, connections enable market entry by OAOs. Once some presence has been established to provide these very high speed connections, the incremental costs of adding new connections are reduced and OAOs can viably provide lower speed connections. Price regulation of very high speed services, that seeks to bring the price down to the cost level of the incumbent (reflecting the incumbent's economies of scale and scope), result in OAOs not being able to viably offer very high speed services as a means of market entry, and thus removes the possibility of OAOs also entering the market for lower speed services.
- 3.1.2 ComReg proposes that all MI WHQA (MI) services belong in the same product market. That conclusion is essentially based on a report by Oxera, which "*recommends a single Modern Interface MI) market for all Ethernet speeds above 2Mbps, including services provided using xWDM, fibre distributed data interface (FDDI), fibre connection (FICON) and other alternative service types.*"³
- 3.1.3 The Oxera report, however, does not present persuasive evidence to support this conclusion. The pricing analysis performed excluded all technologies other than Ethernet, despite the report also recommending that a number of other technologies (including WDM and others) should be included in the MI market. This is significant for the very high speed services and it is for those services that the other technologies are most likely to be used. The data for very high speed services is therefore more incomplete than is the case for the lower speed services.
- 3.1.4 With regards to the potential difference in users of MI services of different speeds, the Oxera report states that "*functional analysis does not reveal obvious differences in users across the speeds*"⁴The Oxera report also states that "*the majority of NGN Ethernet circuits sold are configured on a traffic class of service configuration rather than circuit-based and for traffic-based Ethernet leased lines, there is no apparent discontinuity in prices at a specific bandwidth*"⁵. However, the report does not state whether there is a difference in the use of traffic-based or circuit-based classes of service across the different speeds of Ethernet services. As the circuit-based class of service pricing did suggest a break in the chain of substitution, Zayo considers this omission in the Oxera report to be significant. Overall it would seem that Oxera has not analysed the very high speed market as a stand-alone market but only as part of the single product market. This is likely to have masked some of the significantly different characteristics of the very high speed MI services market when compared to the market for the lower speed MI services.
- 3.1.5 As a final comment on the Oxera report, Zayo notes that the report uses the Ofcom 2015 BCMR consultation as a reference for finding a single product market for the equivalent of

² Relative to market shares for lower speed leased lines.

³ See Oxera report page 49.

⁴ Ibid.

⁵ See Oxera report page 45.

the Irish MI market. Zayo draws ComReg's attention to the fact that Ofcom's decision has subsequently, been thoroughly discredited and overturned by the Competition Appeals Tribunal in the UK.

3.1.6 Zayo further notes ComReg's response to OAO comments, set out in this consultation document:

- In paragraph 4.109 (c) ComReg states that it found: "*relatively homogenous market share distribution, particularly when comparing market shares across Ethernet based WHQA LL product bandwidths up to 1Gb/s.*" Zayo does not understand how ComReg can find that this supports a single product market without a break of in the chain of substitution at 1Gbps. Whilst Zayo does not have access to the detailed market share analysis behind ComReg's statement, it appears that ComReg found that the market share distribution above 1Gbps is significantly different from that for lower speed circuits.
- Further, in paragraph 4.112, ComReg states as follows: "*In relation to BT's comment in paragraph 4.36 above that the identification of separate MI WHQA Markets would lead to a different outcome in terms of market share estimations, ComReg notes the relative homogeneity of market share distribution across Ethernet based WHQA LL product bandwidths up to 1Gb/s. Identification of a separate High Bandwidth MI WHQA market including all MI WHQA products above 1Gb/s, as suggested by BT, would not make a material difference on ComReg's analysis of competition and assessment of SMP in the MI WHQA Market either. MI WHQA products above 1Gb/s account for approximately 15% of all MI WHQA products, although ComReg acknowledges that there will likely be greater demand for such services in the future.*" It would appear here, that ComReg may have made a fundamental error in suggesting that it is not important to separate out the very high speed market, simply because it is small and would not alter ComReg's conclusions for the MI market. What ComReg fails to recognise is that the separation of the very high speed services into a separate market would mean that different a SMP finding and (if relevant) remedies would potentially result for that market. If no price regulation were to be applied to circuits >1Gbps, then that could have a significant impact on investment incentives for OAOs. Zayo urges ComReg to reconsider the position as set out above.
- Finally, on paragraph 4.110 ComReg states: "*In addition, it should be noted that ComReg's interviews with Multi-site retail LL customers provides some support the existence of single MI WHQA Market (in particular, 11 out of 17 interviewees indicated that they are likely to switch to higher bandwidth LLs in the next two to three years due to increasing data demands at their premises, the upgrading of ICT equipment and installation of new applications such as video conferencing. As such, retail MI LL's of higher bandwidths are considered part of the same product market as lower bandwidth MI LL's).*" Zayo is again concerned that ComReg appears to have misapplied the regulatory framework. The fact that some customers may move from one product to another, as their needs and requirements change over time, does not constitute an argument for the products being in the same relevant market. The SSNIP test is intended to be applied to a customer at a point in time, testing whether that customer would move from one product to another in response to a small but significant non-transitory

change in price. Zayo is not aware of a test that considers any future choices customers may make, particularly not where such choices are driven by a change in requirements rather than a price change. Zayo consider that ComReg's analysis is flawed and should not be relied upon.

- 3.1.7 Zayo's direct experience in the Irish market for very high speed MI services, is that these are predominantly used by OAOs for backhaul purposes. This distinguishes the market for very high speed services from the market for MI services up to and including 1Gbps services, which are used by a much wider and diverse group of customers and for a wider range of purposes.
- 3.1.8 The consequence of finding a single product market for all MI services will be continued price regulation of the very high speed services, despite the market for provision of the very high speed services likely displaying characteristics of emerging competition in locations where the lower speed MI services do not. This over-regulation would almost certainly result in reduced investment by OAOs.
- 3.1.9 When defining the product markets, ComReg has chosen to exclude the leased lines provided by eircom to its own mobile arm, concluding that the market for provision of those services is likely to be captive and therefore not part of the market for which OAOs can compete. Zayo struggles to understand why the market for supplying eircom's mobile arm is more captive than the remainder of eircom's self-supply. Whilst an OAO could compete for the business of the end consumer of MI-based services (and thus for the underlying MI circuits), there remains a large number of other circuits which eircom likely provides to itself for a host of different purposes which are likely to be as captive as those used by eircom's mobile arm.
- 3.1.10 In the new SMP Guidelines Explanatory Notes, the European Commission (the Commission) makes it clear when self-supply should be included in the relevant market definition by stating:
- "Where self-supply and external supply are undistinguishable from a consumer perspective and services are functionally similar and interchangeable, such self-supply should be considered to be part of the same product market as the services supplied externally"*⁶
- 3.1.11 The document further refers to Case AT/2017/2020. The NRA proposed in its draft measure to define a market, excluding self-supply of the SMP operator to its parent company. The Commission required the NRA to withdraw its draft measure, finding that the exclusion of self-supply would not be in accordance with EU law⁷.
- 3.1.12 There seems no doubt that the leased lines eircom provides to its own MNO are the same as those being provided to other MNOs. Certainly, ComReg has not in any way suggested that they are different. It therefore seems clear that self-provision of leased lines services to eircom's own mobile arm must be included in the relevant market definition.

⁶ See SMPGuidelinesExplanatoryNote.pdf page 17 at: <https://ec.europa.eu/digital-single-market/en/news/revision-guidelines-significant-market-power-commission-publishes-drafts-revised-guidelines-and>

⁷ https://circabc.europa.eu/webdav/CircaBC/CONNECT/e-cctf/Library/01%20-%20Commission%20Decisions/Commission_Decisions_2017/AT-2017-2020%20ADOPTED_EN.pdf

3.1.13 ComReg's proposal to exclude the circuits supplied by eircom to its own mobile business is artificially reducing the overall market size and also eircom's share of that market. This results in an overall underestimation of eircom's market power, and Zayo is opposed to ComReg's approach in this regard.

4 Geographic market definition for MI services

4.1.1 In the initial consultation, ComReg proposed that eircom did not have SMP in the supply of MI services in any location in Ireland. However, following substantive submissions from a number of OAOs, ComReg has performed additional analyses and is now proposing to divide the MI market into two geographic segments, namely zones A and B:

- **Zone A:** Areas where there are multiple competing networks capable of readily supplying MI WHQA to the current and potential demand for those services, and
- **Zone B:** Areas where there are limited or no competing networks capable of readily supplying MI WHQA.

4.1.2 As ComReg did not propose to define separate product markets for MI services up to 1Gbps and very high speed MI services, no geographic market analysis was performed for these sub-markets.

4.1.3 Zayo applauds ComReg for having taken on-board the comments made by the OAOs and having performed a new analysis that considered the different levels of competition in different parts of the country. Zayo considers it appropriate that sub-national geographic markets are introduced as the OAO investment starts eroding the market share held by the incumbent. It is important that the NRA avoids over-regulation as that can deter further OAO investment and halt the competitive process resulting in the country's permanent reliance on the incumbent's infrastructure.

4.1.4 Reliance on incumbent infrastructure is not in the interest of consumers as it often results in reduced innovation and it becomes more difficult to meet the needs of some consumers of physical resilience without a shared shingle point of failure, which is particularly important in the leased lines market.

4.1.5 Although Zayo considers ComReg's revised proposals for separate Zone A and B MI markets to be a substantial improvement to the proposals in the initial consultation, we still have concerns that the lack of analysis of geographic sub-markets for the separate very high speed MI services market is likely to result in over-regulation of those services, resulting in reduced investment incentives for OAOs. Zayo considers that ComReg, as part of its review of the product markets as set out above, should consider sub-national geographic markets of the very high speed MI market.

4.1.6 Zayo also has significant concerns as to how ComReg has determined the boundary criteria for Zones A and B. ComReg proposes that Zone A should be defined as areas in which 75% of leased line customers have two or more competitive infrastructures within 100 meters of their address, or where Enet has network with 100 meters of 75% of leased line customer addresses⁸. Zayo perceives two problems with these boundary criteria:

⁸ See this consultation paragraphs 4.161 through 4.164. Although this is used for the delineation of the market definition, it becomes an important factor in the SMP analysis as all data is analysed at the aggregate level of the entirety of the market defined. This can mask differences in competitive conditions within the defined market.

- Firstly, 75% appears to be a very low threshold. Within the group of locations that qualify by this criteria, will be a small group that would also qualify by a 90% criteria. Zayo considers that those locations could likely be considered effectively competitive at this time, but the remainder of that group of locations would still have substantial reliance on eircom for access to customers sites. In its 2016 BCMR (the UK leased lines market review), Ofcom used the measure of 90% of customers being within the given distance (and this was not overturned by the appeals tribunal) and Zayo considers that a more reasonable criteria to apply. A location where 25% of customers will not have an effective choice of supplier cannot, in Zayo's view, be considered effectively competitive.
- Additionally, Zayo does not consider that the presence of Enet only, within 75% of leased line customer addresses, is sufficient to qualify a location as competitive. Whilst Enet is subject to certain rules⁹, due to its reliance on state aid, the inter-workings between the state aid side of Enet and the commercial part of Enet are not transparent. It is Zayo's experience that that the terms offered by the commercial part of Enet do not reflect a situation where the commercial side of Enet has consumed dark fibre services from the state aid side on the same terms as those offered to Zayo and other OAOs. Zayo strongly recommends that ComReg removes the option of Enet only presence for a location to qualify as part of Zone A.
- Additionally, further to the clarification provided by ComReg to BT's request for clarification (6) pertaining to page 160, Zayo is concerned that ComReg has likely included the presence of ANs that are not active in the relevant SA, as no 'relevance floor was applied when assessing the presence of ANs.
- ComReg's response to BT's clarification request (8A) also highlights a concern for Zayo. Zayo considers it likely that ComReg's approach to classifying both SAs with 1 relevant premise and with no relevant premises is unjustified. Zayo urges ComReg to stay on the side of caution when determining which areas eircom no longer holds SMP. As clearly demonstrated by the responses to ComReg's questionnaire (Appendix 5 of the further consultation) many leased lines customers have a mixture of urban and rural premises. It is therefore important that regulated access is available in areas with few or no current relevant premises– not being able to reach such locations/premises would make eircom the only provider able to meet a multi-site leased lines requirement.
- Zayo also considers that ComReg's response to BT's clarification request (9B) that ComReg is likely to have overstated the presence of ANs within 100 meters assuming that the AN presence is 20 meters wide – sometimes resulting in the same point of presence qualifying as presence in more than one SA.

4.1.7 Given the severe concerns set out above, Zayo urges ComReg to revisit its boundary criteria. Given that no further geographic segmentation takes place at the SMP and remedies stage of ComReg's analyses, it is important that the markets defined are sufficiently homogenous to present consistent competitive conditions for OAOs operating in that market. Zayo does not consider that this is the case and considers that there is a real risk of removing regulation

⁹ Zayo notes that although the state aid side of Enet is subject to pricing controls, those controls were introduced more than 10 years ago and have now, to Zayo's knowledge, been reviewed since.

from locations for which this is not justified. That will very likely result in reduction of investment by OAOs, to the detriment of consumers.

5 SMP analysis and remedies for the MI markets

- 5.1.1 ComReg finds that eircom has SMP in the Zone B, but not in the Zone A MI market. Zayo agrees that the criteria used to define the two zones will, by definition, result in competition being stronger in Zone A than in Zone B. Whether that means that the competition is “Strong”¹⁰ is another matter.
- 5.1.2 Zayo has reviewed all of ComReg’s analyses and does not find that they present a convincing case that Zone A is fully competitive. Overall, Zayo is of the view that, whilst there is definitely increasing competition in the Zone A MI market, it is by no means clear that the market is yet fully competitive. It seems to us that the data presented suggest that there is emerging competition which is in a relatively fragile state and which, in Zayo’s view, could be harmed by potential anticompetitive behaviour by eircom. For example, Zayo does not consider that the criteria of 75% of leased line customers being with 100 meters of 2 or more ANs is appropriate. Zayo also has strong objections to ComReg considering that the presence of Enet only, is sufficient for a local area to be effectively competitive.
- 5.1.3 As set out earlier in this response, Zayo considers that the boundary criteria used by ComReg to define the Zone A MI market are seriously flawed and would result in inappropriate removal of regulation from some locations in Ireland.
- 5.1.4 Further, it would appear that ComReg’s primary (or indeed only) concern with regards to the potential for eircom abusing a position of dominance, is to safeguard the conditions for continued competition from downstream operators which rely on access to eircom’s (or another OAO’s) infrastructure to reach customers sites. Zayo is concerned that ComReg does not appear to have considered the harm to competition that would result from eircom acting in an anticompetitive manner to deter investment in more rival infrastructure in Ireland.
- 5.1.5 Zayo believes that eircom has strong incentives to limit investment in rival infrastructure as much as possible, and therefore has severe concerns that the full removal of SMP in locations where competition is not yet fully established would afford eircom the opportunity to price locally to deter such investment. Eircom would have the opportunity to price in an exclusionary manner at both retail and wholesale levels and non-discrimination provisions do not protect builders of rival infrastructure as they do not rely on access to eircom services to meet customer needs (whether wholesale or retail).
- 5.1.6 ComReg refers in several parts of the current consultation document to the availability of duct and pole access without usage restrictions. Zayo considers that (in principle) this remedy is welcome and important in reducing the costs of building rival infrastructure. However Zayo has concerns regarding the usefulness of the duct and pole access product as it stands. Whilst Zayo does not have significant direct experience of the duct and pole product, we have staff with experience from previous employers and also understand from other OAOs that they have significant concerns about the timing, processes and pricing of the current duct and pole access product. Zayo has direct experience of using duct and pole access in France and also has staff members with direct experience of duct and pole use in Ireland. Zayo is in the process of engaging with eircom to start making use of the duct and pole access product and

¹⁰ See this consultation page 5.95.

would be pleased to commit resources to the improvement of that product, working with eircom and other OAOs.

- 5.1.7 Additionally, Zayo considers it inappropriate that the competition in one market (the leased lines market) is reliant on a regulatory remedy imposed in another market. When the Wholesale Central Access market is reviewed next time, it would not be appropriate for ComReg to take into account the value of the duct and pole remedy to the leased lines market. Further, if ComReg considers that the availability of duct and pole access is important in the leased lines market (including in Zone A), to encourage additional infrastructure competition, then that suggests that ComReg does not, in fact, believe that Zone A is yet fully and effectively competitive. It is important that a finding of a market being fully and effectively competitive is made in a transparent manner and does not rely on regulatory measures from other markets
- 5.1.8 Zayo considers that ComReg should undertake additional analysis of eircom's incentives to deter further investment in rival infrastructure and should consider the imposition of a duct and pole remedy in both Zone A and Zone B to encourage further development of competition at the infrastructure level before determining that the Zone A MI market is fully competitive.
- 5.1.9 Further, Zayo considers that ComReg should perform a review of the economic space between different layers upstream from wholesale leased lines, using current and forward-looking regulated pricing of wholesale leased lines for the period covered by this review. It is important that the duct and pole access remedy provides an economically viable option for OAOs building rival infrastructure. Therefore, the pricing of eircom's wholesale leased lines must be such that an OAO can provide competing wholesale leased lines products using the duct and pole remedy. Zayo is not aware that such analysis has been performed and considers it vital that it forms part of ComReg's analytical framework.
- 5.1.10 If ComReg's analysis concludes that the duct and pole remedy is an effective remedy in the leased lines markets, as it seems ComReg assumes, then ComReg should impose that remedy in those markets. This remedy, which promotes upstream competition, will then facilitate an increase in competitive infrastructure to serve downstream needs of OAOs to serve retail customers. Zayo considers it appropriate that a duct and pole remedy is applied in a market that is prospectively competitive, and that other downstream remedies are removed (although it would be important to retain transparency and non-discrimination remedies as regulatory accounts would be important for the setting of duct and pole charges and it would be critical that eircom was subject to non-discrimination as regards imputation of duct and pole pricing in its wholesale and retail leased lines services).
- 5.1.11 With regards to remedies imposed in the Zone B MI market, Zayo believes that ComReg's mandate to promote competition and investment, necessitates that ComReg checks whether the price level resulting from the BU-LRAIC pricing approach would be replicable by an equally efficient operator. As ComReg relies primarily on the presence of a competing network to determine whether different geographic markets exist, which are likely to present sufficiently different competitive characteristics to justify them being treated different from other parts of the country, it is clear that investment in rival infrastructure is a critical component of the development of effective competition in the leased lines market. Given ComReg's mandate is to promote competition and investment, it would appear to be counter to those objectives to impose remedies that would deter further investment in rival

infrastructure. Zayo considers that any static economic efficiencies resulting from a less aggressive price control will be compensated by significant dynamic efficiencies in the longer term, consisting of both price and non-price benefits to consumers. BU-LRAIC costs, which assume eircom's current economies of scale and scope, would be extremely difficult (if not impossible) for an efficient OAO to replicate.